

MAY 2016

# BEST

**Building Excellent Schools Today**



**SUMMARY OF BUILDING EXCELLENT SCHOOLS TODAY (BEST)  
FY2016-17 GRANT APPLICATIONS  
RECEIVED FEBRUARY 26, 2016**





## **SUMMARY OF BUILDING EXCELLENT SCHOOLS TODAY (BEST) FY2016-17 GRANT APPLICATIONS**

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**DIVISION OF CAPITAL CONSTRUCTION  
BUILDING EXCELLENT SCHOOLS TODAY (BEST)****Capital Construction Assistance Board Members****Board Chair**

Lyndon Burnett                      School Board Member / Agate 300

**Board Members**

Karl Berg                              Architect / Retired  
Kathy Gebhardt                      Executive Director / Children's Voices  
Ken Haptonstall                      Superintendent / Garfield School District 16  
Denise Pearson                      Superintendent / Elbert County School District C-2  
Tim Reed                              Executive Director Facilities & Construction Management / Jeffco R-1  
Scott Stevens                      Maintenance and Facilities / Fountain-Fort Carson 8  
Cyndi Wright                      Director of Facilities & Transportation / Sheridan School District 2

**Division Staff**

Scott Newell                      Director, Division of Capital Construction  
Anna Fitzer                      Regional Program Manager (*Southwest Territory*)  
Cheryl Honigsberg                      Regional Program Manager (*Southeast & Central Territories*)  
Jay Hoskinson                      Regional Program Manager (*Northeast Territory*)  
Kevin Huber                      Regional Program Manager (*Northwest Territory*)  
Dustin Guerin                      Supervisor, Statewide Facility Assessment  
Ashley Moretti                      Office Manager  
Paul Reynolds                      Financial Analyst

**BEST FY2016-17 Grant Application Review Ground Rules****Schedule & Time**

Please be respectful of each other's time. Make your best effort to adhere to the schedule, including time allotted for breaks and lunch.

**Completing Work**

Each member shall complete their share of the work for each grant reviewed. Grant Evaluation Sheets and Waiver Evaluation Sheets will be collected after each grant review.

**Decision Making**

Grant evaluations sheets will be completed by each individual member during each initial grant review, and then the CCAB as a whole will make a public motion to move a grant project to the recommendation shortlist. Once all grants have been reviewed the CCAB as a whole will decide on the final prioritized list.

**Participation**

All members may speak freely and listen attentively. All members shall participate in all phases of the process, unless they are required to recuse themselves.

**Focus**

The discussions should remain focused on the grant application proposals and the information provided by Division staff and the grant applicant.

**Openness / Conflict**

Each member shall succeed in getting relevant issues on the table. Each individual's input is valued. Each member shall manage conflict effectively.

**Critique**

Each member shall take their work seriously, provide meaningful feedback on their evaluation sheets, reflect and self-critique along the way.

**Humor**

Each member shall remember to keep a good sense of humor, smile and enjoy the company of others as we move forward in helping needy public schools throughout the State.

**INTRODUCTION**

In 2008, the General Assembly enacted and the Governor signed HB08-1335 which established a new program called Building Excellent Schools Today (BEST) to assist School Districts, Charter Schools, Institute Charter Schools, BOCES, and the Colorado School for the Deaf and Blind (CSDB) with capital improvements to facilities.

The Bill:

- Created the Division of Public School Capital Construction Assistance (Division) within CDE to administer the program;
- Established the Capital Construction Assistance Board (CCAB) to oversee the program;
- Created the assistance fund to fund BEST projects;
- Required the establishment of Public School Facility Construction Guidelines (Guidelines);
- Required a statewide facility assessment;
- Provides funding to the assistance fund for capital construction projects addressing health & safety, overcrowding, technology, and other;
- Provides technical assistance to school districts, charter schools, BOCES, and the CSDB.

The funding for the assistance fund (BEST Funds) consists of:

- State Land Trust revenue from rental income, land surface leases, timber sales, and mineral leases;
- Colorado Lottery Spillover;
- Marijuana Excise Tax;
- Interest from monies in the assistance fund.

On February 26, 2016, the Division received 53 grant applications for the FY2016-17 BEST grant cycle. The amount requested for BEST funds were \$125.8 million with applicants providing \$123 million in matching funds. The CCAB is responsible for submitting a prioritized list of recommended projects from the applications to the State Board for final approval and award. This book summarizes all of the applications submitted and provides additional data to assist with the evaluation of the applications. The Public School Facility Construction Guidelines, established in rule by the CCAB, will also be evaluated when reviewing applications.

In preparation of the CCAB grant review, Division staff has read each application and gone through a thorough review process to evaluate scope, budget, proposed solution and conformance with the statewide assessment.

Section 6.2 of the BEST Rules require the CCAB, taking into consideration the Statewide Assessment, to prioritize and determine the type and amount of the grant or matching grant from applications for projects deemed eligible for BEST funding based on the following criteria, in descending order of importance:

- Projects that will address safety hazards or health concerns at existing public school facilities, including concerns relating to public school facility security. In prioritizing an application for a public school facility renovation project that will address safety hazards or health concerns, the CCAB shall consider the condition of the entire public school facility for which the project is proposed and determine whether it would be more fiscally prudent to replace the entire facility than to provide financial assistance for the renovation project;
- Projects that will relieve overcrowding in public school facilities, including but not limited to projects that will allow students to move from temporary instructional facilities into permanent facilities;
- Projects that are designed to incorporate technology into the educational environment;
- All other projects.

BEST grants are matching grants and each applicant is required to provide matching funds in an amount determined using criteria in statute. An applicant can submit a waiver request for part, or for the entire matching requirement. The CCAB will evaluate each request and make a decision whether the waiver should be approved or denied.

**Grant Applicant Review Process:**

Applications will be reviewed alphabetically in the following order: County, then by Applicant name  
(*Applicant's photos will be shown while each project is being discussed*)

Applicants will be given the opportunity to present their project to the CCAB. Each applicant is allowed any representatives available to address the CCAB and answer questions pertaining to their grant application.

- **This is voluntary and the application will not be penalized for not having a representative present.**

Individual Grant Application Review:

- 1) Once a grant is up for review, the Director will ask the Division staff representative and the grant applicant to approach the review tables;
- 2) The Director of the Division will introduce the project (applicant name & project title), then ask the applicants' presenters to introduce themselves;
- 3) After the presenters have introduced themselves, they will be given a two-minute window to present to the CCAB;
  - The presentation should include any items the applicant wishes to address pertaining to the proposed project. No visual materials will be allowed for the presentation;
- 4) Following the applicant's presentation, the Board Chair will open the floor to any discussion / questions the CCAB may have;
- 5) After the CCAB has thoroughly reviewed the grant application and all questions have been answered, each CCAB member will complete a grant application evaluation sheet;
- 6) The CCAB will then make a public motion to move the application to a funding recommendation shortlist.
  - NOTE: Moving an application to the funding recommendation shortlist does not guarantee the application will be awarded. See below for the shortlist prioritization procedure.
- 7) If an application is moved to the shortlist and a waiver is requested as part of the application package, the CCAB will evaluate the waiver, ask any questions and complete a waiver evaluation sheet;
  - Statutory waivers will automatically be approved and a waiver evaluation will not be needed;
  - The Board Chair will entertain a motion to approve the applicant's waiver request;
    - Applicants whose waiver request is denied are still eligible to receive a grant;
- 8) After all evaluation sheets are collected by Division staff, the next grant application will be reviewed;
- 9) This process will be repeated until all applications have been reviewed;
- 10) Upon completion of the application review, Division staff will input the scores from the shortlisted application evaluation sheets into a master spreadsheet that will tally the total scores for each project;
- 11) The Division staff will present the CCAB with the results of the grant application evaluation sheets;

- First, the shortlisted projects will be sorted by their identified statutory need (priority 1, 2, 3, or 4);
- Then, the sorted projects will be prioritized by their evaluation score, as determined by the average overall CCAB score;

12) The CCAB will review the prioritized list and make any final discussion remarks;

13) A funding line will be drawn at the set amount of available funding (State share), which the CCAB will review and make their final motion to approve the list.

The CCAB review will result in a prioritized list of projects to submit to the State Board for approval. The prioritized list shall include the CCAB's recommendation as to the amount and type of financial assistance to be provided and a statement of the source and amount of applicant matching moneys for each recommended project, based upon information provided by the applicant.

The State Board may approve, disapprove, or modify the provision of financial assistance for any project recommended by the CCAB if the State Board concludes that the CCAB misapplied the prioritization criteria in the statute. If the State Board concludes that the CCAB misapplied the prioritization criteria in the statute, then the State Board shall specifically explain in writing, its reasons for finding that the CCAB misapplied the prioritization criteria.

The forgoing is only intended to be a general outline of the process. The CCAB's recommendations will be made in accordance with applicable statutes and rules.

Attachments:

- BEST Grant Program Rules
- Public School Facility Construction Guidelines Rules
- BEST Grant Priority Guidelines
- Statewide Facility Assessment Criteria Questions
- Unifomat
- Map of Participating School Districts
- Example of a BEST Grant Application Evaluation Tool
- Example of a BEST Grant Waiver Evaluation Tool for School Districts and BOCES
- Example of a BEST Grant Waiver Evaluation Tool for Charter Schools
- Glossary of Terms Used





**COLORADO DEPARTMENT OF EDUCATION****DIVISION OF PUBLIC SCHOOL CAPITAL CONSTRUCTION ASSISTANCE****1 CCR 303-3****BUILDING EXCELLENT SCHOOLS TODAY GRANT PROGRAM****Authority**

§ 22-43.7-106(2)(i)(I) C.R.S., the Public School Capital Construction Assistance Board may promulgate rules, in accordance with Article 4 of Title 24, C.R.S., as are necessary and proper for the administration of the BEST Act.

**Scope and Purpose**

This regulation shall govern the Building Excellent Schools Today (BEST) Public School Capital Construction Assistance Program pursuant to the BEST Act.

**1. Definitions**

- 1.1. "Applicant" means an entity that submits an Application for Financial Assistance to the Board, including:
  - 1.1.1.A School District;
  - 1.1.2.A District Charter School;
  - 1.1.3.An Institute Charter School;
  - 1.1.4.A Board of Cooperative Educational Services (BOCES);
  - 1.1.5.The Colorado School for the Deaf and Blind.
- 1.2. "Application" means the Application for Financial Assistance submitted by an Applicant.
- 1.3. "Assistance Fund" means the public school capital construction assistance fund created in § 22-43.7-104(1) C.R.S.
- 1.4. "Authorizer" means the School District that authorized the charter contract of a Charter School or, in the case of an Institute Charter School, as defined in § 22-43.7-106(1) C.R.S., the State Charter School Institute created and existing pursuant to § 22-30.5-502(6) C.R.S.
- 1.5. "BEST Act" means § 22-43.7-101 C.R.S. et seq.
- 1.6. "BEST Lease-purchase Funding" means funding from a sublease-purchase agreement entered into between the state and an entity as described in 2.1 pursuant to § 22-43.7-110(2) C.R.S.
- 1.7. "BEST Cash Grant" means cash funding as a matching grant.
- 1.8. "BEST Emergency Grant" means a request for Financial Assistance in connection with a Public School Facility Emergency.

- 1.9. "Board" means the Public School Capital Construction Assistance Board created in § 22-43.7-106 (1) C.R.S.
- 1.10. "Board of Cooperative Educational Services" or "BOCES" means a Board of Cooperative Services created and existing pursuant to § 22-5-104 C.R.S. that is eligible to receive State moneys pursuant to § 22-5-114 C.R.S.
- 1.11. "Capital Construction" means, pursuant to § 24-75-301 (1) C.R.S.:
- 1.11.1. Purchase of land, regardless of the value thereof;
  - 1.11.2. Purchase, construction, or demolition of buildings or other physical facilities, including utilities and state highways or remodeling or renovation of existing buildings or other physical facilities, including utilities and state highways to make physical changes necessitated by changes in the program, to meet standards required by applicable codes, to correct other conditions hazardous to the health and safety of persons which are not covered by codes, to effect conservation of energy resources, to effect cost savings for staffing, operations, or maintenance of the facility, or to improve appearance;
  - 1.11.3. Site improvement or development;
  - 1.11.4. Purchase and installation of the fixed and movable equipment necessary for the operation of new, remodeled, or renovated buildings and other physical facilities and for the conduct of programs initially housed therein upon completion of the new construction, remodeling, or renovation;
  - 1.11.5. Purchase of the services of architects, engineers, and other consultants to prepare plans, program documents, life-cycle cost studies, energy analyses, and other studies associated with any Capital Construction project and to supervise construction or execution of such Capital Construction projects;
  - 1.11.6. Any item of instructional or scientific equipment if the cost will exceed fifty thousand dollars.
- 1.12. "Capital Renewal Reserve" means moneys set aside by an Applicant that has received an award for a project for the specific purpose of replacing major Public School Facility systems with projected life cycles such as, but not limited to, roofs, interior finishes, electrical systems and heating, ventilating, and air conditioning systems.
- 1.13. "Charter School" means a Charter School as described in § 22-54-124 (1)(f.6)(I)(A) or (1)(f.6)(I)(B) C.R.S., that has been chartered for at least five years on the date its Authorizer forwards an Application for Financial Assistance to the Board on the Charter School's behalf pursuant to § 22-43.7-103(7) C.R.S.
- 1.14. "Eligible Charter School" means a qualified charter school that is eligible for the Loan Program as defined in section 22-30.5-408(1)(c) C.R.S. and authorized to receive financial assistance pursuant to 22-43.7-109(7) C.R.S.
- 1.15. "Division" means the Division of Public School Capital Construction Assistance created in § 22-43.7-105 C.R.S.
- 1.16. "Financial Assistance" means BEST Cash Grants; BEST Lease-purchase Funding; BEST Emergency Grants; funding provided as matching grants by the Board from the Assistance Fund to an Applicant; or any other expenditure made from the Assistance Fund for the purpose of financing Public School Facility Capital Construction as authorized by the BEST Act.

- 1.17. “Grantee” means a School District, Charter School, Institute Charter School, BOCES or the Colorado School for the Deaf and Blind that has applied for Financial Assistance and received an award.
- 1.18. “Institute Charter School” means a Charter School chartered by the Colorado State Charter School Institute pursuant to § 22-30.5-507 C.R.S.
- 1.19. “Loan Program” means the charter school matching moneys loan program pursuant to 22-43.7-110.5 C.R.S.
- 1.20. “Matching Moneys” means moneys required to be used directly to pay a portion of the costs of a Public School Facility Capital Construction project by an Applicant as a condition of an award of Financial Assistance to the Applicant pursuant to § 22-43.7-109 (9) C.R.S and/or 22-43.7-110(2) C.R.S.
- 1.21. “Project” means the Capital Construction Project for which Financial Assistance is being requested.
- 1.22. “Public School Facility” means a building or portion of a building used for educational purposes by a School District, Charter School, Institute Charter School, a Board of Cooperative Education Services, the Colorado School for the Deaf and Blind created and existing pursuant to § 22-80-102(1)(a) C.R.S., including but not limited to school sites, classrooms, data centers, libraries and media centers, cafeterias and kitchens, auditoriums, multipurpose rooms, and other multi-use spaces; except that “Public School Facility” does not include a learning center, as defined in § 22-30.7-102(4) C.R.S., that is not used for any other public school purpose and is not part of a building otherwise owned, or leased in its entirety, by a School District, a Board of Cooperative Education Services, a Charter School, Institute Charter School, or the Colorado School for the Deaf and Blind for educational purposes.
- 1.23. “Public School Facility Construction Guidelines” means Public School Facility Construction Guidelines as established in § 22-43.7-107 C.R.S.
- 1.24. “Public School Facility Emergency” means an unanticipated event that makes all or a significant portion of a Public School Facility unusable for educational purposes or poses an imminent threat to the health or safety of persons using the Public School Facility.
- 1.25. “School District” means a School District, other than a junior or community college district, organized and existing pursuant to law in Colorado pursuant to § 22-43.7-103 (14) C.R.S.
- 1.26. “State Board” means the State Board of Education created and existing pursuant to section 1 of article IX of the State Constitution.
- 1.27. “Statewide Assessment” means the Financial Assistance priority assessment conducted pursuant to § 22-43.7-108 C.R.S.

## **2. Eligibility**

- 2.1. The following entities are eligible to apply for Financial Assistance:

2.1.1.A School District;

- 2.1.2.A District Charter School or individual school of a School District if the school applies through the School District in which the school is located. The School District shall forward the Application from a Charter School or individual school of a School District to the Division with its comments;
  - 2.1.3.An Institute Charter School;
  - 2.1.4.A Board of Cooperative Educational Services (BOCES);
  - 2.1.5.The Colorado School for the Deaf and Blind.
- 2.2. The Board may only provide Financial Assistance for a Project for a Public School Facility that the Applicant owns or will have the right to own in the future under the terms of a lease-purchase agreement with the owner of the facility or a sublease-purchase agreement with the state entered into pursuant to § 22-43.7-110(2) C.R.S.
  - 2.3. The Board may provide Financial Assistance to a Charter School that first occupies a Public School Facility on or after May 22, 2008, only if the Public School Facility occupied by the Charter School complied with all Public School Facilities Construction Guidelines addressing health and safety issues when the Charter School first occupied the facility.
  - 2.4. For a BEST Emergency Grant, the Applicant shall be operating in the Public School Facility for which Financial Assistance is requested.

### **3. Assistance Board**

#### **3.1. Conflict of Interest**

##### **3.1.1.In regard to Board members providing information to potential Applicants:**

- 3.1.1.1. Board members shall exercise caution when responding to requests for information regarding potential Applications, especially in regard to questions that may increase the chances that the Board would give a favorable recommendation on an Application or Project.

##### **3.1.2.If a potential or actual conflict of interest occurs with a Board member, the Board member will complete a Conflict of Interest disclosure form and it will be presented at the following CCAB meeting. The Division shall document the date of the disclosure, the name of the board member and conflict disclosed, and the documented disclosure shall be retained and made available at all board meetings which evaluation of applications or voting occurs.**

##### **3.1.3.Board members, and their firms, shall not present their position on the Board to School Districts, Charter Schools, Institute Charter Schools, BOCES, or the Colorado School for the Deaf and Blind as an advantage for using their firm over other firms in a bid to provide services on any capital construction project.**

##### **3.1.4.In regard to Board members avoiding potential conflicts of interest in evaluation of and voting on Applications:**

- 3.1.4.1. If a Board member's firm has no prior involvement regarding the Project included in an Application and the Board member does not have a direct or indirect substantial financial interest in an Application, the Board member may appropriately vote on the Application, but may not bid or work on the Project. The Board member's firm may bid or work on the Project, so long as the Board



member plays no role in the entire procurement process and the Board member discloses any conflict of interest;

3.1.4.2. No Board member shall participate in the Board's evaluation process, including voting, for any Application when the Board member has a direct or indirect substantial financial interest in the Project or Application or the Board member's firm has had prior involvement with the Applicant directly related to the Project or Application;

3.1.4.3. At all times Board members must exercise judgment and caution to avoid conflicts of interest and/or appearance of impropriety, and should inform the Division staff of any questionable situation that may arise. A Board member may recuse himself or herself from any vote.

3.1.4.4. Board members shall be aware of and comply with the Colorado Code of Ethics, section 24-18-108.5(2), C.R.S., and shall not perform any official act which may have a direct economic benefit on a business or other undertaking in which the member has a direct or substantial financial interest.

3.1.4.4.1. A financial interest means a substantial interest held by an individual which is (i) an ownership interest in a business, (ii) a creditor interest in an insolvent business, (iii) an employment or prospective employment for which negotiations have begun, (iv) an ownership interest in real or personal property, (v) a loan or any other, or (vi) a directorship or officer ship in a business.

3.1.4.4.2. An official action means any vote decision, recommendation, approval, disapproval or other action, including inaction, which involves the use of discretionary authority.

3.1.5. In cases where a Board member has violated the conflict of interest policy as determined by the board chair, the Division Director will notify the Board member's appointing authority of the violation in writing. In the event of a conflict involving the board chair, the vice-chair will make the determination.

#### **4. Matching Requirement**

4.1. Except as provided below in section 4.2, Financial Assistance may be provided only if the Applicant provides Matching Moneys in an amount equal to a percentage of the total cost of the Project determined by the Board after consideration of the Applicant's financial capacity, based on the following factors:

4.1.1. With respect to a School District's Application for Financial Assistance:

4.1.1.1. The School District's assessed value per pupil relative to the state average;

4.1.1.2. The School District's median household income relative to the state average;

4.1.1.3. The School District's bond redemption fund mill levy relative to the statewide average;

4.1.1.4. The percentage of pupils enrolled in the School District who are eligible for free or reduced-cost lunch;

4.1.1.5. The school district's current available bond capacity remaining;

4.1.1.6. The school district's unreserved fund balance as a percentage of its annual budget; and

4.1.1.7. The amount of effort put forth by the School District to obtain voter approval for a ballot question for bonded indebtedness, including but not limited to, a ballot question for entry by the district into a sublease-purchase agreement of the type that constitutes an indebtedness of the district pursuant to § 22-32-127 C.R.S., during the ten years preceding the year in which the district submitted the Application, which factor may be used only to reduce the percentage of Matching Moneys required from a district that has put forth such effort and not to increase the amount of Matching Moneys required from any district;

4.1.1.8. A School District shall not be required to provide any amount of Matching Moneys in excess of the difference between the School District's limit of bonded indebtedness, as calculated pursuant to § 22-42-104 C.R.S., and the total amount of outstanding bonded indebtedness already incurred by the School District.

4.1.2. With respect to a Board of Cooperative Education Services' Application for Financial Assistance:

4.1.2.1. The average assessed value per pupil of all members of the Board of Cooperative Education Services participating in the Project relative to the state average;

4.1.2.2. The average median household income of all members of the Board of Cooperative Education Services participating in the Project relative to the state average;

4.1.2.3. The average bond redemption fund mill levy of all members of the Board of Cooperative Education Services participating in the Project relative to the statewide average;

4.1.2.4. The percentage of pupils enrolled in the member schools within the Board of Cooperative Education Services that are participating in the Project who are eligible for free or reduced-cost lunch;

4.1.2.5. The average available bond capacity remaining of all members of the board of cooperative services participating in the capital construction project;

4.1.2.6. The average unreserved fund balance as a percentage of the annual budget of all members of the board of cooperative services participating in the capital construction project; and

4.1.2.7. The amount of effort put forth by the members of the Board of Cooperative Education Services to obtain voter approval for a ballot question for bonded indebtedness, including but not limited to a ballot question for entry by any member into a sublease-purchase agreement of the type that constitutes an indebtedness of the member pursuant to § 22-32-127 C.R.S., during the ten years preceding the year in which the Board of Cooperative Education Services submitted the Application, which factor may be used only to reduce the percentage of Matching Moneys required from a Board of Cooperative Education Services whose members, or any of them, have put forth such effort and not to increase the amount of Matching Moneys required from any Board of Cooperative Education Services.

4.1.3. With respect to a Charter School's Application for Financial Assistance:

- 4.1.3.1. The weighted average of the match percentages for the school districts of residence for the students enrolled in a district charter school or fifty percent of the average of the match percentages for all school districts in the state for an institute charter school;
- 4.1.3.2. Whether the charter school's authorizer retains no more than ten percent of its capacity to issue bonds;
- 4.1.3.3. Whether the charter school is operating in a district-owned facility at the time it submits its application;
- 4.1.3.4. In the ten years preceding the year in which the charter school submits the application, the number of times the charter school has attempted to obtain or has obtained:
  - 4.1.3.4.1. Bond proceeds pursuant to 22-30.5-404 C.R.S through inclusion in a ballot measure submitted by the charter school's authorizer to the registered electors of the school district:
  - 4.1.3.4.2. Proceeds from a special mill levy for capital needs pursuant to 22-30.5-405 C.R.S.;
  - 4.1.3.4.3. Grant funding for capital needs from a source other than the assistance fund; and
  - 4.1.3.4.4. Funding for capital construction from bonds issued on its behalf by the Colorado Educational and Cultural Facilities authority created and existing pursuant to 23-15-104(1)(a), C.R.S., or from some other source of financing.
- 4.1.3.5. If the charter school is a district charter school, the student enrollment of the charter school as a percentage of the student enrollment of the charter school's authorizing school district.
- 4.1.3.6. The percentage of students enrolled in the charter school who are eligible for the federal free and reduced-cost lunch program in relation to the overall percentage of students enrolled in the public schools in the State who are eligible for the federal free and reduced-cost lunch program.
- 4.1.3.7. The percentage of the per pupil revenue received by the charter school that the charter school spends on facility costs other than facilities operations and maintenance.
- 4.1.3.8. The charter school's unreserved fund balance as a percentage of its annual budget.
- 4.1.3.9. The match percentage for a charter school calculated based on the above criteria shall not be higher than the highest match percentage for a school district, or lower than the lowest match percentage for a school district, in the same grant cycle.

#### 4.2. Waiver or reduction of Matching Moneys

- 4.2.1. An Applicant may apply to the Board for a waiver or reduction of the Matching Moneys requirement. Such application shall discuss unique issues demonstrating why the percentage is not representative of the Applicant's current financial state. The Board may grant a waiver or reduction if it determines:

- 4.2.1.1. That the waiver or reduction would significantly enhance educational opportunity and quality within a School District, Board of Cooperative Education Services, or Applicant school,

4.2.1.2. That the cost of complying with the Matching Moneys requirement would significantly limit educational opportunities within a School District, Board of Cooperative Education Services, or Applicant school, or

4.2.1.3. That extenuating circumstances deemed significant by the Board make a waiver appropriate.

4.2.2. An applicant must complete a waiver application and submit it to the Board in conjunction with their grant application. The waiver application shall explain issues and impacts in detail, including dollar amounts of the issues and impacts, and demonstrate why each of the factors used to calculate their Matching Moneys percentage are not representative of their actual financial capacity. The Board will determine the merit of the waiver by evaluating each wavier application using the prescribed wavier application evaluation tool.

4.3. Charter School matching moneys Loan Program.

4.3.1. The Charter School matching moneys Loan Program will assist Eligible Charter Schools in obtaining the Matching Moneys requirement for an award of Financial Assistance pursuant to 22-43.7-109 C.R.S.

4.3.2. An Eligible Charter School that chooses to seek a loan through the Loan Program shall apply to the Board to receive a loan.

4.3.3. To be an Eligible Charter School for the Loan Program means a Charter School that is described in section 22-30.5-104 or an Institute Charter School as that term is defined in section 22-30.5-502 has a stand-alone credit assessment or rating of at least investment grade by a nationally recognized rating agency at the time of issuance of any qualified Charter School bonds on behalf of the Charter School by the Colorado educational and cultural facilities authority pursuant to the "Colorado Educational and Cultural Facilities Authority Act", article 15 of title 23, C.R.S., and that has been certified as a qualified Charter School by the State Treasurer.

4.3.4. The Board may approve a loan for an Eligible Charter School in an amount that does not exceed fifty percent of the amount of Matching Moneys calculated for the Eligible Charter School pursuant to 22-43.7-109(9)(c) C.R.S.

4.3.5. If a loan is approved by the Board the project will be considered as a BEST Lease-Purchase project pursuant to 22-43.7-110.5(2)(b)C.R.S., and the proposed project must be one that is financeable.

4.3.6. The Board shall direct the State Treasurer to include the amount of a loan approved pursuant to the terms in the Lease-Purchase agreement entered into pursuant to 22-43.7-110 (2) C.R.S. to provide Financial Assistance to the Eligible Charter School for which the loan is approved.

4.3.7. Charter School Loan Program application

4.3.7.1. An application for a loan shall include:

4.3.7.1.1. Basic contact information, justification for seeking a BEST loan and documentation of a stand-alone credit assessment or rating of at least investment grade by a nationally recognized rating agency for the Charter School;

- 4.3.7.1.2. Identify the Charter Schools current facilities and indicate if those facilities are owned, leased or in a lease-purchase agreement;
  - 4.3.7.1.3. A current credit disclosure statement along, any business notes payable or reviews, notices or warnings from the Charter School's authorizer;
  - 4.3.7.1.4. Financial information to include internal financial statements, CPA Audits and IRS 990's for the previous three years. Detailed operating budget for the current and next year. The Charter School's projected operating budget for the next five years. Enrollment figures for the previous three years, the current year and the following three years;
  - 4.3.7.1.5. CDE listed minimum match requirement for the BEST grant;
  - 4.3.7.1.6. Amount of total match provided by the Charter School for the BEST grant;
  - 4.3.7.1.7. Amount of the loan request for the BEST grant;
  - 4.3.7.1.8. A loan application from a Charter School shall include signatures of the District Superintendent, School Board Officer, and the Charter School Director;
  - 4.3.7.1.9. A loan application from an Institute Charter School shall include signatures of the Charter School Institute Director and the Institute Charter School Director;
  - 4.3.7.1.10. Applications that are incomplete may be rejected without further review.
- 4.3.8. Charter School Loan Program deadline for submission
- 4.3.8.1. The loan application, along with any supporting material, shall be submitted with the BEST grant application on or before the BEST grant application due date.
  - 4.3.8.2. An application will not be accepted unless it is received in the Board office by 4:30 p.m. on or before the deadline date determined by the board.
  - 4.3.8.3. The Board may, in its sole discretion and upon a showing of good cause in written request from an Applicant, extend the deadline for filing an Application.
- 4.3.9. To receive a loan through the Loan Program, an Eligible Charter School shall:
- 4.3.9.1. Authorize the State Treasurer to withhold moneys payable to the Eligible Charter School in the amount of the loan payments pursuant to 22-30.5-406 C.R.S.;
  - 4.3.9.2. Pay an interest rate on the loan that is equal to the interest rate paid by the State Treasurer on the Lease-Purchase agreement entered into pursuant to 22-43.7-110 C.R.S. to provide Financial Assistance to the Eligible Charter School for which the loan is approved;
  - 4.3.9.3. Amortize the loan payments over the same period in years as the Lease-Purchase agreement entered into pursuant to 22-43.7-110 C.R.S. to provide Financial Assistance to the Eligible Charter School for which the loan is approved; except that the Eligible Charter School may pay the full amount of the loan early without incurring a prepayment penalty; and



4.3.9.4. Create an escrow account for the benefit of the state with a balance in the amount of six months of loan payments.

## **5. Applications**

### **5.1. Deadline for submission**

5.1.1. Except as provided below, Applications shall be filed with the Board on or before a date determined by the Board.

5.1.2. An Application will not be accepted unless it is received in the Board office by 4:00 p.m. on or before the deadline date determined by the Board. This does not apply to an Application in connection with a Public School Facility Emergency;

5.1.3. The Board may, in its sole discretion and upon a showing of good cause in a written request from an Applicant, extend the deadline for filing an Application.

5.2. The Board prefers Applications to be in electronic form, but one hard copy to the Board office is acceptable. Each Application shall be in a form prescribed by the Board and shall include, but not be limited to, the following (with supporting documentation):

5.2.1. A description of the scope and nature of the Project;

5.2.2. A description of the architectural, functional, and construction standards that are to be applied to the Project that indicates whether the standards are consistent with the Construction Guidelines and provides an explanation for the use of any standard that is not consistent with the Construction Guidelines;

5.2.3. The estimated amount of Financial Assistance needed for the Project and the form and amount of Matching Moneys that the Applicant will provide for the Project;

5.2.4. If the Project involves the construction of a new Public School Facility or a major renovation of an existing Public School Facility, a demonstration of the ability and willingness of the Applicant to renew the Project over time that includes, at a minimum, the establishment of a capital renewal budget and a commitment to make annual contributions to a Capital Renewal Reserve within a School District's capital reserve fund or any functionally similar reserve fund separately maintained by an Applicant that is not a School District;

5.2.5. If the Application is for Financial Assistance for the renovation, reconstruction, expansion, or replacement of an existing Public School Facility, a description of the condition of the Public School Facility at the time the Applicant purchased or completed the construction of the Public School Facility and, if the Public School Facility was not new or was not adequate at that time, the rationale of the Applicant for purchasing the Public School Facility or constructing it in the manner in which it did;

5.2.6. A statement regarding the means by which the Applicant intends to provide Matching Moneys required for the Project, including but not limited to voter-approved multiple-fiscal year debt or other financial obligations, gifts, grants, donations, or any other means of financing permitted by law, or the intent of the Applicant to seek a waiver of the Matching Moneys requirement. If an Applicant that is a School District or a Board of Cooperative Educational Services with a participating School District intends to raise Matching Moneys by obtaining voter approval to enter into a sublease-purchase agreement that constitutes an

indebtedness of the district as pursuant to § 22-32-127 C.R.S., it shall indicate whether it has received the required voter approval or, if the election has not already been held, the anticipated date of the election;

5.2.7. A description of any efforts by the Applicant to coordinate Capital Construction projects with local governmental entities or community-based or other organizations that provide facilities or services that benefit the community in order to more efficiently or effectively provide such facilities or services, including but not limited to a description of any financial commitment received from any such entity or organization that will allow better leveraging of any Financial Assistance awarded;

5.2.8. A copy of any existing Master Plan or facility assessment relating to the facility(ies) for which Financial Assistance is sought;

5.2.9. Any other information that the Board may require for the evaluation of the project;

5.2.10. An Application from a School District shall include signatures of the Superintendent and a District Board Officer;

5.2.11. An Application from a Charter School shall include signatures of the District Superintendent, School Board Officer, and the Charter School Director;

5.2.12. An Application from an Institute Charter School shall include signatures of the Charter School Institute Director and the Institute Charter School Director;

5.2.13. An Application from a Board of Cooperative Educational Services shall include signatures of the BOCES Director and a BOCES Board Officer;

5.2.14. An Application from the Colorado School for the Deaf and Blind shall include signatures of the Colorado School for the Deaf and Blind Director and a Colorado School for the Deaf and Blind Board Officer.

### 5.3. BEST Lease-Purchase Funding

5.3.1. In addition to the information required in section 5.2 above, the Applicant shall agree to provide any necessary documentation related to securing the lease-purchase agreement.

### 5.4. BEST Emergency Grants

5.4.1. Applicant shall contact the Division by phone, fax, or email. Appropriate follow up documentation will be determined based on type and severity of emergency, including financial need.

5.4.2. In the event the Governor declares a disaster emergency, pursuant to section 24-33.5-704(4) C.R.S., the Division shall, as soon as possible following the declaration of the disaster emergency, contact each affected school facility in any area of the State in which the Governor declared the disaster emergency to assess any facility needs resulting from the declared disaster emergency.

5.4.2.1. The Division must report its findings to the Board as soon as possible following its outreach.

5.4.2.2. In determining whether to recommend to the State Board that Emergency Financial Assistance be provided, the Board shall consider the findings that the Division provided to the Board.

5.4.3. The Board shall meet within fifteen days of receiving the Application for a BEST Emergency Grant to determine whether to recommend to the State Board that emergency Financial Assistance be provided, the amount of any assistance recommended to be provided, and any conditions that the Applicant shall meet to receive the assistance.

5.5. Applications that are incomplete may be rejected without further review.

5.6. The Board may request supplementation of an Application with additional information or supporting documentation.

## **6. Application Review**

### **6.1. Time for Review**

6.1.1. The Board, with the support of the Division, will review the Applications;

6.1.2. The Board will submit the prioritized list of Projects to the State Board for which the Board is recommending Financial Assistance according to the timeline established by the Board;

6.1.3. In the case of Financial Assistance that involves lease-purchase agreements, the prioritized list is subject to both the preliminary approval of the state board and the final approval of the capital development committee.

6.1.4. The Board may, in its discretion, extend these deadlines.

6.2. The Board, taking into consideration the Statewide Assessment, shall prioritize and determine the type and amount of the grant or matching grant for Applications for Projects deemed eligible for Financial Assistance based on the following criteria, in descending order of importance:

6.2.1. Projects that will address safety hazards or health concerns at existing Public School Facilities, including concerns relating to Public School Facility security;

6.2.1.1. In prioritizing an Application for a Public School Facility renovation project that will address safety hazards or health concerns, the Board shall consider the condition of the entire Public School Facility for which the project is proposed and determine whether it would be more fiscally prudent to replace the entire facility than to provide Financial Assistance for the renovation project.

6.2.2. Projects that will relieve overcrowding in Public School Facilities, including but not limited to projects that will allow students to move from temporary instructional facilities into permanent facilities.

6.2.3. Projects that are designed to incorporate technology into the educational environment; and

6.2.4. All other projects.

6.2.5. Among other considerations, the Board may take into account the following in reviewing Applications:

6.2.5.1. The amount of the matching contribution being provided in excess of or less than the minimum;

6.2.5.2. Whether the Applicant has been placed on financial watch by the Colorado Department of Education;

- 6.2.5.3. Overall condition of the Applicant's existing facilities;
- 6.2.5.4. The project cost per pupil based on number of pupils affected by the proposed Project;
- 6.2.5.5. The project life cycle.
- 6.2.5.6. The Public School Facility's Facility Condition Index (FCI), Colorado Facility Index (CFI), school priority score and construction guidelines score.
- 6.2.5.7. The Applicants ability to help itself, including available bonding capacity, planning and criteria in sections 4.1.1 or 4.1.2 or 4.1.3.

6.3. Additional actions the Board may take when reviewing an Application:

- 6.3.1. The Board may modify the amount of Financial Assistance requested or modify the amount of Matching Moneys required;
- 6.3.2. The Board may recommend funding a project in its entirety or recommend a partial award to the project;
  - 6.3.2.1. If a project is partially funded a written explanation will be provided.

6.4. The Board shall submit to the State Board the prioritized list of Projects. The prioritized list shall include:

- 6.4.1. The Board's recommendation to the State Board as to the amount of Financial Assistance to be provided to each Applicant approved by the Board to receive funding and whether the assistance should be in the form of a BEST Cash Grant, BEST Lease-purchase Funding or a BEST Emergency Grant.

6.5. In considering the amount of each recommended award of Financial Assistance, the Board shall seek to be as equitable as practical in considering the total financial capacity of each Applicant.

**7. BEST Lease-purchase Funding**

- 7.1. Subject to the following limitations, the Board may instruct the State Treasurer to enter into lease-purchase agreements on behalf of the state to provide Lease-purchase Funding for Projects for which the State Board has authorized provision of Financial Assistance.
- 7.2. Whenever the State Treasurer enters into a lease-purchase agreement pursuant to § 22-43.7-110 C.R.S., the Applicant that will use the facility funded with the Lease-purchase Funding shall enter into a sublease-purchase agreement with the state that includes, but is not limited to, the following requirements:
  - 7.2.1. The Applicant shall perform all the duties of the state to maintain and operate the Public School Facility that are required by the lease-purchase agreement;
  - 7.2.2. The Applicant shall make periodic rental payments to the state, which payments shall be credited to the Assistance Fund as Matching Moneys of the Applicant;
  - 7.2.3. Ownership of the Public School Facility shall be transferred by the state to the Applicant upon fulfillment of both the state's obligations under the lease-purchase agreement and the Applicant's obligations under the sublease-purchase agreement.

**8. Payment and Oversight****8.1. Payment.**

8.1.1. All Cash Grant Financial Assistance Grantees must sign a grant contract with CDE outlining the terms and conditions associated with the Financial Assistance.

8.1.2. All Financial Assistance awarded is expressly conditioned on the availability of funds.

8.1.3. Payment of Financial Assistance will be on a draw basis. As a Grantee expends funds on a Project, the Grantee may submit a request for funds to the Division on a fund request form provided by the Division. The fund request shall be accompanied by copies of invoices from the vendors for which reimbursement is being requested and any other documentation requested by the Division.

8.1.3.1. The Division will review the fund request and make payment. Payments will only be made for work that is included in the Project scope of work defined in the Application.

8.1.3.2. If the Grantee is a School District, request for payment shall come from the School District. Requests will not be accepted from individual School District schools.

8.1.3.3. If the Grantee is a District Charter School, request for payment shall come from the School District. Payment shall be made to the School District and the School District shall make payment to the charter school. The School District may not retain any portion of the moneys for any reason.

8.1.3.4. If the Grantee is an Institute Charter School, request for payment shall come from the Charter School Institute and the Charter School Institute shall make payment to the Institute Charter School. Payment shall be made directly to the Charter School Institute.

8.1.3.5. If the Grantee is a Board of Cooperative Educational Services, request for payment shall come from the Board of Cooperative Educational Services. Requests will not be accepted from individual Board of Cooperative Educational Services schools.

8.1.3.6. If the Grantee is the Colorado School for the Deaf and Blind, request for payment shall come from the Colorado School for the Deaf and Blind.

8.1.4. Payment of BEST Lease-purchase Funding will be determined by the terms of the lease-purchase agreement and any subsequent sublease-purchase agreements.

8.1.5. Each grant cycle the Board shall make a motion to authorize up to 10% of the assistance fund dollars be used to address grant reserves for projects awarded in that given year.

8.1.5.1. Grant reserve requests shall be submitted on a Division provided application;

8.1.5.2. Grant reserve applications will be submitted to the Board as an action item at the board meeting following the date the grant reserve application was submitted to the Division.

8.1.5.3. Grant reserve draws shall be limited to issues that were unforeseen, unanticipated and could not have been known about or planned for at the time the Application was submitted.

**8.2. Oversight**



- 8.2.1. When a Grantee completes Project, it shall submit a final report to the Division on a Division provided form before final payment will be made. Once the final report is submitted and final payment is made, the Project shall be considered closed.
- 8.2.2. If a Grantee has not used all Financial Assistance on a closed out BEST Cash Grant, the unused balance will be returned to the Assistance Fund.
- 8.2.3. If a Grantee has not used all Financial Assistance on a closed out Lease-Purchase Grant, the unused balance will be treated in accordance with the Board policy on returning Matching Moneys.
- 8.2.4. The Division may make site visits to review Project progress or to review a completed Project;
- 8.2.5. The Division may require a Grantee to hire additional independent professional construction management to represent the Applicant's interests, if the Division deems it necessary due to the size of the Project, the complexity of the Project, or the Grantee's ability to manage the Project with Grantee personnel.
- 8.2.6. Upon completion of a new school, major renovation or addition Project, the Grantee shall affix a permanent sign that reads: "Funding for this school was provided through the Building Excellent Schools Today Program from School Trust Lands," unless waived in writing by the Division.

**9. Technical Consultation**

- 9.1. The Division will provide technical consultation and administrative services to School Districts, Charter Schools, Institute Charter Schools, BOCES and the Colorado School for the Deaf and Blind.



**COLORADO DEPARTMENT OF EDUCATION****DIVISION OF PUBLIC SCHOOL CAPITAL CONSTRUCTION ASSISTANCE****1 CCR 303(1)****PUBLIC SCHOOL FACILITY CONSTRUCTION GUIDELINES****Article 1 – Purpose and Authority to Promulgate Rules**

## 1.1. Purpose

1.1.1. Section 22-43.7-107(1)(a), C.R.S. states, The board shall establish public school facility construction guidelines for use by the board in assessing and prioritizing public school capital construction needs throughout the state as required by section 22-43.7-108, C.R.S. reviewing applications for financial assistance, and making recommendations to the state board regarding appropriate allocation of awards of financial assistance from the assistance fund only to applicants. The board shall establish the guidelines in rules promulgated in accordance with article 4 of title 24, C.R.S.

1.1.2. Section 22-43.7-107(1)(b), C.R.S. states, It is the intent of the general assembly that the Public School Facility Construction Guidelines established by the board be used only for the purposes specified in section 1.1.1 above.

1.1.3. The Public School Facility Construction Guidelines shall identify and describe the capital construction, renovation, and equipment needs in public school facilities and means of addressing those needs that will provide educational and safety benefits at a reasonable cost.

## 1.2. Statutory Authority

1.2.1. Section 22-43.7-106(2)(i)(I) C.R.S. states, the board may promulgate rules in accordance with article 4 of title 24, C.R.S. The board is directed to establish Public School Facility Construction Guidelines in rule pursuant to 22-43.7-107(1)(a), C.R.S.

**Article 2 – Definitions**

2.1. The definitions provided in 22-43.7-103, C.R.S., shall apply to these rules. The following additional definitions shall also apply:

“C.R.S.” means Colorado Revised Statutes.

“ES” means Elementary School.

“F.T.E.s” means Full Time Equivalent Students.

“Gross Square Feet (GSF)” means the total area of the building (inclusive of all levels as applicable) of a building within the outside faces of the exterior walls, including all vertical circulation and other shaft (HVAC) areas connecting one floor to another.

“Guidelines” means the Public School Facility Construction Guidelines.

"Historical significance" means having importance in the history, architecture, archaeology, or culture of this state or any political subdivision thereof or of the United States, as determined by the state historical society.

"HS" means High School.

"K12" means Kindergarten through 12<sup>th</sup> Grade School that is under all one facility / campus.

"MS" means Middle School.

"SF" means Square Foot.

"S.T.E.M." means Science, Technology, Engineering, & Mathematics.

### **Article 3 – Codes, Documents and Standards incorporated by reference**

- 3.1. The following materials are incorporated by reference within the Public School Facility Construction Guidelines:
  - 3.1.1. ASHRAE 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings.
  - 3.1.2. ASHRAE Standard Benchmark Energy Utilization Index (October 2009).
  - 3.1.3. ASHRAE Standard 189.1 - 2011 Standard for the Design of High-Performance Green Buildings.
  - 3.1.4. ANSI S12.60, Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools (2010).
  - 3.1.5. International Code Council's International Plumbing Code (2015).
  - 3.1.6. National Fire Protection Association 70: National Electrical Code (2014).
  - 3.1.7. LEED 2009 for Schools New Construction and Major Renovations.
  - 3.1.8. CO-CHPS Criteria for New Construction and Major Modernizations (2009).
  - 3.1.9. ASHRAE Standard 62.1-2013 Ventilation for Acceptable Indoor Air Quality (2013).
  - 3.1.10. Environmental Protection Agency's Safe Water Drinking Act (1996).
  - 3.1.11. All projects shall be constructed and maintained in accordance with the codes and regulations as currently adopted by the Colorado Division of Fire Prevention & Control in 8 CCR 1507-30, which incorporates current building, fire, existing building, mechanical, and energy conservation codes.
- 3.2. The Division shall maintain copies of the complete texts of the referenced incorporated materials, which are available for public inspection during regular business hours with copies available at a reasonable charge. Interested parties may inspect the referenced incorporated materials by contacting the Director of the Division of Public School Capital Construction Assistance, 1580 Logan Street, Suite 310, Denver, Colorado 80203.
- 3.3. This rule does not include later amendments or editions of the incorporated material.

**Article 4 - These Guidelines are not mandatory standards to be imposed on school districts, charter schools, institute charter schools, the boards of cooperative services or the Colorado School for the Deaf and Blind. As required by statute, the Guidelines address:**

**4.1 Health and safety issues, including security needs and all applicable health, safety and environmental codes and standards as required by state and federal law. Public school facility accessibility.**

**4.1.1 Sound building structures.** Each building should be constructed and maintained with sound structural foundation, floor, wall and roof systems.

4.1.1.1 - All building structures shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30 and ANSI S12.60, Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools.

**4.1.2 Roofs.** A weather-tight roof that drains water positively off the roof and discharges the water off and away from the building. All roofs shall be installed by a qualified contractor who is approved by the roofing manufacturer to install the specified roof system and shall receive the specified warranty upon completion of the roof. The National Roofing Contractors Association divides roofing into two generic classifications: low-slope roofing and steep-slope roofing. Low-slope roofing includes water impermeable, or weatherproof types of roof membranes installed on slopes of less than or equal to 3:12 (fourteen degrees). Steep slope roofing includes water-shedding types of roof coverings installed on slopes exceeding 3:12 (fourteen degrees).

4.1.2.1 - Low slope roofing systems:

4.1.2.1.1- Built-up – minimum 4 ply, type IV fiberglass felt, asphalt BUR system. Gravel or cap sheet surfacing required.

4.1.2.1.2- Ethylene Propylene Diene Monomer - minimum 60 mil EPDM membrane, with a ballasted or adhered system.

4.1.2.1.3- Poly Vinyl Chloride - minimum 60 mil PVC membrane adhered or mechanically attached systems.

4.1.2.1.4- Thermal Polyolefin - minimum 60 mil membrane adhered or mechanically attached systems.

4.1.2.1.5- Polymer-modified bitumen sheet membrane - Styrene-Butadiene-Styrene (SBS) membranes only, to be used only as a component of a built-up system noted above.

4.1.2.2 - Steep slope roofing systems:

4.1.2.2.1- Asphalt shingles - minimum 50 year spec asphalt shingles, UL Class A.

4.1.2.2.2- Clay tile and concrete tile - minimum 50 year spec clay or concrete tile, UL Class A.

4.1.2.2.3- Metal roof systems for steep-slope applications - minimum 24 gage prefinished steel, standing seam roof system with a minimum 1.5" seam height.

4.1.2.2.4- Slate - ¾" minimum thickness, 50 year spec. UL Class A.

4.1.2.2.5- Synthetic shingles - minimum 50 year spec, UL Class A.

4.1.3 **Electrical and distribution systems.** Safe and secure electrical service and distribution systems designed and installed to meet the National Fire Protection Association 70: National Electrical Code (2014), and ASHRAE 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings.

4.1.3.1– Energy use intensity should not exceed the U.S. Department of Energy (DOE) building benchmarks, and shall conform to ASHRAE Standard Benchmark Energy Utilization Index (October 2009).

4.1.3.2 - Emergency lighting shall operate when normal lighting systems fail in locations and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

4.1.4 **Mechanical systems.** A safe and efficient mechanical system that provides proper ventilation, proper sound levels and maintains the building temperature and relative humidity. The mechanical system shall be designed, maintained and installed utilizing current State and Federal building codes, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

4.1.4.1 - Healthy building indoor air quality (IAQ) through the use of the mechanical heating, ventilation and air conditioning (HVAC) systems or operable windows and by reducing air infiltration and water penetration with a tight building envelope.

4.1.4.2 - Mechanical systems shall comply with: ASHRAE Standard 62.1-2013 Ventilation for Acceptable Indoor Air Quality, ASHRAE 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings, and ASHRAE Standard 189.1-2014 Standard for the Design of High-Performance Green Buildings.

4.1.5 **Plumbing.** A potable water source and supply system that complies with the Colorado Primary Drinking Water Regulations, 5 CCR 1003-1, the Environmental Protection Agency's Safe Water Drinking Act, and the International Code Council's 2015 International Plumbing Code.

4.1.6 **Fire management.** Building fire alarm and emergency notification systems in all school facilities shall be designed in accordance with state requirements. Exceptions include unoccupied very small single story buildings, sheds and temporary facilities where code required systems are not mandatory and the occupancy does not warrant a system. All fire management systems shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

4.1.6.1 - Types of fire alarm notifications systems.

4.1.6.1.1– Internal audible and visual alarms.

4.1.6.1.2– External alarm monitoring and dispatch via internet / modem, telephone, radio, or cellular monitoring systems.

4.1.6.2 - Types of fire suppression systems.

4.1.6.2.1- Fire hydrants.

4.1.6.2.2- Static fire water storage tanks.

4.1.7 **Paths of egress.** A continuous and unobstructed path of egress from any point in the school that provides accessible routes to an area of refuge, a horizontal exit, or public way. A facility code analysis shall be conducted to determine all code requirements.

4.1.8 **Facilities with safely managed hazardous materials.** Potential hazardous materials in building components, which are identified in the Asbestos Hazard Emergency Response Act (AHERA) report, may include: asbestos, radon, lead, lamps and devices containing mercury. Additional hazardous materials may include: science chemicals, cleaning chemicals, blood-borne pathogens, acid neutralization tank for science departments, and bulk fuel storage (UST/AST) management that may be stored by the occupant.

4.1.8.1 - Public schools shall comply with all AHERA criteria and develop, maintain, and update an asbestos management plan, to be kept on record at the school district. This should include a building survey of the exterior of the building, and identification of all friable, non-friable, and trace asbestos materials. Reference regulation Number 8, Control of Hazardous Air Pollutants, 5 CCR 1001-10.

4.1.8.2 - All new facilities and additions shall conduct radon testing following completion of construction within nineteen months after occupancy as required by Colorado Department of Public Health and Environment, 6 CCR 1010-6.

4.1.8.3 - Lead based paint. All schools shall conform to the regulations adopted by the Colorado Air Quality Control Commission governing the abatement of lead-based paint from target housing (constructed prior to 1978) and child-occupied facilities, reference C.R.S. 25-5-1101.

4.1.9 **Security.** The degree of resistance to, or protection from, harm. It applies to any vulnerable and valuable asset; such as a person, building or dwelling. Security provides "a form of protection where a separation is created between the assets and the threat." These separations are generically called "controls," and sometimes include changes to the asset or the threat. These separations and degrees of resistance can be achieved through several models and techniques.

4.1.9.1 - Video Management Systems (VMS).

4.1.9.1.1- Cameras. Cameras are typically used to implement a video management system. In new construction, these should be internet protocol (IP) cameras on Power over Ethernet (PoE) cabling infrastructure, high definition over coax cameras, or analog cameras. Cameras should support motion activation, pan-tilt-zoom functionality, and standard video compression.

4.1.9.1.2- Closed circuit or IP video recorders. A central video management system should be capable of monitoring live feeds from multiple cameras from a central location, recording to digital media. Acceptable recorders include: network video recorder (NVR), high-definition composite video interface (HD-CVI), digital video recorder (DVR).

4.1.9.1.3- All video management systems should be integrated into their local first responder's alert notification system.

4.1.9.2 - Controlled access.

4.1.9.2.1- Manual.



- 4.1.9.2.1.1 - The number of entryways into the building or onto the campus should be limited. New construction shall be designed to restrict normal entrance to only one or two locations, with no recessed doorways, provided that sufficient entryways are available for fire department access and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.
- 4.1.9.2.1.2 - All exterior doors shall be locking and equipped with panic bars to open readily from the egress side. Panic bars should utilize flush push bar hardware to prevent chaining doors shut.
  - 4.1.9.2.1.2.1 - Unless a door is intended for ingress, exterior doors should not have handles and locks on the outside. In all cases exposed hardware should be minimized, provided that sufficient entryways are available for fire department access and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.
- 4.1.9.2.1.3 - Doors should be constructed of steel, aluminum alloy, or solid-core hardwood. If necessary, glass doors should be fully framed and equipped with burglar-resistant tempered glass. Translucent glass should be avoided in all cases.
- 4.1.9.2.1.4 - Exit doors with panic push-bars should be "Access Control Doors" per the codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30, to prevent easy access by criminals and vandals, or in a lock-down / lock-out situation.
- 4.1.9.2.1.5 - Heavy-duty metal or solid-core wooden doors should be used at entrances in areas containing expensive items. These areas include classrooms, storerooms, and custodians' rooms. Interior doorway doors should also be heavy-duty metal or solid-core wooden doors.
- 4.1.9.2.1.6 - Door hinges should have non-removable pins.
- 4.1.9.2.1.7 - Door frames should be constructed of pry-proof material.
- 4.1.9.2.1.8 - Armored strike plates shall be securely fastened to the door frame in direct alignment to receive the latch easily.
- 4.1.9.2.2- Automated. Acceptable automated controlled access includes: automatic identification card/badge readers.
  - 4.1.9.2.2.1 - Faculty, staff, and administration. School personnel may be issued additional tools for authenticating their identity in order to maintain efficient access to school facilities.
  - 4.1.9.2.2.2 - Student. Schools shall expect students to carry some form of verifiable identification, if automated access to school facilities is to be provided.
- 4.1.9.3 - Front door security

- 4.1.9.3.1- Building vestibules. Where appropriate, buildings shall employ double entry door designs that provide a secured area for visitors to authenticate and gain clearance. Known as “man traps”, security vestibules solve several common security issues such as students opening doors for visitors, visitors bypassing check-in points, direct access to the interior from attackers, piggy-back entrances, and propped doors.
- 4.1.9.3.2- Video entrance systems. Building designs shall allow for school personnel to be able to monitor incoming visitors from a safe location out of reach, or line of site from incoming visitors who have not yet been authenticated or cleared for entry. These entry points shall use remote video and access control technology to conduct multi-factor authentication of incoming visitors (e.g. visual verification and ID, PIN/password and ID, or biometric and other form of visual identification).
- 4.1.9.3.2.1- Video entrance systems shall use IP technology to allow access control to be conducted by school personnel from multiple locations, so that multiple personnel can provide coverage for screening incoming visitors, eliminating entry system override or “door propping”.
- 4.1.9.3.2.2- Video entrance systems shall be integrated with school communication, alarm, or school database systems to allow personnel to screen visitors.
- 4.1.9.3.3- Line of sight. The front entrance should be designed to maximize the line of sight distance for school occupants to detect an intruder from each relevant perimeter (e.g. classroom to hallway, office or guard station to entryway, or entryway to exterior fence access, or exterior fence access to property perimeter).
- 4.1.9.4- Door lock / intrusion detection. Doors should have sufficient data cabling to a central interim distribution frame (IDF) or master distribution frame (MDF) to support access control/door release mechanisms, door sensors, IP Authentication sensors, and/or IP surveillance cameras as well as power cabling sufficient to support such hardware.
- 4.1.9.4.1- Interior classroom doors shall have locking hardware for lock downs, which does not interfere with automatic closing and latching functions required by the fire code and may have door sidelights, or door vision glass that allow line of sight into the corridors during emergencies, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.
- 4.1.9.5- Event alerting and notification (EAN) system. An EAN system that utilizes an intercom / phone system with communication devices located in all classrooms and throughout the school to provide efficient inter-school communications, and communication with local fire, police, and medical agencies during emergency situations.
- 4.1.9.6 - Secure sites should include the following:
- 4.1.9.6.1- Locations to avoid.
- 4.1.9.6.2- Location of utilities.
- 4.1.9.6.3- Roof access.

- 4.1.9.6.4- Lighted walkways.
- 4.1.9.6.5- Secured playgrounds.
- 4.1.9.6.6- Bollards at main entrances and shop areas with overhead doors.
- 4.1.9.6.7- Signage.
- 4.1.10 **Health code standards.** Schools, including labs, shops, vocational and other areas with hazardous substances shall conform to the Department Of Public Health and Environment Rules and Regulations Governing Schools: 6 CCR 1010-6.
- 4.1.11 **Food preparation equipment and maintenance.** Food preparation and associated facilities equipped and maintained to provide sanitary facilities for the preparation, distribution, and storage of food as required by Colorado Retail Food Establishment Rules and Regulations: 6 CCR 1010-2.
- 4.1.12 **Emergency care room.** A separate emergency care room shall be provided. This room shall have a dedicated bathroom, and shall comply with the Department Of Public Health and Environment Rules and Regulations Governing Schools 6 CCR 1010-6.
- 4.1.13 **A site that safely separates pedestrian and vehicular traffic and is laid out with the following guidelines:**
  - 4.1.13.1 - Physical routes for basic modes (busses, cars, pedestrians, and bicycles) of traffic should be separated as much as possible from each other. If schools are located on busy streets and/or high traffic intersections, coordinate with the applicable municipality or county to provide for adequate signage, traffic lights, and crosswalk signals to assist school traffic in entering the regular traffic flow.
  - 4.1.13.2 - When possible, provide a dedicated bus staging and unloading area located away from students, staff, and visitor parking.
  - 4.1.13.3 - Provide an adequate driveway zone for stacking cars on site for parent drop-off/pick-up zones. Drop-off area design should not require backward movement by vehicles, and be one-way in a counterclockwise direction where students are loaded and unloaded directly to the curb/sidewalk. Students should not have to load or unload where they have to cross a vehicle path before entering the building. It is recommended all loading areas have "No Parking" signs posted.
  - 4.1.13.4 - Provide well-maintained sidewalks and a designated safe path leading to the school entrance(s).
  - 4.1.13.5 - Building service loading areas and docks should be independent from other traffic and pedestrian crosswalks. If possible, loading areas shall be located away from school pedestrian entries.
  - 4.1.13.6 - Facilities should provide bicycle access and storage.
  - 4.1.13.7 - Fire lanes shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

4.1.13.8 - Playgrounds shall comply with the Americans with Disabilities Act and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

**4.1.14 Severe weather preparedness.**

4.1.14.1 - Designated emergency shelters shall be constructed as category IV buildings and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

**4.2 Technology, including but not limited to telecommunications and internet connectivity technology and technology for individual student learning and classroom instruction.**

4.2.1 Educational facilities for individual student learning, classroom instruction, online instruction and associated technologies, connected to the Colorado institutions of higher education distant learning networks "Internet" and "Internet two."

4.2.2 Educational facilities with standards based wired and wireless network connectivity.

4.2.3 Security and associated filtering and intrusion control for internal voice, video and data networks.

4.2.4 External internet service provider (ISP) connection and internal wide area network (WAN) connections meeting or exceeding recommended guidelines of the state education technology education directors association (SETDA) broadband imperative, and devices meeting or exceeding recommended specifications according to the most current version of technology guidelines for the partnership for assessment of readiness for college and careers (PARCC) assessments.

4.2.5 Provide school administrative offices with web-based activity access.

4.2.6 Administrative software individual educational programs (IEP), individual learning programs (ILP), and personal learning plans (PLP).

4.2.7 Emergency power backup, redundant a/c for voice, video and data systems.

4.2.8 Bi-Directional Amplification (BDA). Signal boosters that enhance in-building signals across a range of frequencies.

4.2.9 Building shall be constructed with long-term sustainable technology infrastructure. Facilities should be built with sufficient data cabling and/or conduit and power infrastructure to allow for maximum flexibility as technological systems are upgraded and replaced in the future. A plan for technology lifecycle review intervals should be put in place for review at 2-4 year intervals.

4.2.10 Data center and non-data centers.

4.2.10.1 - Uninterruptible power center (UPS). IDF and MDF locations should be wired with 30 Amp or 40 Amp power circuits to support sufficient backup power systems to maintain secure systems operation during a power outage, or intentional school attack.

4.2.10.1.1 - Data center and non-data centers should be backed up by a generator.

#### 4.2.11 Connectivity standards.

4.2.11.1 - Wireless. Data cabling shall be planned to support appropriately spaced multiple-antenna wireless networking infrastructure allowing for a centrally located antenna every 2500 to 5000 square feet (or preferably performing a professional site survey/ resonance analysis). Support for 802.11b/g/n, 802.11ac, and/or newer protocols are recommended.

#### 4.2.11.2 - Wired.

4.2.11.2.1 - Cabling. All new runs of copper data cable should be augmented category 6 cable or newer standards. Any data jack should be backed by two cable runs.

4.2.11.2.2 - Intermediate distribution frame (IDF) or Main distribution frame (MDF). Data closets shall be connected by conduit and fiber optic cable to allow for maximum data performance and upgradeability.

4.2.11.2.3 - IDF or MDF to classroom. Classrooms should have a data jack on the wall at the front and back of the room as well as data cable to the door for access control and a data jack on the ceiling near the front of the room for projection and/or smart board equipment as well as security/PA/clock devices.

4.2.11.2.4 - IDF to office, and library or technology/media centers. Any areas designed for independent work or study should have a dedicated data jack with two copper cable runs each.

4.2.11.2.5 - IDF to common areas, auditorium, and cafeteria. Common areas should contain one data jack per forty feet of linear wall space and such jacks shall be distributed at reasonably equal spacing throughout the room.

#### **4.3 Building site requirements. Functionality of existing and planned public school facilities for core educational programs, particularly those educational programs for which the State Board has adopted state model content standards. Capacity of existing and planned public school facilities, taking into consideration potential expansion of services for the benefit of students such as full-day kindergarten and preschool- and school-based health services and programs.**

##### 4.3.1 Traditional education model, S.T.E.M. & Montessori / Expeditionary education models.

4.3.1.1 - Minimum occupancy requirements for schools:

Median Gross Square Foot (GSF) Per Pupil								
F.T.E.s	Traditional ES (K-5)		Traditional MS (6-8)		Traditional HS (9-12)		Traditional K-12	
	GSF/Pupil	Total GSF	GSF/Pupil	Total GSF	GSF/Pupil	Total GSF	GSF/Pupil	Total GSF
100	151	15,064	161	16,102	192	19,183	164	16,393
200	146	29,197	159	31,813	190	38,030	161	32,298
300	141	42,401	157	47,136	188	56,540	159	47,715
400	137	54,674	155	62,068	187	74,713	157	62,645
500	132	66,017	153	76,610	185	92,550	154	77,087
600	127	76,429	151	90,763	183	110,050	152	91,041
700	123	85,912	149	104,526	182	127,214	149	104,508
800	118	94,464	147	117,899	180	144,041	147	117,488
900	113	102,086	145	130,883	178	160,531	144	129,979
1000	109	108,778	143	143,476	177	176,685	142	141,984
1100	104	114,540	142	155,680	175	192,502	140	153,500
1200	99	119,371	140	167,494	173	207,982	137	164,529

Median Gross Square Foot Per Pupil - Alternate Programs (Expeditionary (Exp.), Montessori (Mtsri.), S.T.E.M.)												
F.T.E.s	Alt. ES (GSF/Pupil)			Alt. MS (GSF/Pupil)			Alt. HS (GSF/Pupil)			Alt. K12 (GSF/Pupil)		
	Exp.	Mtsri.	S.T.E.M.	Exp.	Mtsri.	S.T.E.M.	Exp.	Mtsri.	S.T.E.M.	Exp.	Mtsri.	S.T.E.M.
100	160	161	156	171	169	166	203	198	201	174	172	180
200	155	156	151	169	167	164	202	196	199	171	170	177
300	150	151	146	167	165	162	200	194	197	169	167	175
400	145	146	141	164	163	160	198	192	195	166	164	172
500	140	141	137	162	161	158	196	191	194	163	162	169
600	135	136	132	160	159	156	194	189	192	161	159	167
700	130	131	127	158	157	154	193	187	190	158	157	164
800	125	126	122	156	155	152	191	185	188	156	154	161
900	120	121	117	154	153	150	189	184	187	153	152	159
1000	115	116	113	152	151	148	187	182	185	151	149	156
1100	110	111	108	150	149	146	186	180	183	148	146	153
1200	105	106	103	148	147	144	184	179	181	145	144	151

Square Foot Values - Assembly								
F.T.E.s	ES Assembly		MS Assembly		HS Assembly		K12 Assembly	
	Cafeteria	Auditorium	Cafeteria	Auditorium	Cafeteria	Auditorium	Cafeteria	Auditorium
100	675	1,300	675	1,500	675	1,700	675	1,700
200	1,200	1,600	1,200	1,800	1,200	2,000	1,200	2,000
300	1,800	1,900	1,800	2,100	1,800	2,300	1,800	2,300
400	2,400	2,400	2,400	2,600	2,400	2,800	2,400	2,800
500	3,000	2,700	3,000	2,900	3,000	3,100	3,000	3,100
600	3,600	3,000	3,600	3,200	3,600	3,400	3,600	3,400
700	4,200	3,900	4,200	3,900	4,200	3,900	4,200	3,900
800	4,800	4,200	4,800	4,200	4,800	4,200	4,800	4,200
900	5,400	4,500	5,400	4,500	5,400	4,500	5,400	4,500
1000	6,000	4,800	6,000	4,800	6,000	4,800	6,000	4,800
1100	6,600	5,100	6,600	5,100	6,600	5,100	6,600	5,100
1200	7,200	5,400	7,200	5,400	7,200	5,400	7,200	5,400

- Cafeteria Capacity assumes three (3) seatings without a secondary function overlay.

- Auditorium Capacity SF is sized for 1/3 of General enrollment and is inclusive of stage (size varies: 1,000 to 1,800); Basis is 9 SF per seat (1/3 FTES) plus stage at various sizes, stage includes a small amount of storage or similar support.

Square Foot (SF) Values - Core Classrooms (Minimum (Min) classroom size = 675 sf)								
F.T.E.s	ES Min (24-30 FTES)		MS Min (24-30 FTES)		HS Min (24-30 FTES)		K12 Min (24-30 FTES)	
	SF/Pupil	Total SF	SF/Pupil	Total SF	SF/Pupil	Total SF	SF/Pupil	Total SF
Kindergarten	38	1,140	-	-	-	-	38	1,140
Grade 1	32	960	-	-	-	-	32	960
Grade 2	32	960	-	-	-	-	32	960
Grade 3	32	960	-	-	-	-	32	960
Grade 4	30	900	-	-	-	-	30	900
Grade 5	30	900	-	-	-	-	30	900
Grade 6	-	-	30	900	-	-	30	900
Grade 7	-	-	28	840	-	-	28	840
Grade 8	-	-	28	840	-	-	28	840
Grade 9	-	-	-	-	28	840	28	840
Grade 10	-	-	-	-	28	840	28	840
Grade 11	-	-	-	-	28	840	28	840
Grade 12	-	-	-	-	28	840	28	840
Montessori	40	1,200	40	1,200	40	1,200	40	1,200
Expeditionary	36	1,080	36	1,080	36	1,080	36	1,080

Square Foot (SF) Values - Exploratory Spaces (minimum size = 675 sf)								
F.T.E.s	ES Min (24-30 F.T.E.s)		MS Min (24-30 F.T.E.s)		HS Min (24-30 F.T.E.s)		K12 Min (24-30 F.T.E.s)	
	SF/Pupil	Total SF	SF/Pupil	Total SF	SF/Pupil	Total SF	SF/Pupil	Total SF
Comp/Tech	30	-	32	-	32	-	32	-
Music	35	-	35	-	35	-	35	-
Science	38	-	40	-	44	-	44	-
Lecture	28	-	28	-	28	-	28	-
Art	35	-	40	-	45	-	45	-
Gym / MP	3,000 SF (50'x60')		5,400 SF (60'x90')		7,300 SF (70'x104')		7,300 SF (70'x104')	
Special Ed	37	-	37	-	37	-	37	-
VoAg	-	-	-	-	60	-	60	-
Media Center	1200 sf (30 occ)		2400 sf (60 occ)		3600 sf (60 occ)		3600 sf (60 occ)	
"Gymatorium"	4,400 SF (See notes)		4,400 SF (See notes)		-		-	

- ES Gymnasium basis is 50'X60' play area; Capacity Assumes (GE\*.25)/7 periods (without fixed seats)
- MS Gymnasium basis is 60'X90' play area; Capacity Assumes (GE\*.5)/7 periods (without fixed seats)
- HS Gymnasium basis is 70'X104' practice gym; Capacity Assumes (GE\*.5)/7 periods (with limited fixed seats) Note: National Federation of State High School Association's standards outline an "ideal" court for high school age as 84'x50' (and not greater than 94'x50')
- "Gymatorium" basis is 50'x60' play area and 1000 SF platform stage with 400 SF storage

Instructor / Support Areas		
Space Type:	Square Feet	Notes:
Office - typical	120	
Office - large	150	
Work room	250	Multiple individual (or in aggregate) may be required due to scale
Team planning (conf)	240	12-16 occupants (assembly use)
Instruction - sm group	320	16 occupants (classroom use)
Storage	50	Ave per instructor
Staff toilets	50	Multiple may be required due to scale

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**4.3.2 Other rooms.**

4.3.2.1 - Facilities with preschools shall comply with Rules Regulating Child Care Centers (Less Than 24-Hour Care) 12 CCR 2509-8 and shall comply with the Colorado Department of Public Health and Safety's Regulations Governing Child Care, 6 CCR 1010-7.

4.3.2.2 - Special education classrooms. Special Education classrooms and facilities meeting or exceeding the accessibility and adaptive needs of the current and reasonably anticipated student population, in accordance with Section 504 and Title II of the Americans with Disabilities Act, the Exceptional Children's Educational Act, and Individuals with Disabilities Education Act.

**4.4 Building performance standards and guidelines for green building and energy efficiency.**

Section 24-30-1305.5 C.R.S., requires all new facilities, additions, and renovation projects funded with 25% or more of state funds to conform with the High Performance Certification Program (HPCP) policy adopted by the Office of the State Architect (OSA) if:

- The new facility, addition, or renovation project contains 5,000 or more building square feet; and
- The project includes an HVAC system; and
- If increased initial cost resulting from HPCP can be recouped by decreased operational costs within 15 years, and
- In the case of a renovation project, the cost of the renovation exceeds 25% of the current value of the property.

**4.4.1 High Performance Certification Programs.**

4.4.1.1 - Leadership in Energy and Environmental Design (LEED) for schools. Reference LEED 2009 for Schools New Construction and Major Renovations.

4.4.1.1.1- LEED is an internationally recognized certification system that measures a building using several metrics, including: energy savings, water efficiency, sustainable land use, improved air quality, and stewardship of natural resources.

4.4.1.1.2- Points are awarded on a 100-point scale, and credits are weighted to reflect their potential environmental impacts. Different levels of certification are granted based on the total number of earned points. The four progressive levels of certification from lowest to highest are: certified, silver, gold and platinum.

4.4.1.2 - Colorado Collaborative for High Performance Schools (CO-CHPS).

4.4.1.2.1- The CO-CHPS Criteria is a benchmarking system that defines the attributes of a high performance school. The criteria addresses site and materials selection, energy and water efficiency, indoor environmental quality, innovation, performance, and integrated delivery, and provide high performance school strategies that can be used by schools and districts and their design teams for new campuses, buildings and major modernizations.

4.4.1.2.2- The CO-CHPS Criteria for New Construction and Major Modernizations (2009) requires the project achieves a 25% reduction in total energy cost savings compared to ASHRAE 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings, set an ENERGY STAR goal



of at least 75, and use the resulting site Energy Use Intensity (EUI) as a performance target and utilize the Flex Energy design tool.

#### **4.4.2 Renewable energy strategies.**

4.4.2.1 - Solar Photovoltaic / Solar Thermal.

4.4.2.2 - Geothermal / Geo exchange.

4.4.2.3 - Wind.

4.4.2.4 - Passive Solar Design.

#### **4.4.3 Energy management plan.**

4.4.3.1 - Energy programs assist with creating a culture of energy efficiency within a school. Reference Energy Star Guidelines for Energy Management to help develop a plan.

#### **4.4.4 Other energy efficient options.**

4.4.4.1 - ENERGY STAR Labeled HVAC / mechanical systems.

4.4.4.2 - Windows, doors, and skylights (collectively known as fenestration).

4.4.4.3 - Building Envelope.

4.4.4.3.1- The interface between the interior of the building and the outdoor environment, including the walls, roof, and foundation – serves as a thermal barrier and plays an important role in determining the amount of energy necessary to maintain a comfortable indoor environment relative to the outside environment.

4.4.4.3.2- Roof. Roof design and materials can reduce the amount of air conditioning required in hot climates by increasing the amount of solar heat that is reflected, rather than absorbed, by the roof. For example, roofs that qualify for ENERGY STAR® are estimated to reduce the demand for peak cooling by 10 to 15 percent.

4.4.4.3.3- Insulation is important throughout the building envelope.

4.4.4.4 - Lighting.

4.4.4.4.1- Light emitting diodes (LEDs), compact fluorescents (CFLs) and fluorescent lighting should be considered over traditional incandescent lighting.

4.4.4.5 - Commissioning, retro commissioning and re-commissioning.

4.4.4.5.1- Commissioning ensures that a new building operates initially as the owner intended and that building staff are prepared to operate and maintain its systems and equipment.

4.4.4.5.2- Retro commissioning is the application of the commissioning process to existing buildings.

4.4.4.5.3- Re-commissioning is another type of commissioning that occurs when a building that has already been commissioned, undergoes another commissioning process.

4.4.4.6- Measurement and verification. Measurement and verification (M&V) is the term given to the process for quantifying savings delivered by an Energy Conservation Measure (ECM), as well as the sub-sector of the energy industry involved with this practice. M & V demonstrates how much energy the ECM has avoided using, rather than the total cost saved.

4.4.4.7 - Landscaping.

**4.5 The historic significance of existing public school facilities and their potential to meet current programming needs by rehabilitating such facilities.**

4.5.1 Buildings that are 50 years or older at the time of application may be subject to the State Register Act 24-80.1-101 to 108 in determining if the affected properties have historical significance.

4.5.1.1 - Historical significance means having importance in the history, architecture, archaeology, or culture of this state or any political subdivision thereof or of the United States, as determined by the state historical society.

4.5.2 When determining if a facility should be replaced, the cost to rehabilitate versus the cost to replace should be evaluated.



Below are general guidelines to assist with project priority identification:

**C.R.S. 22-43.7-109(5)(a, b, c, and d):**

**(5)** *The Assistance Board, taking into consideration the financial assistance priority assessment conducted pursuant to section 22-43.7-108, shall prioritize applications that describe public school facility capital construction projects deemed eligible for financial assistance based on the following criteria, in descending order of importance:*

**(a)(I)** *Projects that will address safety hazards or health concerns at existing public school facilities, including concerns relating to public school facility security; (II) In prioritizing an application for a public school facility renovation project that will address safety hazards or health concerns, the Assistance Board shall consider the condition of the entire public school facility for which the project is proposed and determine whether it would be more fiscally prudent to replace the entire facility than to provide financial assistance for the renovation project.*

- Molds and fungi abatement
- Major structural hazards
- Threatening electrical
- Threatening HVAC, boiler, plumbing, indoor air quality hazards
- Potable water hazards
- Asbestos testing and abatement (friable) and being disturbed
- Roof repairs and replacement - with leaks causing damage to the facility
- Proper chemical storage
- Fire alarms
- Fire sprinklers
- Lead abatement
- Exterior door monitoring
- Master key and/or card systems for doors
- Equipment for surveillance and security
- Underground fuel tank removal and replacement
- Radon remediation
- Exit and emergency lighting
- Other

**(b)** *Projects that will relieve overcrowding in public school facilities, including but not limited to projects that will allow students to move from temporary instructional facilities into permanent facilities.*

- Eliminate modulars
- Reduce existing overcrowding
- Reduce the number of students per classroom
- Other

**(c)** *Projects that are designed to incorporate technology into the educational environment.*

- Provide new interactive technology facilities and hands on learning
- Upgrade technology infrastructure
- Technology equipment
- Other

*(d) All other projects. (While these projects could be considered a health, safety or security concern, the project may not necessarily pose an imminent concern during this application period)*

- Provide better temperature control and indoor air quality
- Air conditioning
- Additional space for new program(s)
- HVAC repairs, replacement and new installation
- Boiler replacement
- Plumbing repairs
- Electrical repairs
- Upgrading the electrical systems to meet codes, reduce energy or increase service
- Provide proper acoustics to reduce noise
- Roof repairs or replacement - due to age or regular scheduled maintenance (no leak issues)
- ADA upgrades
- Window and door replacement
- Insulation for temperature control
- Addition of energy saving windows to increase natural light and reduce lighting costs
- Asbestos abatement (friable), but non-disturbed
- Asbestos abatement (non-friable)
- Caulking to reduce air infiltration
- Reduce energy costs
- Exterior entry vestibules for ice, snow and wind costs
- Minor structural hazards
- Grading to improve drainage
- Provide cheerful ceiling, wall and floor treatment
- Increase storage for better organization
- Lighting upgrades
- Other

<b>Criteria #</b>	<b>Question</b>
<b>1</b>	Approximately how many acres is the site? (CDE requires a URL link to aerial photograph of all facilities assessed via Google Earth or other of site with approximate boundaries delineated. The CDE will provide the assessor with aerial images of schools.
<b>2</b>	How does the existing site compare with size recommendation in the CDE Construction Guidelines 4.1.13?
<b>4.1</b>	Do Football Fields meet the school's program requirements? If not comment on deficiencies.
<b>4.2</b>	Are Football Fields approved by the Colorado High School Activities Association?
<b>5.1</b>	Does the track meet the school's program requirements? If not comment on deficiencies.
<b>5.2</b>	Is the track approved by the Colorado High School Activities Association?
<b>6.1</b>	Do Baseball fields meet the school's program requirements? If not comment on deficiencies.
<b>6.2</b>	Are Baseball Fields approved by the Colorado High School Activities Association?
<b>7.1</b>	Do Softball fields meet the school's program requirements? If not comment on deficiencies.
<b>7.2</b>	Are Softball Fields approved by the Colorado High School Activities Association?
<b>8.1</b>	Do tennis courts meet the school's program requirements? If not comment on deficiencies.
<b>8.2</b>	Are tennis courts approved by the Colorado High School Activities Association?
<b>9.1</b>	Do soccer fields meet the school's program requirements? If not comment on deficiencies.
<b>9.2</b>	Are soccer fields approved by the Colorado High School Activities Association?
<b>10.1</b>	Do practice fields meet the school's program requirements? If not comment on deficiencies.
<b>13</b>	Is the school located on a 4 lane highway or street with daily traffic counts exceeding 25,000 per day? DOT?
<b>13.1</b>	If 4 lanes wide OR traffic count exceeding 25000 cars is there a traffic light or dedicated turn lane into the school?
<b>13.2</b>	Is there signage warning of school zone?
<b>14</b>	Is the location removed from undesirable business industry traffic and natural hazards as recommended in the CDE Construction Guidelines 4.1.13?
<b>16.1</b>	Is there a bus loading and unloading zone?
<b>16.2</b>	Is the bus loading and unloading zone and parent drop off - pickup area separated from other vehicle and pedestrian traffic?
<b>16.3</b>	Do pedestrians have to cross traffic lanes to enter school?
<b>17.1</b>	Is there a parent drop off and pick up area?
<b>17.2</b>	Is the parent drop off and pickup area one way?
<b>17.4</b>	Is the parent drop off and pickup area separated from bus loading and unloading
<b>18.1</b>	Are there staff and visitor parking?
<b>18.2</b>	Is the staff and visitor parking area paved with marked parking stalls?
<b>18.3</b>	Are there marked ADA staff and visitor parking stalls?
<b>18.4</b>	Does the staff and visitor parking provided meet the CDE Construction Guidelines 4.1.13?
<b>18.6</b>	Is there a dedicated well marked traffic lane to the main entry?
<b>19.1</b>	Is there student parking?
<b>19.2</b>	Is the parking area paved with marked parking stalls?
<b>19.3</b>	Are there marked ADA student parking spaces?
<b>19.4</b>	Does the student parking provided meet the CDE Construction Guidelines 4.1.13?
<b>20</b>	Is the service delivery area separated from pedestrian traffic, sports fields and playgrounds?
<b>21.1</b>	Are there concrete walks that provide circulation around the school?
<b>22</b>	Is there an area for bicycle storage?

<b>Criteria #</b>	<b>Question</b>
23	Is there a marked fire lane with "no parking" signs posted?
25	Is there a playground/playfields for ES? If so does the play equipment meet recommendations in the CDE Construction Guidelines 4.1.13?
25.1	If there is playground equipment; is the equipment in good condition?
26	Is playground equipment available for persons with disabilities?
28	Are parking areas lit? Describe condition.
29	Are sports fields lit? Describe condition.
30	Are school entries lit? Describe condition.
31	Are school perimeters lit? Describe condition.
33	Is the school floor slab raised 6" Above grade or more? Describe condition.
34	Does water drain positively away from the school?
35	Is there a drainage path on site?
35.1	Is the site erosion free?
36	Is there a water retaining area?
36.1	Does it have a drain at the basin?
36.2	Describe the condition of the retaining area.
38	Is ADA parking close to the main entrance?
39	Is there an identifiable path of ingress?
40	Are there curb cuts at curbs?
41	Is there signage identifying ADA parking and identifying path of ingress?
43.1	Is there site way-finding signage?
43.2	Is there traffic signage? Describe deficiencies.
45	Is the school heated with natural gas propane coal electricity or other?
45.1	Are the propane tank or tanks installed as required by code?
45.2	Is the natural gas service protected?
46	Is the site served by a private or a public water system?
47	Is the site served by a well?
47.1	Is the well secured to limit access? Describe condition.
48	Is major electrical service equipment (Including transformers switchgear and disconnects) located outside?
48.1	If the major electrical service equipment is located outside is the electrical equipment fenced in or locked to limit access?
49	Is the site served by a public or private waste water system?
50	Is the private waste water system approved by the Colorado Health Department OR a LOCALLY approved septic tank and leach field?
50.1	Is there a manhole to the service tank?
51	Is there a fire hydrant(s) located within 200 ft. of the school?
51.1	How far away is the fire hydrant from the school building?
53	Is the landscaping well developed and maintained?
54	How is the landscaping watered? By hand on a timer on a smart system other?
54.1	Describe the condition of the landscaping watering system.
55	Does the landscaping aid passive solar techniques?
56	Is the landscaping drought tolerant?

<b>Criteria #</b>	<b>Question</b>
57	Are weeds under control?
60	Is the trash area segregated from students and the public?
61	Is the trash area enclosed?
63	Is the site clean and free of litter and trash?
65.1	Is the site fenced?
65.2	Are gates provided at fences with locking capability?
65.3	Are playgrounds fenced separately?
66	Are there good open lines of site from a single vantage point of playgrounds?
67	Is the school roof controlled for restricted access?
68	Is the main entry protected from forced vehicle entry? Describe how, bollards etc.
70	Are corridors fire rated?
70.1	Are the corridors' openings protected? E.g. are doors labeled with smoke seals and closers etc.?
70.2	Describe the condition of the corridors.
71	Is the school segregated with area separation fire walls?
72	What is the school construction type? E.g. III-A, 1-B, etc.
73	What is the school occupant load?
73.1	Is the school occupant load in compliance with code?
74	Is there an unobstructed path of egress from all points in the school?
74.1	Describe the condition of the unobstructed path of egress.
75	Are stairways protected for exiting as required by code?
75.1	Determine the adequate number of stairways
75.2	Describe condition of stair(s)
76	Do stair treads risers and landings meet code? 1) Riser restrictions are 7' maximum and 4" minimum. 2) Tread depth must be a minimum of 11". 3) Minimum stair width must be 60" for educational group with an occupancy of 100 or more.
76.1	Describe condition of treads risers and landings
77	Are classroom doors recessed and open in the exiting direction?
78	Are there guardrails and handrails by stairways and landings as required by code? 1) Top of handrail must be 34" to 38" above the stair nosing. 2) Handrail extension for the top and bottom must extend a minimum of 12" plus the return to wall dimension.
78.1	Describe condition of guardrails and handrails
79	Is glass tempered, laminated, or wire in locations as required by code?
80	Does the school provide exits as required by code?
80.1	Do corridors terminate at an exit or a stairway leading to an exit?
81	Is the path of egress ADA accessible?
81.1	Are there areas of refuge?
82	Does the school facility offer same services to all occupants in the building? E.g. is the building ADA compliant?
83	Does the school have emergency exiting lighting on an independent electrical service?
84	Does the district/school have a backup generator?
84.1	How is the backup generator powered? Natural gas propane wind other?
84.2	Is fuel stored as required by code? Describe condition.



<b>Criteria #</b>	<b>Question</b>
<b>85</b>	Does the school have fire extinguishers located as required by code?
<b>86</b>	Is the school provided with a sprinkler system?
<b>87</b>	Is there a school fire alarm system that meets current fire codes? IFC Required?
<b>87.1</b>	Is the alarm monitored?
<b>87.2</b>	Describe the type age and condition of the fire alarm system.
<b>89</b>	Will photographs be taken of facility deficiencies found?
<b>90</b>	Include exterior photographs of all district owned facilities, North, East, West, and South.
<b>91</b>	Collect pdf files of existing floor plans. CDE prefers this information be collected from the school district for inclusion into database
<b>92</b>	List all facilities as described in section 4 of the RFP by name and description. Include this information on all facilities including abandoned facilities, storage sheds, press stands, etc.
<b>93</b>	List square footages of all facilities, including roof footprint square footage. Include this information on all facilities including abandoned facilities, storage sheds, press stands, etc.
<b>94</b>	List Age of all facilities. List dates of additions or major remodels. Include this information on all facilities including abandoned facilities, storage sheds, press stands, etc.
<b>95</b>	List Grades Attending School.
<b>96</b>	List number of building stories.
<b>97</b>	What is the student capacity?
<b>100</b>	Is there a basement?
<b>100.1</b>	Do the foundation or basement walls have any observable cracks?
<b>101</b>	Is the school constructed on a slab on grade?
<b>101.1</b>	Does the slab on grade show signs of heaving or cracking?
<b>101.2</b>	If visually possible from the exterior, note whether the slab is post tensioned.
<b>102</b>	Are the exterior/interior walls bearing?
<b>102.1</b>	What materials are the exterior/interior walls constructed of?
<b>102.2</b>	Are there any observable cracks or other areas of failure in respect to the walls?
<b>102.3</b>	Are there expansion joints for expansion and contraction of building materials?
<b>103</b>	What are the exterior walls constructed of if not bearing? Wood framing metal framing other?
<b>103.1</b>	Describe condition of exterior walls (Including all facilities including abandoned facilities, storage sheds, press stands, etc.)
<b>104</b>	What is the school's structural system?
<b>104.2</b>	Describe the condition of the school's structural system.
<b>105</b>	What are the exterior walls veneered with? Lath and plaster stucco brick CMU block stone wood lap siding metal siding other?
<b>105.2</b>	Describe condition of veneer.
<b>106</b>	What are the interior corridor walls constructed of, if not bearing?
<b>106.1</b>	Describe condition of interior corridor walls.
<b>107</b>	What are interior walls, other than corridors, constructed of?
<b>107.1</b>	Describe condition of the interior walls and veneering.
<b>108</b>	What is the ceiling/roof assembly constructed of? Wood joists with wood planking I-joists with plywood open web wood joists with wood planking or plywood open web metal joist and concrete other?
<b>108.1</b>	Describe the condition of the school's ceiling/roof assembly.

<b>Criteria #</b>	<b>Question</b>
<b>109</b>	What is the ceiling/floor assembly constructed of? Wood joists with wood planking I-joists with plywood open web wood joists with wood planking or plywood open web metal joist and metal decking other?
<b>109.1</b>	Describe the condition of the school's ceiling/floor assembly.
<b>110</b>	Is the school's roof covering low-sloping (3:12 or less) or steep-sloping (3:12 or more)?
<b>110.1</b>	What is the roofing system (BUR EPDM Asphalt Shingles etc.)?
<b>110.2</b>	What is the approximate age of the roof covering?
<b>110.3</b>	Is water draining positively with water being removed off?
<b>110.4</b>	What is the condition of the roof covering?
<b>112</b>	HVAC-What type of mechanical system does the school have? Describe all individual mechanical systems by area that comprise the overall system.
<b>112.1</b>	What is the approximate age of the HVAC system?
<b>112.2</b>	Does the system provide fresh air as recommended in the CDE Construction Guidelines 4.1.3? Please refer to CO2 test results.
<b>112.3</b>	How is the fresh air controlled?
<b>112.4</b>	How many zones are there?
<b>114</b>	What is the air quality for carbon dioxide?
<b>114.1</b>	Provide resulting data from carbon dioxide tests.
<b>115</b>	At the time of visit, what is the air quality for carbon monoxide in boiler rooms or at air supply ducts?
<b>116</b>	Are electrical utilities lines service equipment and distribution system installed as recommended in the CDE Construction Guidelines 4.1.3?
<b>116.1</b>	Does the electrical system in its existing configuration, from the transformer to the panel, have room for additional electrical capacity?
<b>116.2</b>	Is power single or three phase?
<b>116.3</b>	Describe the age and condition of the electrical system.
<b>117</b>	Is there an adequate number of electrical outlets in classrooms and teaching areas?
<b>117.1</b>	Are extension cords and multiple outlet receptacle outlets used to make up for lack of wall/floor outlets?
<b>118</b>	What type of lighting does the school have? Compact fluorescents, T-8 lamps, T-5 lamps, other?
<b>118.1</b>	Describe condition of the lighting in the school.
<b>119</b>	Do current lighting levels meet electrical lighting codes?
<b>119.1</b>	Describe lighting levels.
<b>120</b>	Are there any noticeable odors in the school that suggest sewer lines are in poor condition?
<b>120.1</b>	Does the school have adequate bathrooms to support the building population as required by code?
<b>120.2</b>	Are plumbing fixtures equipped with low flow water saving devices?
<b>120.3</b>	Describe condition of system and fixtures.
<b>120.4</b>	What are the occupant loads and fixture counts versus the current enrollment at the school?
<b>121</b>	Test water at one location in each school for lead and copper. Provide testing results in database.
<b>122</b>	What is the condition of the school's water treatment system?
<b>124</b>	Is there an event alert notification system as recommended in the CDE Construction Guidelines 4.1.9.5?
<b>125.1</b>	Is there restricted access at secondary entrances and controlled access at the building main entrance as recommended in the CDE Construction Guidelines 4.1.9?
<b>125.2</b>	Are there lines of sight from the administrative area or video cameras monitoring the main entrance?
<b>127</b>	Are facilities equipped with closed circuit video and key card or key pad school access?

<b>Criteria #</b>	<b>Question</b>
<b>129</b>	Are there any noticeable friable hazardous materials in the school or any suspected hazardous materials not on the school's Asbestos Hazard Emergency Response Act (AHERA) plan?
<b>129.1</b>	Are hazardous materials safely managed?
<b>129.2</b>	Is there an updated copy of the Asbestos Management Plan on file?
<b>131</b>	Are the school facilities including kitchens maintained in a clean and sanitary manner as recommended in the Criteria and as required by Colorado Health Codes? List major items in non-compliance
<b>131.1</b>	Please list deficiencies in relation to major clean and sanitary non-compliance issues.
<b>133</b>	Are chemicals and cleaning supplies stored as recommended in the CDE Construction Guidelines 4.1.8?
<b>134</b>	Are Science labs and shops safe as recommended in the CDE Construction Guidelines 4.1.8?
<b>135</b>	Is there an emergency nurse's station with a dedicated bathroom and secure area to store student medications?
<b>137.1</b>	Does the school have daylight with views in all learning areas?
<b>137.2</b>	Learning style variety
<b>137.3</b>	Does the school have acoustical materials to reduce ambient noise levels and minimize transfer of noise between classrooms, corridors and other learning areas?
<b>138</b>	Is there anything in the physical make-up of the school that does not allow the school to meet the standards of the Colorado Achievement Plan for Kids (Cap4K) or the No Child Left Behind Act (NCLB)
<b>139.1</b>	Does the school have preschool classrooms as needed for the school program?
<b>139.2</b>	Preschool Adjacencies
<b>139.3</b>	Preschool Storage/Fixed Equipment
<b>140.1</b>	Does the school have kindergarten classrooms as needed for the school program?
<b>140.2</b>	Kindergarten Adjacencies
<b>140.3</b>	Kindergarten Storage/Fixed Equipment
<b>141.1</b>	Do the special education spaces (including testing rooms, offices, etc.) meet school expectations and requirements?
<b>141.2</b>	Special Ed Adjacencies
<b>141.3</b>	Special Ed Storage/Fixed Equipment
<b>142.1</b>	Does the school have general classrooms as described in the CDE Construction Guidelines 4.3?
<b>142.2</b>	General Classroom Adjacencies
<b>142.3</b>	General Classroom Storage/Fixed Equipment
<b>143.1</b>	Do the special program spaces (including, Title 1, Speech, PT/OT, ESL, etc.) meet school expectations and requirements.
<b>143.2</b>	Special Programs Adjacencies
<b>143.3</b>	Special Programs Storage/Fixed Equipment
<b>144.1</b>	Does the school have a Music room as described in the CDE Construction Guidelines 4.3?
<b>144.2</b>	Music Adjacencies
<b>144.3</b>	Music Storage/Fixed Equipment
<b>146.1</b>	Does the school have an art room as described in the CDE Construction Guidelines 4.3?
<b>146.2</b>	Art Adjacencies
<b>146.3</b>	Art Fixed Equipment
<b>147.1</b>	Does the school have a computer lab as described in the CDE Construction Guidelines 4.3?
<b>147.2</b>	Computer Lab Adjacencies
<b>147.3</b>	Computer Lab Fixed Equipment

<b>Criteria #</b>	<b>Question</b>
<b>148</b>	Does the school have a career center for students to access materials and research higher education opportunities which meets local needs
<b>149.1</b>	Does the school have Career and Technical Education spaces as described in the CDE Construction Guidelines 4.3?
<b>149.2</b>	CTC Adjacencies
<b>149.3</b>	CTC Storage/Fixed Equipment
<b>150.1</b>	Does the school have a library/multimedia center (LMC) as described in the CDE Construction Guidelines 4.3?
<b>150.2</b>	Library Adjacencies
<b>150.3</b>	Library Storage/Fixed Equipment
<b>151.1</b>	Does the school have a distance learning lab as described in the CDE Construction Guidelines 4.3?
<b>151.2</b>	Distance Learning Adjacencies
<b>151.3</b>	Distance Learning Storage/Fixed Equipment
<b>152.1</b>	Does the school have an adequate PE facilities as described in the CDE Construction Guidelines 4.3?
<b>152.2</b>	PE Adjacencies
<b>152.3</b>	PE Storage/Fixed Equipment
<b>152.4</b>	Does school have dance program and appropriate space for program
<b>156.1</b>	Does the school have a performing arts/auditorium support area as described in the CDE Construction Guidelines 4.3?
<b>156.2</b>	Performing Arts/Auditorium Adjacencies
<b>156.3</b>	Performing Arts/Auditorium Storage/Fixed Equipment
<b>157.1</b>	Does the school have an administrative support area + reception area including teacher lounge guidance area etc. as described in the CDE Construction Guidelines 4.3?
<b>157.2</b>	Administration Adjacencies
<b>157.3</b>	Administration Storage/Fixed Equipment
<b>157.4</b>	Student Restrooms
<b>157.5</b>	Cafeteria
<b>157.6</b>	Food Prep
<b>158.1</b>	Science Labs as described in the CDE Construction Guidelines 4.3?
<b>158.2</b>	Science Labs Adjacencies
<b>158.3</b>	Science Labs Storage/Fixed Equipment
<b>159</b>	Are the school materials listed below of good quality and easily maintainable? Please see below listed questions 160-165 for details.
<b>160</b>	Interior walls finishes? Describe type and condition.
<b>161</b>	Interior flooring? Describe type and condition.
<b>162</b>	Interior ceilings? Describe type and condition.
<b>163</b>	Exterior doors, frames and glazing? Describe type and condition.
<b>163.1</b>	What is condition of weather stripping and caulk?
<b>163.2</b>	How many exterior doors are there?
<b>164</b>	Interior doors and frames? Describe type and condition.
<b>165</b>	Windows/glazing? Describe type and condition.
<b>168</b>	Telephone system? Describe type and condition.

<b>Criteria #</b>	<b>Question</b>
169	Video distribution system? Describe type and description.
170	Does the school have a data/network system?
171.1	Is the school facility protected to maintain business continuity with emergency power backup?
171.2	Is the school facility protected to maintain business continuity with redundant air conditioning for data centers?
171.3	Is the school facility protected to maintain business continuity with data backup systems?
171.4	Where are data backups stored?
173.1	Is the school connected to the internet? How is it connected?
173.2	Does the school have wireless internet access throughout?
174.1	Is the school connected to the Colorado institutions of higher education distant learning networks "internet two"?
174.2	Do the buildings have high speed drops or wireless?
176.1	School administrative offices are provided with hardware & software that provides control of web-based activity access throughout the facility.
176.2	School administrative offices are provided with the technological hardware and software that provides email for staff.
176.3	School administrative offices are provided with the technological hardware and software that provides a school wide telephone system with voicemail.
176.4	School administrative offices are provided with hardware & software that provides a district hosted web site with secure parent online access linked to attendance and grades.
178.1	Is the school energy efficient? (Btus/SF/Yr)
178.2	Is the school water efficient? (Gals/SF/Student)
179	Does the school have low life cycle costs? (Compare current FCI with Parsons K12 Historical FCI curve and establish + deviation (worse) or - deviation (better) to estimate total effect of life cycle costs.)
180	Is the school healthy for its occupants? (Average scores of 112.2 (fresh air)+ 114 (CO2) + 115 (CO) + 119.1 (lighting) + 121 (C and Pb) + 129.1 (Hazmat) + 131 (sanitary) + 137.1 (daylight) + 137.3 (acoustics))
181	Does the school have a relatively low impact on the environment? (Average scores 178.1 (energy) + 178.2 (water) + 179 (life cycle costs) + 184.1 (renewable strategies))
182	Does the school reduce demand on municipal infrastructure by encouraging denser development, reducing water consumption and with responsible storm water management and treatment design?
183	Does the site minimize parking to reduce heat island effect and discourage use of individual automobiles?
184	Does the school utilize energy efficient equipment? (See 178.1 - Btus/SF/Yr)
184.1	Does the building utilize renewable energy strategies?
185	Does the school meter all utilities with the ability to submeter selected systems?
186	Does the school increase the schools community knowledge about the basics of high performance design using an educational display to serve as a three-dimensional textbook?
187	What are exterior walls insulated with? Describe age type and condition. Condition Score
188	Is there an un-shaded south facing wall? If so how many square feet get direct sunlight?
189	What percent of exterior facade are windows dedicated to?
190	Is the school site located to encourage use of bicycling walking and mass transportation?
191	Is the school used jointly with the community?
191.1	What are the typical community uses of the building?

<b>Criteria #</b>	<b>Question</b>
<b>191.2</b>	How many hours/day and days/year is the school available for the community to use?
<b>192</b>	How many exit doors are there?
<b>193</b>	Is the school oriented to take advantage of passive solar, wind, natural ventilation green roofs, etc.?
<b>194</b>	Does the school have good sources of natural light throughout the building? Describe type and locations.
<b>195</b>	Has the school lighting been replaced with new energy efficient fixtures?
<b>196</b>	Does the site lighting have minimal impact at night on neighboring properties (low sky glare)?
<b>197</b>	Has the mechanical system been commissioned or retro-commissioned in the last five years?
<b>198</b>	What are exterior walls insulated with? Describe age type and condition. Energy Score
<b>199</b>	Are corridor walls insulated for sound? Describe age type and condition.
<b>200</b>	Are interior walls other than corridors insulated for sound? Describe age type and condition.
<b>201</b>	Is ceiling/floor assembly insulated for sound? Describe age type and condition.
<b>202</b>	Is the ceiling/roof assembly insulated? Describe age type and condition of insulation.
<b>203</b>	Are the windows thermal with double pane low e glass? If not describe type and condition.
<b>203.1</b>	Are they operable? Are the windows being used to control indoor air temperature and ventilation?
<b>203.2</b>	Describe condition of caulking
<b>204</b>	Are school wastes reclaimed?
<b>205</b>	Does the site incorporate responsible storm water management and treatment design?
<b>206</b>	Are there entry vestibules at the main school entrances?
<b>206.1</b>	Are there entry vestibules at the secondary school entrances?
<b>207</b>	Does the district/school have a recent active energy management plan?
<b>208</b>	Does the district/school have preventative maintenance procedures in place?
<b>209</b>	Obtain past and current utility records (three year) from school and include in database. Include dollars per kilowatt-hour (kwh) kilowatt (kW) and Therms used. This item must be coordinated with the Governor's Energy Office.
<b>210</b>	Should the facility be placed on a list for further due diligence by CDE to determine historical significance based on the CDE Construction Guidelines section 4.5?
<b>212</b>	Current facility/school replacement value (CRV)
<b>213</b>	Facility Condition Index (FCI) or equivalent method. Include inflation line item factored in at bottom of (FCI)

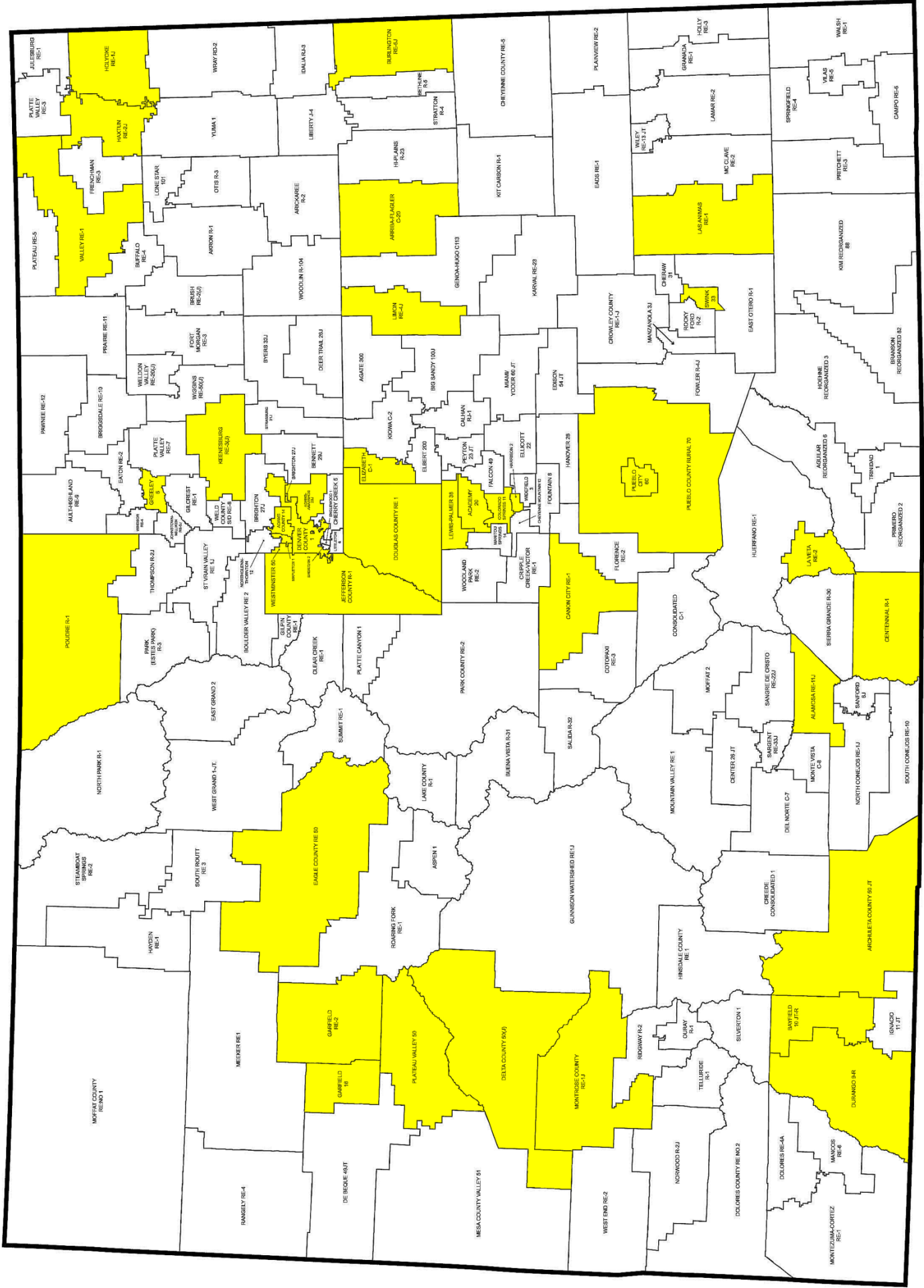


<b>Level 1 Major Group Elements</b>	<b>Level 2 Group Elements</b>	<b>Level 3 Individual Elements</b>
A SUBSTRUCTURE	A10 Foundations	A1010 Standard Foundations
		A1020 Special Foundations
		A1030 Slab on Grade
	A20 Basement Construction	A2010 Basement Excavation
		A2020 Basement Walls
B SHELL	B10 Super Structure	B1010 Floor Construction
		B1020 Roof Construction
		B2010 Exterior Walls
	B20 Exterior Enclosure	B2020 Exterior Windows
		B2030 Exterior Doors
	B30 Roofing	B3010 Roof Coverings
		B3020 Roof Openings
	C INTERIORS	C10 Interior Construction
C1020 Interior Doors		
C1030 Fittings		
C20 Stairs		C2010 Stair Construction
		C2020 Stair Finishes
C30 Interior Finishes		C3010 Wall Finishes
		C3020 Floor Finishes
		C3030 Ceiling Finishes
D SERVICES	D10 Conveying	D1010 Elevators & Lifts
		D1020 Escalators & Moving Walks
		D1090 Other Conveying Systems
	D20 Plumbing	D2010 Plumbing Fixtures
		D2020 Domestic Water Distribution
		D2030 Sanitary Waste
		D2040 Rain Water Drainage
		D2090 Other Plumbing Systems
	D30 HVAC	D3010 Energy Supply
		D3020 Heat Generating Systems
		D3030 Cooling Generating Systems
		D3040 Distribution Systems
		D3050 Terminal & Package Units
		D3060 Controls & Instrumentation
		D3070 Systems Testing & Balancing
	D3090 Other HVAC Systems & Equipment	
	D40 Fire Protection	D4010 Sprinklers
		D4020 Standpipes
		D4030 Fire Protection Specialties
		D4090 Other Fire Protection Systems
	D50 Electrical	D5010 Electrical Service & Distribution
D5020 Lighting and Branch Wiring		
D5030 Communications & Security		
D5090 Other Electrical Systems		



E EQUIPMENT & FURNISHINGS	E10 Equipment	E1010 Commercial Equipment
		E1020 Institutional Equipment
		E1030 Vehicular Equipment
		E1090 Other Equipment
	E20 Furnishings	E2010 Fixed Furnishings
		E2020 Movable Furnishings
F SPECIAL CONSTRUCTION & DEMOLITION	F10 Special Construction	F1010 Special Structures
		F1020 Integrated Construction
		F1030 Special Construction Systems
		F1040 Special Facilities
		F1050 Special Controls and Instrumentation
	F20 Selective Building Demolition	F2010 Building Elements Demolition
	F2020 Hazardous Components Abatement	
G BUILDING SITEWORK	G10 Site Preparation	G1010 Site Clearing
		G1020 Site Demolition and Relocations
		G1030 Site Earthwork
		G1040 Hazardous Waste Remediation
	G20 Site Improvements	G2010 Roadways
		G2020 Parking Lots
		G2030 Pedestrian Paving
		G2040 Site Development
		G2050 Landscaping
	G30 Site Mechanical Utilities	G3010 Water Supply
		G3020 Sanitary Sewer
<b>Key:</b>		G3030 Storm Sewer
<b>Priority: 1</b> Critical/Immediate Need		G3040 Heating Distribution
<b>Priority: 2</b> Potentially Critical - 12 Months		G3050 Cooling Distribution
<b>Priority: 3</b> Necessary - 2-5 Years		G3060 Fuel Distribution
<b>Priority: 4</b> Recommended - 3-10 Years		G3090 Other Site Mechanical Utilities
<b>Priority: 5</b> Does Not Meet Current Code and/or Guidelines (grandfathered)	G40 Site Electrical Utilities	G4010 Electrical Distribution
		G4020 Site Lighting
		G4030 Site Communications & Security
		G4090 Other Site Electrical Utilities
	G90 Other Site Construction	G9010 Service and Pedestrian Tunnels
		G9090 Other Site Systems & Equipment

# Building Excellent Schools Today (BEST) FY2016-17 Participating Districts



Note: For CSI Schools, BOCES and the Colorado School for the Deaf & Blind, the district is highlighted where the school geographically resides.



<b>Applicant:</b>		<b>Board Member:</b>		
<b>Project Name:</b>				
<b>Grant Application Statutory Need</b>				
Pursuant to 22-43.7-109(5) C.R.S., the board shall prioritize applications that describe public school facility capital construction projects deemed eligible for financial assistance based on the following criteria, in descending order of importance:				
<b>Priority 1</b>	This application addresses safety hazards or health concerns at existing public school facilities, including concerns relating to public school facility security.			
<b>Priority 2</b>	This application will relieve current overcrowding in public school facilities, including but not limited to allowing students to move from temporary instructional facilities into permanent facilities.			
<b>Priority 3</b>	This application is to incorporate technology into the educational environment.			
<b>Priority 4</b>	This application is for other types of capital improvements not addressed in priorities 1-3.			
<b>Division Comments: After review of the application, the division would consider this project a priority ____.</b>				
<b>After Review of the Application, the Evaluator would Consider this Application a Priority:</b>				
<i>(Optional Evaluator Comments &amp; Notes)</i>				
<b>Grant Application Scoring Key</b>				
<b>Strongly Disagree</b> 1-2	<b>Somewhat Disagree</b> 3-4	<b>Neutral</b> 5-6	<b>Somewhat Agree</b> 7-8	<b>Strongly Agree</b> 9-10
<i>Review each section below and provide a score for each question based on your review of the application.</i>				
<b>Conditions of the Entire Public School Facility</b>				
<b>Division Comments:</b>				
<b>Evaluator Review of Conditions of the Entire Public School Facility</b>			<b>Score 1-10 for Each</b>	
The FCI or CFI from the statewide facility assessment, or an assessment provided by the applicant, supports the scope of the proposed project.				
The statewide facility assessment findings, or an assessment provided by the applicant, support the scope of the project.				
The due diligence performed by the applicant supports the scope of the project.				
<b>Total out of 30:</b>				
<i>(Optional Evaluator Comments &amp; Notes)</i>				
<b>Financial Capacity</b>				
<b>Division Comments:</b>				
<b>Evaluator Review of Financial Capacity</b>			<b>Score 1-10 for Each</b>	
The amount of matching funds provided by the applicant is appropriate given their cited resources.				
The applicant has made efforts to leverage available resources to enhance their financial contribution to the project or provide cost efficiencies to the project.				
The applicant is contributing a suitable amount towards the capital needs of their facilities.				
<b>Total out of 30:</b>				
<i>(Optional Evaluator Comments &amp; Notes)</i>				

**Project Proposal**

**Division Comments:**

**Evaluator Review of Project Proposal**

**Score 1-10 for Each**

The deficiencies presented by the applicant are compelling and clearly noted within the application.

The solution presented by the applicant resolves all deficiencies noted within the application.

The scope of work proposed in the solution appears to be reasonable and well planned.

The project is urgent in nature.

**Total out of 40:**

*(Optional Evaluator Comments & Note)*

**Other Application Considerations**

**Division Comments:**

**Evaluator Review of Other Application Considerations**

**Score 1-10 for Each**

The project complies with the BEST Construction Guidelines.

The cost, cost per SF, and/or cost per pupil seem appropriate and supportable.

The SF of the project and/or SF per pupil seem reasonable and supportable.

The applicant is willing to pursue a fair, competitive, and transparent selection process for contractors and consultants.

**Total out of 40:**

*(Optional Evaluator Comments & Notes)*

**Grand Total of All Scores:**

**Evaluator Recommendation to Shortlist this Application *(Check One)***

**Recommended to Shortlist**

**Not Recommended to Shortlist**

**If the Application is Not Recommended to the Shortlist, Please Provide the Evaluator's Justification**

**Evaluator Notes Section for Information Only**

Board Member: \_\_\_\_\_

The BEST grant is a matching grant. Each applicant is assigned a unique minimum matching requirement, based on the factors outlined in statute, to identify financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines the minimum match is not reflective of their current financial capacity.

Please review the applicant’s waiver application responses. Answer the questions below by marking each response with a yes or no. Be sure to look at the specifics when reviewing each question and evaluate the applicant’s explanation to the issues and impacts that make it impossible for the applicant to make its full matching contribution.

- Yes - The response demonstrated a high need for a reduction in the match contribution
- No - The response did not demonstrate sufficient need for a reduction in the applicant’s match requirement
- N/A - The applicant did not provide a response for the question in their waiver application

Grant Applicant Name \_\_\_\_\_ Project Name \_\_\_\_\_

Waiver application questions

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district, charter school or BOCES.

**Does this response support a reduction in the applicant’s match contribution?      YES      or      NO**

2. Please describe why the cost of complying with the match contribution would significantly limit educational opportunities within your school district, charter school or BOCES.

**Does this response support a reduction in the applicant’s match contribution?      YES      or      NO**

3. What efforts has the applicant made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant’s ability to contribute financial assistance to the project?

**Does this response support a reduction in the applicant’s match contribution?      YES      or      NO**

4. Justification for per pupil assessed valuation not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution?      YES      NO      N/A**

5. Justification for the district’s median household income not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution?      YES      NO      N/A**

6. Justification for percentage of pupils eligible for free or reduced cost lunch not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution?      YES      NO      N/A**

7. Justification for bond election failures and successes in the last 10 years not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution?                    YES      NO      N/A**

8. Justification for bond mill levy not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution?                    YES      NO      N/A**

9. Justification for the school district's current available bond capacity remaining not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution?                    YES      NO      N/A**

10. Justification for the school district's unreserved fund balance not being representative of their financial capacity.

**Does this response support a reduction in the applicant’s match contribution?                    YES      NO      N/A**

11. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

**Does this response support a reduction in the applicant’s match contribution?                    YES      NO      N/A**

Additional Board Member Comments

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**Overall support based on the total number of *yes* responses versus *no* responses.                    YES      or      NO**

*In the event of a tie, Robert’s Rules will apply and a “no” will be assigned.*

Board Member: \_\_\_\_\_

The BEST grant is a matching grant. Each applicant is assigned a unique minimum matching requirement, based on the factors outlined in statute, to identify financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines the minimum match is not reflective of their current financial capacity.

Please review the applicant’s waiver application responses. Answer the questions below by marking each response with a yes or no. Be sure to look at the specifics when reviewing each question and evaluate the applicant’s explanation to the issues and impacts that make it impossible for the applicant to make its full matching contribution.

- Yes - The response demonstrated a high need for a reduction in the match contribution
- No - The response did not demonstrate sufficient need for a reduction in the applicant’s match requirement
- N/A - The applicant did not provide a response for the question in their waiver application

Grant Applicant Name \_\_\_\_\_ Project Name \_\_\_\_\_

Waiver application questions

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district, charter school or BOCES.

**Does this response support a reduction in the applicant’s match contribution?            YES    or    NO**

2. Please describe why the cost of complying with the match contribution would significantly limit educational opportunities within your school district, charter school or BOCES.

**Does this response support a reduction in the applicant’s match contribution?            YES    or    NO**

3. What efforts has the applicant made to coordinate the project with local governmental entities, community based organizations, or other available grants or organizations to more efficiently or effectively leverage the applicant’s ability to contribute financial assistance to the project?

**Does this response support a reduction in the applicant’s match contribution?            YES    or    NO**

4. Justification for weighted average of district matches which comprise the student population.

**Does this response support a reduction in the applicant’s match contribution?            YES    NO    N/A**

5. Justification for the district authorizer having 10% or less bonding capacity remaining.

**Does this response support a reduction in the applicant’s match contribution?            YES    NO    N/A**

6. Justification for the charter school in a district-owned facility.

**Does this response support a reduction in the applicant’s match contribution?            YES    NO    N/A**



7. Justification for the number of times the charter school attempted or attained bond proceeds from an authorizer's ballot measure for capital needs.

**Does this response support a reduction in the applicant's match contribution?                    YES      NO      N/A**

8. Justification for the number of times the charter school attempted to do a special mill levy override pursuant to 22-30.5-405 for capital needs.

**Does this response support a reduction in the applicant's match contribution?                    YES      NO      N/A**

9. Justification for the number of times the charter school attempted or attained grant funding through a non-BEST source for capital needs.

**Does this response support a reduction in the applicant's match contribution?                    YES      NO      N/A**

10. Justification for the number of times the charter school attempted or obtained funding through CECFA or another type of financing.

**Does this response support a reduction in the applicant's match contribution?                    YES      NO      N/A**

11. Justification for charter school enrollment as a percent of district enrollment.

**Does this response support a reduction in the applicant's match contribution?                    YES      NO      N/A**

12. Justification for free/reduced lunch % in relation to the statewide average charter school free/reduced lunch %.

**Does this response support a reduction in the applicant's match contribution?                    YES      NO      N/A**

13. Justification for percentage of PPR spent on non-M&O facilities costs.

**Does this response support a reduction in the applicant's match contribution?                    YES      NO      N/A**

14. Justification for unreserved fund balance as a percent of budget.

**Does this response support a reduction in the applicant's match contribution?                    YES      NO      N/A**

15. Justification for describing any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

**Does this response support a reduction in the applicant's match contribution?                    YES      NO      N/A**

Additional Board Member Comments

**Overall support based on the total number of *yes* responses versus *no* responses.                    YES      or      NO**

*In the event of a tie, Robert's Rules will apply and a "no" will be assigned.*

**Affected pupils**

The total number of pupils currently enrolled (as of October 1, 2015) that are affected by the proposed application.

**Affected square feet (Sq Ft)**

The total square feet affected by the proposed application.

**Charter School Capital Construction Funding**

Each year, the State Education Fund provides an appropriation for Charter School and Institute Charter School Capital Construction. This funding can be used by the Charter School or Institute Charter School to pay for school construction, renovation, financing, or the purchasing or leasing of facilities. The purpose of this funding is to promote a safe and healthy learning environment for all Colorado students.

**Colorado Facility Index (CFI)**

CFI is the ratio of condition needs plus suitability needs plus energy audit needs to Current Replacement Value (CRV).

**Condition Budget**

Condition budgets are the rough order-of-magnitude budgeted costs to make partial or full replacement of expired systems, costs for out-of-cycle repair adjustments and costs for condition, suitability and sufficiency deficiencies. Because project costs typically include budget elements in addition to condition repair costs of a current facility, i.e., modernization upgrade items, area sufficiency items, etc., the total order-of-magnitude condition repair costs can exceed the current replacement value (CRV).

**Condition Score\***

Condition Score is a factor used in the calculation of School Score. The Condition Score is developed from scoring of those criteria questions addressing facility condition referenced in SchoolHouse from the CDE Construction Guidelines. Each criteria question is set up in the database Administration with specific possible points 0-5.

**Contingency %**

The percentage listed in the grant application is both construction and owner's contingency. These costs are added for potential scope changes, unforeseen conditions, detail conflicts, and / or design changes. The contingencies assist with keeping costs within budget and managing risk.

**Cost per Sq Ft**

The affected square feet divided by the total project cost; can be broken up into soft and hard costs of construction:

**Soft cost per Sq Ft** - Costs not considered a direct construction costs. Costs include: architectural, engineering, financing, and legal fees, and other pre- and post-construction expenses.

**Hard Cost per Sq Ft** - Costs related to the actual, physical construction of the project. Costs can include: quantifiable labor and materials required to complete the project, site work, landscaping, contingencies, escalation, bonds, fees, and insurance.

**Current Replacement Value (CRV)**

Current Replacement Value (CRV) represents the hypothetical total cost of rebuilding or replacing an existing facility in current dollars to its optimal condition (excluding auxiliary facilities) under current codes and construction standards.

**Energy Budget**

The energy budget represents recommended costs to improve the energy efficiency of the school.

**Energy Score\***

Energy Score is a factor that may be used in the calculation of School Score. The Energy Score is developed from scoring of those criteria questions addressing facility energy issues referenced in SchoolHouse from the CDE Construction Guidelines. Each criteria question is set up in the database Administration with specific possible points 0-5.

**Escalation %**

A percent of the project hard costs added to account for an increase in prices, that are typically caused by inflation.

**Facility Condition Index (FCI)**

FCI is an industry-standard measurement of a facility's condition that is the ratio of the cost to correct a facility's deficiencies to the Current Replacement Value of the facilities. The higher the FCI, the poorer the condition the facility is in. After an FCI is established for all buildings within a portfolio, a building's condition can be ranked relative to other buildings. The FCI may also represent the condition of a portfolio based on the cumulative FCIs of the portfolio's facilities.

**High Performance Certification Program (HPCP)**

Any capital construction project that receives 25% or more of its funding from a State agency may be required to comply with the State's High Performance Certification Program (HPCP). HPCP stipulates that qualifying projects should obtain a minimum standard for energy efficiency. In the case of public school projects that minimum standard is either LEED Gold or CHPS-Verified.

**Historical Adverse Effect**

The Division is required to consult with History Colorado on any public school facility requesting State funds for capital improvement projects in facilities that are 50 years or older. As part of the consultation process, History Colorado will make a determination of effect on the proposed scope of the project. If History Colorado determines the proposed scope of work will significantly alter the historical significance of the facility they will assert the proposed project has an "adverse effect".

**Gross square feet (GSF)**

The size of the enclosed floor space of a building in square feet, measured to the outside face of the enclosing wall.

**Match / Waiver**

Meets: The applicant is meeting their minimum required match.

Waiver Requested: The applicant is providing less than their minimum required match.

**Previous BEST Grants**

The number of BEST grants the applicant has been previously been awarded.

**Prioritization Criteria:****1. Health & Safety**

Projects that will address safety hazards or health concerns at existing public school facilities, including concerns relating to public school facility security.

**2. Overcrowding**

Projects that will relieve overcrowding in public school facilities, including but not limited to projects that will allow students to move from temporary instructional facilities into permanent facilities.

**3. Technology**

Projects that are designed to incorporate technology into the educational environment.

**4. Other**

All other projects not relating to health & safety, overcrowding and technology.

**Remaining Service Life Index (RSLI)**

RSLI is defined as a percentage ratio of the remaining service life of a renewable system to its system life, expressed as a percent.

**School Score\***

The School Score is calculated as the combined scores of the Criteria Groups of facility Condition, educational Suitability and Energy criteria referenced in SchoolHouse from the CDE Construction Guidelines. Each Group is set up in the database Administration with weighting factors that modify the calculated score for each group as follows:

$[Condition\ Score \times Weight] + [Suitability\ Score \times Weight] + [Energy\ Score \times Weight] = School\ Score$

Current weighting is set as follows: Condition = 60%, Suitability = 40%, Energy = 0%

*See Condition, Suitability and Energy Score.*

**Suitability Budget**

The suitability budget represents modernization costs to upgrade the school to meet current educational and safety standards.

**Suitability Score\***

The Suitability Score is developed from scoring of those criteria questions addressing facility suitability referenced in SchoolHouse from the CDE Construction Guidelines, or from best practices generally referenced from Council of Educational Facility Planners International (CEFPI). Each criteria question is set up in the database Administration with specific possible points 0-5.

**Uniformat**

A standard for classifying building specifications, cost estimating, and cost analysis in the U.S. and Canada. The elements are major components common to most buildings. The system can be used to provide consistency in the economic evaluation of building projects. It was developed through an industry and government consensus and has been widely accepted as an ASTM standard.

**\*Points are rated accordingly: 5 = Very Good, 4 = Good, 3 = Average, 2 = Poor, 1 = Very Poor**



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# **BUILDING EXCELLENT SCHOOLS TODAY (BEST) FY2016-17 APPLICATION SUMMARIES**

**APPLICATIONS SORTED BY COUNTY**



**COLORADO**  
Department of Education

**DIVISION OF CAPITAL CONSTRUCTION**

**MAY 2016**



# BEST FY2016-17 APPLICATION SUMMARIES

All Applications Sorted by County, then Applicant

Page #	County	Applicant Name	Project Title	Amount of		Total Project Costs	Cost Per Sq Ft
				Grant Request	Applicant Contribution		
87	Adams	Adams County 14	Kearney MS Roof Replacement	\$2,168,762.03	\$974,371.34	\$3,143,133.37	\$35.00
92	Adams	Mapleton 1	Global Leadership New PK-3 School	\$6,778,669.50	\$5,546,184.13	\$12,324,853.63	\$325.00
103	Adams	Mapleton 1	Adventure Elementary PK-6 School Replacement	\$10,806,079.42	\$8,841,337.70	\$19,647,417.12	\$324.00
114	Adams	Westminster 50	Harris Park ES Roof Replacement	\$608,784.00	\$342,441.00	\$951,225.00	\$23.00
118	Alamosa	Alamosa RE-11J	MS Security Upgrade	\$689,435.67	\$205,935.33	\$895,371.00	\$7.00
124	Alamosa	Alamosa RE-11J	HS Security Upgrade	\$1,014,859.23	\$303,139.77	\$1,317,999.00	\$11.00
130	Arapahoe	Adams-Arapahoe 28J	Mrachek Middle School Replacement	\$16,054,888.00	\$24,082,332.00	\$40,137,220.00	\$309.00
141	Arapahoe	Aurora Academy Charter School	Aurora Academy Security Remodel & Addition	\$1,966,498.62	\$883,499.38	\$2,849,998.00	\$199.00
149	Arapahoe	Lotus School For Excellence	Health and Safety Upgrades	\$3,112,072.47	\$424,373.52	\$3,536,445.99	\$266.00
161	Archuleta	Archuleta County 50 JT	MS Roof Replacement	\$109,119.29	\$185,797.71	\$294,917.00	\$28.00
167	Bent	Las Animas RE-1	HS - Upgrades to improve Indoor Air Quality	\$1,593,312.06	\$398,328.02	\$1,991,640.08	\$59.00
176	Costilla	Centennial R-1	Remediation of BEST Grant FY2008-09 Deficiencies	\$1,120,681.84	\$2,547,671.16	\$3,668,353.00	\$49.00
181	CSI	Colorado Springs Early Colleges	CSEC Roof Replacement	\$743,067.63	\$247,689.21	\$990,756.84	\$39.00



Page #	County	Applicant Name	Project Title	Amount of Grant Request	Amount of Applicant Contribution	Total Project Costs	Cost Per Sq Ft
190	CSI	Ricardo Flores Magon Academy	Ricardo Flores Magón Academy K-8 New School	\$13,404,734.28	\$2,553,282.72	\$15,958,017.00	\$399.00
199	Delta	Delta County 50(J)	MS Addition & Campus Sitework	\$11,288,058.44	\$3,371,757.72	\$14,659,816.16	\$72.00
213	Denver	Kipp Sunshine Peak Academy	Sunshine Peak Academy Classroom Replacement	\$4,976,281.00	\$4,976,281.00	\$9,952,562.00	\$234.00
223	Douglas	Skyview Academy	Complete Fire Sprinkler System	\$106,742.00	\$160,113.00	\$266,855.00	\$5.00
231	Eagle	Eagle County RE 50	Safety and Security Upgrades at Multiple Facilities	\$201,100.97	\$673,251.07	\$874,352.04	\$3.00
237	Eagle	Eagle County RE 50	PK-8 Roof Replacement	\$327,246.92	\$1,095,565.78	\$1,422,812.70	\$14.00
241	El Paso	Atlas Preparatory School	Atlas HS Boiler Replacement	\$103,375.48	\$66,092.52	\$169,468.00	\$3.00
247	El Paso	Atlas Preparatory School	Atlas Prep Middle School Roof	\$277,137.48	\$177,186.25	\$454,323.73	\$17.00
252	El Paso	Colorado School For The Deaf and the Blind	Gymnasium Locker Room Safety Upgrades	\$1,391,615.91	\$0.00	\$1,391,615.91	\$286.00
258	El Paso	Lewis-Palmer 38	PLES Abatement/ Roof Replacement	\$227,461.52	\$422,428.55	\$649,890.07	\$23.00
267	El Paso	The Classical Academy Charter	TCA Central ES Renovation and Addition	\$3,079,045.86	\$3,918,785.63	\$6,997,831.49	\$116.00
284	Elbert	Elizabeth C-1	HS Roof replacement	\$1,151,028.51	\$566,924.49	\$1,717,953.00	\$17.00
294	Elbert	Elizabeth C-1	ES Wastewater Treatment Facility	\$260,348.64	\$424,779.36	\$685,128.00	\$13.00
299	Fremont	Canon City RE-1	Roof Replacement at Multiple Facilities	\$667,077.18	\$343,645.82	\$1,010,723.00	\$21.00

Page #	County	Applicant Name	Project Title	Amount of Grant Request	Amount of Applicant Contribution	Total Project Costs	Cost Per Sq Ft
305	Garfield	Garfield 16	HS Sitework, HVAC, ADA and Security Project	\$2,125,285.55	\$4,516,231.80	\$6,641,517.35	\$73.00
320	Garfield	Garfield 16	ES Security Vestibule	\$148,274.13	\$315,082.52	\$463,356.65	\$10.00
326	Garfield	Garfield RE-2	ES Partial Roof Replacement	\$226,252.80	\$402,227.20	\$628,480.00	\$19.00
331	Huerfano	La Veta RE-2	District Safety & Security	\$256,169.39	\$41,701.99	\$297,871.38	\$4.00
341	Jefferson	Lincoln Academy	Lincoln Academy Safety/ Security Upgrades	\$669,765.00	\$669,765.00	\$1,339,530.00	\$16.00
352	Kit Carson	Arriba-Flagler C-20	K-12 Safety and Security Upgrades	\$93,636.43	\$44,064.20	\$137,700.63	\$2.00
358	Kit Carson	Burlington RE-6J	HS Roof Replacement	\$1,126,297.50	\$301,202.50	\$1,427,500.00	\$19.00
365	La Plata	Bayfield 10 JT-R	New ES & ES Renovation to become Primary School	\$8,568,488.88	\$27,133,548.12	\$35,702,037.00	\$286.00
379	La Plata	Durango 9-R	HS Track and Field Replacement	\$576,910.01	\$1,071,404.30	\$1,648,314.30	\$11.00
384	Larimer	Poudre R-1	Fire Alarm Upgrades at Multiple Facilities	\$309,089.54	\$756,736.46	\$1,065,826.00	\$1.00
391	Lincoln	Limon RE-4J	K-12 Locker Room Renovation Supplemental	\$1,183,659.75	\$30,350.25	\$1,214,010.00	\$191.00
398	Lincoln	Limon RE-4J	K-12 Partial Roof Replacement	\$277,192.98	\$30,799.22	\$307,992.20	\$20.00
404	Logan	Valley RE-1	Caliche K-12 Wastewater Supplemental	\$195,189.50	\$159,700.50	\$354,890.00	\$4.00
408	Mesa	Plateau Valley 50	PK-12 RTU Replacement	\$494,139.15	\$494,139.15	\$988,278.30	\$22.00

Page #	County	Applicant Name	Project Title	Amount of Grant Request	Amount of Applicant Contribution	Total Project Costs	Cost Per Sq Ft
416	Montrose	Montrose County RE-1J	MS Replacement	\$12,492,021.53	\$21,270,198.81	\$33,762,220.34	\$428.00
430	Otero	Swink 33	Swink Abatement and Security Upgrades	\$164,816.52	\$84,905.48	\$249,722.00	\$4.00
438	Phillips	Haxtun RE-2J	ES Playground Replacement	\$197,960.49	\$116,262.51	\$314,223.00	\$35.00
442	Phillips	Holyoke RE-1J	Jr/Sr HS Life Skills Classroom	\$140,322.20	\$114,809.07	\$255,131.27	\$283.00
451	Phillips	Holyoke RE-1J	Jr/Sr HS Parital Roof Replacement	\$450,368.18	\$368,483.06	\$818,851.24	\$19.00
456	Pueblo	Pueblo City 60	Heritage ES Partial Roof Replacement	\$289,971.48	\$257,144.52	\$547,116.00	\$16.00
460	Pueblo	Pueblo City 60	Goodnight K-8 School Partial Roof Replacement	\$122,918.14	\$109,002.87	\$231,921.01	\$18.00
464	Pueblo	Swallows Charter	New Classroom Building	\$10,460,259.49	\$129,999.99	\$10,590,259.48	\$405.00
485	Weld	Frontier Charter Academy	ES HVAC Replacement	\$114,721.65	\$114,721.65	\$229,443.30	\$3.00
491	Weld	Greeley 6	McAuliffe ES Roof Replacement	\$348,524.59	\$98,301.81	\$446,826.40	\$10.00
498	Weld	Greeley 6	Dos Rios ES Roof Replacement	\$348,479.10	\$98,288.98	\$446,768.08	\$10.00
505	Weld	Weld County School District Re-3J	Districtwide Security Upgrades	\$230,653.24	\$564,702.76	\$795,356.00	\$2.00

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# **BUILDING EXCELLENT SCHOOLS TODAY (BEST) FY2016-17 APPLICATION SUMMARIES**

**CHARTER SCHOOL APPLICATIONS SORTED BY COUNTY**



**COLORADO**  
Department of Education

**DIVISION OF CAPITAL CONSTRUCTION**

**MAY 2016**

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# BEST FY2016-17 APPLICATION SUMMARIES

List of Charter School Applications Sorted by County

Page #	County	Applicant Name	Project Title	Amount of		Total Project Costs	Cost Per Sq Ft
				Grant Request	Applicant Contribution		
141	Arapahoe	Aurora Academy Charter School	Aurora Academy Security Remodel & Addition	\$1,966,498.62	\$883,499.38	\$2,849,998.00	\$199.00
149	Arapahoe	Lotus School For Excellence	Health and Safety Upgrades	\$3,112,072.47	\$424,373.52	\$3,536,445.99	\$266.00
181	CSI	Colorado Springs Early Colleges	CSEC Roof Replacement	\$743,067.63	\$247,689.21	\$990,756.84	\$39.00
190	CSI	Ricardo Flores Magon Academy	Ricardo Flores Magón Academy K-8 New School	\$13,404,734.28	\$2,553,282.72	\$15,958,017.00	\$399.00
213	Denver	Kipp Sunshine Peak Academy	Sunshine Peak Academy Classroom Replacement	\$4,976,281.00	\$4,976,281.00	\$9,952,562.00	\$234.00
223	Douglas	Skyview Academy	Complete Fire Sprinkler System	\$106,742.00	\$160,113.00	\$266,855.00	\$5.00
241	El Paso	Atlas Preparatory School	Atlas HS Boiler Replacement	\$103,375.48	\$66,092.52	\$169,468.00	\$3.00
247	El Paso	Atlas Preparatory School	Atlas Prep Middle School Roof	\$277,137.48	\$177,186.25	\$454,323.73	\$17.00
267	El Paso	The Classical Academy Charter	TCA Central ES Renovation and Addition	\$3,079,045.86	\$3,918,785.63	\$6,997,831.49	\$116.00
341	Jefferson	Lincoln Academy	Lincoln Academy Safety/ Security Upgrades	\$669,765.00	\$669,765.00	\$1,339,530.00	\$16.00
464	Pueblo	Swallows Charter	New Classroom Building	\$10,460,259.49	\$129,999.99	\$10,590,259.48	\$405.00
485	Weld	Frontier Charter Academy	ES HVAC Replacement	\$114,721.65	\$114,721.65	\$229,443.30	\$3.00





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# **BUILDING EXCELLENT SCHOOLS TODAY (BEST) FY2016-17 APPLICATION SUMMARIES**

**LIST OF APPLICATIONS WITH MATCHING FUNDS FROM A PROPOSED 2016 BOND ELECTION**



**COLORADO**  
Department of Education

**DIVISION OF CAPITAL CONSTRUCTION**

**MAY 2016**





# BEST FY2016-17 APPLICATION SUMMARIES

List of Applications with Matching Funds from a Proposed 2016 Bond Election

Page #	County	Applicant Name	Project Title	Amount of Grant Request	Amount of Applicant Contribution	Total Project Costs	Cost Per Sq Ft
92	Adams	Mapleton 1	Global Leadership New PK-3 School	\$6,778,669.50	\$5,546,184.13	\$12,324,853.63	\$325.00
103	Adams	Mapleton 1	Adventure Elementary PK-6 School Replacement	\$10,806,079.42	\$8,841,337.70	\$19,647,417.12	\$324.00
130	Arapahoe	Adams-Arapahoe 28J	Mrachek Middle School Replacement	\$16,054,888.00	\$24,082,332.00	\$40,137,220.00	\$309.00
231	Eagle	Eagle County RE 50	Safety and Security Upgrades at Multiple Facilities	\$201,100.97	\$673,251.07	\$874,352.04	\$3.00
237	Eagle	Eagle County RE 50	PK-8 Roof Replacement	\$327,246.92	\$1,095,565.78	\$1,422,812.70	\$14.00
365	La Plata	Bayfield 10 JT-R	New ES & ES Renovation to become Primary School	\$8,568,488.88	\$27,133,548.12	\$35,702,037.00	\$286.00
384	Larimer	Poudre R-1	Fire Alarm Upgrades at Multiple Facilities	\$309,089.54	\$756,736.46	\$1,065,826.00	\$1.00
416	Montrose	Montrose County RE-1J	MS Replacement	\$12,492,021.53	\$21,270,198.81	\$33,762,220.34	\$428.00
505	Weld	Weld County School District Re-3J	Districtwide Security Upgrades	\$230,653.24	\$564,702.76	\$795,356.00	\$2.00



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# **BUILDING EXCELLENT SCHOOLS TODAY (BEST) FY2016-17 APPLICATION SUMMARIES**

## **LIST OF APPLICATIONS WITH A WAIVER REQUEST**



**COLORADO**  
Department of Education

**DIVISION OF CAPITAL CONSTRUCTION**

**MAY 2016**



# BEST FY2016-17 APPLICATION SUMMARIES

List of Applications with a Waiver Request

Page #	County	Applicant Name	Project Title	Amount of Grant Request	Amount of Applicant Contribution	Total Project Costs	Cost Per Sq Ft
149	Arapahoe	Lotus School For Excellence	Health and Safety Upgrades	\$3,112,072.47	\$424,373.52	\$3,536,445.99	\$266.00
167	Bent	Las Animas RE-1	HS - Upgrades to improve Indoor Air Quality	\$1,593,312.06	\$398,328.02	\$1,991,640.08	\$59.00
199	Delta	Delta County 50(J)	MS Addition & Campus Sitework	\$11,288,058.44	\$3,371,757.72	\$14,659,816.16	\$72.00
252	El Paso	Colorado School For The Deaf and the Blind	Gymnasium Locker Room Safety Upgrades	\$1,391,615.91	\$0.00	\$1,391,615.91	\$286.00
284	Elbert	Elizabeth C-1	HS Roof replacement	\$1,151,028.51	\$566,924.49	\$1,717,953.00	\$17.00
331	Huerfano	La Veta RE-2	District Safety & Security	\$256,169.39	\$41,701.99	\$297,871.38	\$4.00
341	Jefferson	Lincoln Academy	Lincoln Academy Safety/ Security Upgrades	\$669,765.00	\$669,765.00	\$1,339,530.00	\$16.00
358	Kit Carson	Burlington RE-6J	HS Roof Replacement	\$1,126,297.50	\$301,202.50	\$1,427,500.00	\$19.00
391	Lincoln	Limon RE-4J	K-12 Locker Room Renovation Supplemental	\$1,183,659.75	\$30,350.25	\$1,214,010.00	\$191.00
398	Lincoln	Limon RE-4J	K-12 Partial Roof Replacement	\$277,192.98	\$30,799.22	\$307,992.20	\$20.00
408	Mesa	Plateau Valley 50	PK-12 RTU Replacement	\$494,139.15	\$494,139.15	\$988,278.30	\$22.00
464	Pueblo	Swallows Charter	New Classroom Building	\$10,460,259.49	\$129,999.99	\$10,590,259.48	\$405.00
491	Weld	Greeley 6	McAuliffe ES Roof Replacement	\$348,524.59	\$98,301.81	\$446,826.40	\$10.00

Page #	County	Applicant Name	Project Title	Amount of Grant Request	Amount of Applicant Contribution	Total Project Costs	Cost Per Sq Ft
498	Weld	Greeley 6	Dos Rios ES Roof Replacement	\$348,479.10	\$98,288.98	\$446,768.08	\$10.00

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# BUILDING EXCELLENT SCHOOLS TODAY (BEST) FY2016-17 APPLICATION SUMMARIES

BEST GRANT APPLICATION REVIEW ORDER  
SORTED ALPHABETICALLY BY COUNTY, THEN BY APPLICANT



**COLORADO**  
Department of Education

**DIVISION OF CAPITAL CONSTRUCTION**

**MAY 2016**

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# BEST FY2016-17 APPLICATION SUMMARIES

BEST Grant Application Review Order - Sorted Alphabetically by County, then by Applicant

Page #	County	Applicant Name	Project Title
87	Adams	Adams County 14	Kearney MS Roof Replacement
92	Adams	Mapleton 1	Global Leadership New PK-3 School
103	Adams	Mapleton 1	Adventure Elementary PK-6 School Replacement
114	Adams	Westminster 50	Harris Park ES Roof Replacement
118	Alamosa	Alamosa RE-11J	MS Security Upgrade
124	Alamosa	Alamosa RE-11J	HS Security Upgrade
130	Arapahoe	Adams-Arapahoe 28J	Mrachek Middle School Replacement
141	Arapahoe	Aurora Academy Charter School	Aurora Academy Security Remodel & Addition
149	Arapahoe	Lotus School For Excellence	Health and Safety Upgrades
161	Archuleta	Archuleta County 50 JT	MS Roof Replacement
167	Bent	Las Animas RE-1	HS - Upgrades to improve Indoor Air Quality
176	Costilla	Centennial R-1	Remediation of BEST Grant FY2008-09 Deficiencies
181	CSI	Colorado Springs Early Colleges	CSEC Roof Replacement
190	CSI	Ricardo Flores Magon Academy	Ricardo Flores Magón Academy K-8 New School
199	Delta	Delta County 50(J)	MS Addition & Campus Sitework
213	Denver	Kipp Sunshine Peak Academy	Sunshine Peak Academy Classroom Replacement
223	Douglas	Skyview Academy	Complete Fire Sprinkler System
231	Eagle	Eagle County RE 50	Safety and Security Upgrades at Multiple Facilities
237	Eagle	Eagle County RE 50	PK-8 Roof Replacement
241	El Paso	Atlas Preparatory School	Atlas HS Boiler Replacement
247	El Paso	Atlas Preparatory School	Atlas Prep Middle School Roof
252	El Paso	Colorado School For The Deaf and the Blind	Gymnasium Locker Room Safety Upgrades
258	El Paso	Lewis-Palmer 38	PLES Abatement/ Roof Replacement
267	El Paso	The Classical Academy Charter	TCA Central ES Renovation and Addition
284	Elbert	Elizabeth C-1	HS Roof replacement
294	Elbert	Elizabeth C-1	ES Wastewater Treatment Facility
299	Fremont	Canon City RE-1	Roof Replacement at Multiple Facilities
305	Garfield	Garfield 16	HS Sitework, HVAC, ADA and Security Project

Page #	County	Applicant Name	Project Title
320	Garfield	Garfield 16	ES Security Vestibule
326	Garfield	Garfield RE-2	ES Partial Roof Replacement
331	Huerfano	La Veta RE-2	District Safety & Security
341	Jefferson	Lincoln Academy	Lincoln Academy Safety/ Security Upgrades
352	Kit Carson	Arriba-Flagler C-20	K-12 Safety and Security Upgrades
358	Kit Carson	Burlington RE-6J	HS Roof Replacement
365	La Plata	Bayfield 10 JT-R	New ES & ES Renovation to become Primary School
379	La Plata	Durango 9-R	HS Track and Field Replacement
384	Larimer	Poudre R-1	Fire Alarm Upgrades at Multiple Facilities
391	Lincoln	Limon RE-4J	K-12 Locker Room Renovation Supplemental
398	Lincoln	Limon RE-4J	K-12 Partial Roof Replacement
404	Logan	Valley RE-1	Caliche K-12 Wastewater Supplemental
408	Mesa	Plateau Valley 50	PK-12 RTU Replacement
416	Montrose	Montrose County RE-1J	MS Replacement
430	Otero	Swink 33	Swink Abatement and Security Upgrades
438	Phillips	Haxtun RE-2J	ES Playground Replacement
442	Phillips	Holyoke RE-1J	JrSr HS Life Skills Classroom
451	Phillips	Holyoke RE-1J	Jr/Sr HS Parital Roof Replacement
456	Pueblo	Pueblo City 60	Heritage ES Partial Roof Replacement
460	Pueblo	Pueblo City 60	Goodnight K-8 School Partial Roof Replacement
464	Pueblo	Swallows Charter	New Classroom Building
485	Weld	Frontier Charter Academy	ES HVAC Replacement
491	Weld	Greeley 6	McAuliffe ES Roof Replacement
498	Weld	Greeley 6	Dos Rios ES Roof Replacement
505	Weld	Weld County School District Re-3J	Districtwide Security Upgrades

**• Facilities Impacted by this Grant Application •****Adams County 14 - Kearney MS Roof Replacement - Kearney MS - 1953****School Name: Kearney MS**

Number of Buildings:	3
All or Portion built by WPA:	No
Gross Area (SF):	119,101
Replacement Value:	\$36,025,838
Condition Budget:	\$15,748,038
Total FCI:	43.71%
Energy Budget:	\$0
Suitability Budget:	\$8,714,900
Total RSLI:	18%
Total CFI:	67.9%
Condition Score: (60%)	3.20
Energy Score: (0%)	2.81
Suitability Score: (40%)	3.74
School Score:	3.42



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Adams County 14

**County:** Adams

**Project Title:** Kearney MS Roof Replacement

**Previous BEST Grant(s) Funded:** 3

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** Limited State funds

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Adams County School District 14 (Adams 14) is Colorado's 26th largest school district, serving more than 7,500 students annually. Nearly 83 percent of students are children of color, and nearly 73 percent of students qualify for free and reduced lunch. We are a District that is genuinely committed to education, history, culture, traditions and beliefs, and are dedicated to creating and sustaining lasting family, community and business partnerships that support our most precious resource - our students.

Superintendent Sanchez's notable leadership in Adams 14 has created a much-needed reform initiative to ensure all students in Adams 14 have access to culturally-responsive learning environments, and are engaged through powerful instructional strategies that facilitate seamless English-language acquisition. Adams 14's culture is based on high expectations for all students and employees, combined with one that supports both academic and social growth for all students. The District realizes the importance of having school leaders who inspire excellence from both our students and staff. We are working to ensure that all of our children experience excellent teachers, and rigorous and engaging instruction. The District also understands that our classrooms must also reflect the world-class learning environments found across the country, which are preparing students for an extremely competitive, global workforce.

Adams 14 students deserve access to world-class opportunities. If you have stepped foot in many of our school buildings, you know first hand the infrastructure limitations we are up against in providing our students with 21st Century learning environments. Much has changed since our schools were constructed nearly 70 years ago. Yesterday's classrooms across our country have been transformed into learning lab environments, where information is not simply learned, but experienced. Today's students are creating robots, searching for cures to diseases, stimulating space travel - and through access to 21st-Century work spaces - are preparing for the highly competitive job market they will soon enter as adults. Kearney Middle School (KMS), one of Adams 14's two middle schools, was built in 1953. Today, KMS serves 781 students - 87.13 percent of which are students of color. For 60.45 percent of students, English is not their primary language. There is a 13.10 percent mobility rate at KMS, and 67.07 percent of students are eligible for free and reduced lunch.

## Deficiencies Associated with this Project:

Kearney Middle School's (KMS) roof, which has exceeded its life expectancy, continues to provide ongoing, and ever-increasing safety concerns for Adams 14 students and staff. Due to the excessive costs associated with an entire roof replacement, Adams 14 has done its best to maintain the roof, and protect the safety of the students and staff within the building. Ponding water and roof leaks have been an ongoing issue for KMS. The leaking roof not only poses safety and health concerns but also has a huge impact on the learning environment due to the multiple disruptions. Our students and staff are continuously challenged with moving their class rooms around or finding a space that is not impacted from the leaking roof. These impacts are directly impacting our student achievements and their rights to have a safe and healthy learning environment. Over the last few years we have had 168 work orders on leaks from the roof, that's just the ones that have been reported and now may be facing structural concerns if we don't resolve this promptly.

## Proposed Solution to Address the Deficiencies Stated Above:

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

The current KMS roof will need to be removed down to the decking, due to multiple roofs (in some sections 3 roofs one over another) in place. The new roofing will be installed with R24 polyunsaturated rigid insulation. The proposed, new roof system will be a three-ply, built up roof system, utilizing sustainable products. The roof will have a gravel surfacing to reduce the UV exposure, as well as increase the roof's hail resistance.

The roof membrane performance attributes that are recommended by the National Roofing Contractors Association (NRCA) and the National Bureau of Standards (NBS) - Building Science Series #S5 titled; "Performance Criteria for Bituminous Membrane Roofing" are as follows:

Tensile Strength Pliability

Thermal Expansion Characteristics Moisture Expansion

Flexural Strength Wind Up-Lift Resistance

Tensile Fatigue Strength Abrasion Resistance

Flexural Fatigue Strength Weather Resistance

Shear Strength Low Temp. Flexibility

Impact Resistance Tear Resistance

Notch Tensile Strength

A modified, multi-layer built-up roof system provides all of the above qualities, combined with low maintenance costs over the decades to come.

### How Urgent is this Project?

Unfortunately, failure has already occurred.

There is tangible evidence (wet and collapsed insulation) that speaks to the urgency of the replacement of the KMS roofing system. As noted above the roof has already served years beyond its service life - and the ongoing "quick fixes" are not sustainable strategies to protect the District's most valued resources - its students. The cone analysis revealed a high level of moisture intrusion into the roof system and insulation. Due to the complete failure of the membrane, the insulation has become alarmingly unstable, putting additional stress on the roof system, which is leading to a high probability of collapse, a loss of the original investment in thermal resistance, as well as a risk of mold spore development.

Furthermore, prolonged moisture exposure to the structural substrate can cause severe corrosion, which will impact the structural integrity of the building, and if severe enough, may cause structural failure.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

Art 4.1.1 The Kearney Middle School structure has several deficiencies applicable to the health, safety and environmental codes and standards as required by state and federal law. Significant/regular water intrusion, maintenance of structural integrity and ability to maintain high Indoor Air Quality are all significant areas of concern.

4.1 Health and safety issues, including security needs and all applicable health, safety and environmental codes and standards as required by the state and federal law. Public school facility accessibility.

4.1.1 Sound building structures. Each building should be constructed and maintained with sound structural foundation, floor, wall and roof systems.

1.1.1.1 - All building structures shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30 and ANSI S12.60, Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools.

4.1.2 Roofs, A weather-tight roof that drains water positively off the roof and discharges the water off and away from the building. All roofs shall be installed by a qualified contractor who is approved by the roofing manufacturer to install the specified roof system and shall receive the specified warranty upon completion of the roof. The National Roofing Association divides roofing into two generic low-slope roofing and steep-slope. Low-slope roofing includes water impermeable, or weatherproof types of roof membranes installed on slopes of less than or equal to 3.12 Adopted 12/05/2014 3 (fourteen degrees). Steep-slope roofing includes water-shedding types of roof coverings installed on slopes exceeding 3.12 (fourteen degrees).

4.1.2.1 - Low-slope roofing systems

4.1.2.1.1 - Built-up - minimum 4 ply, type IV fiberglass felt, asphalt BUR system. Gravel or cap sheet surfacing required.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

Adams 14 is committed to the allocation of funds and support of the District's roofing replacement cycle. The Board of

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Education and District Administration recognize that keeping school roofs safe and free from water damage is mandatory. They understand that a leaky roof is not just a structural issue, it's an issue that affects classrooms as well as students ability to learn uninterrupted. Accordingly, Adams 14 has budgeted \$XXX,XXX for the Districts roofing replacement program. Another \$30,000 has been allocated for emergency roof repair. BEST funding would support the enhancement of Adams 14's current programs, and serve as the catalyst to accelerate its replacement cycle. Adams 14 has also analyzed its District wide roof plan, and cross-referenced roof conditions and ages against the facility master plan. Adams 14 has diligently prepared to ensure that not a single dime of BEST funds and tax dollars would be wasted - as the District has not requested funding for roofing at the school slated for future replacement. In order to maintain the roof the District will perform biannual inspections to remove debris and clean drains in the spring and fall of every year.

### Inspecting and Repairing Perimeter Details

The roofs perimeter takes much of the stress related to repetitive expansion and contraction cycles. As metal components such as edge details shift, the surrounding roof area can crack or split. Discovered early, such problems can be repaired before water penetration damages insulation and your building's interior. Replacing damaged Flashings according to the National Roofing Contractors Association (NRCA), flashings account for most roof leaks, and approximately 80 percent of such leaks could be prevented by appropriate, timely repairs. Regular inspections, with interim replacements or repairs as indicated, will ensure that areas where dissimilar materials adjoin, will remain intact and impervious to water penetration.

### Examining and Repairing Seams

Single-ply roofs are particularly vulnerable at their seams and patches, sue to the stress of repeated expansion and contraction cycles. Early detection of problems such as open laps and seams can prevent costly replacement of damaged insulation.

### Repairing the Roof Surface

The roof's surface takes a direct hit from UV and weather, as well as the stress of occasional foot traffic. Promptly and diligently fixing problems such as splits and blisters will protect the energy-saving value of insulation and keep buildings dry. Regularly inspecting rooftop equipment and other penetrations areas where vents, plumbing, or other utilities penetrate the roof or exterior wall is an important measure to prevent leakage. HVAC and other rooftop units are frequently the site of water penetration through improper installation or careless maintenance, as units are damaged by worker traffic and mishandled tools.

### Maintaining R-Value

Keeping Insulation dry is critical to the roof's ability to resist heat transfer, from the outside in, on summer days, and from the inside out, in winter. Verifying that insulation has remained dry is essential to optimizing the roof's thermal transfer performance.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

n/a

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$2,168,762.03	<b>CDE Minimum Match %:</b>	31
<b>Current Applicant Match:</b>	\$974,371.34	<b>Actual Match % Provided:</b>	31
<b>Current Project Request:</b>	\$3,143,133.37	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Future Grant Requests:</b>	\$0.00	<b>Capital Reserve</b>	
<b>Total of All Phases:</b>	\$3,143,133.37	<b>Escalation %:</b>	5
<b>Affected Sq Ft:</b>	90,608	<b>Contingency %:</b>	5
<b>Affected Pupils:</b>	821	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$35	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$2	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$32	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$3,828	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	110		NA

<b>District FTE Count:</b>	6,652	<b>Bonded Debt Approved:</b>	\$78,000,000
<b>Assessed Valuation:</b>	\$640,714,560	<b>Year(s) Bond Approved:</b>	06
<b>PPAV:</b>	\$96,312	<b>Bonded Debt Failed:</b>	\$139,700,000
<b>Unreserved Gen Fund 13-14:</b>	\$1,505,393	<b>Year(s) Bond Failed:</b>	13,14
<b>Median Household Income:</b>	\$41,955	<b>Outstanding Bonded Debt:</b>	\$81,045,000
<b>Free Reduced Lunch %:</b>	73	<b>Total Bond Capacity:</b>	\$128,142,912
<b>Existing Bond Mill Levy:</b>	12.105	<b>Bond Capacity Remaining:</b>	\$47,097,912



• Facilities Impacted by this Grant Application •

**Mapleton 1 - Global Leadership New PK-3 School - Global Leadership Academy - 1961**

**School Name: Global Leadership Academy(John Dewey MS)**

Number of Buildings:	3
All or Portion built by WPA:	No
Gross Area (SF):	78,473
Replacement Value:	\$24,223,982
Condition Budget:	\$13,555,858
Total FCI:	55.96%
Energy Budget:	\$0
Suitability Budget:	\$4,676,600
Total RSLI:	16%
Total CFI:	75.3%
Condition Score: (60%)	2.82
Energy Score: (0%)	1.25
Suitability Score: (40%)	3.83
School Score:	3.23



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Mapleton 1

**County:** Adams

**Project Title:** Global Leadership New PK-3 School

**Previous BEST Grant(s) Funded:** 2

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School                    | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input checked="" type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation                    | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition                      | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security                      | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

**General Information About the District / School, and Information About the Affected Facilities:**

The mission of Mapleton Public Schools, a community that embraces its children through high performing schools of choice, is to ensure that the students and staff are provided a safe environment and that each student is empowered to achieve his or her dreams and contribute to his or her community, country and world. Most of Mapleton's 8,738 students live in unincorporated Adams County (immediately north of Denver) and Thornton. Of Mapleton's total student population, 6,311 are students in District-run bricks and mortar schools, while the remaining 2,420 participate in a statewide online program. As of school year 2015-2016, 69% of students in District-run schools are eligible for free or reduced lunch and 41% are English language learners. There are 15 schools, including one online charter school.

Mapleton has a long history of education reform. In 2001, troubled by consistently declining test scores and graduation rates, staff and administrators decided that the traditional public school system operating in Mapleton Public Schools was failing students and the community. In school year 2002-2003, after intensive community-wide strategic planning efforts, Mapleton's Board of Education voted to change all of its schools into research-based, small-by-design schools. Beginning in 2004, every school in the District was closed and re-opened with a new model.

Now in the final stage of these reforms, 15 small-by-design schools (including Expeditionary Learning, Montessori, International Baccalaureate, Big Picture model, and Coalition for Essential Schools, among others) are operating successfully in Mapleton. There are no default neighborhood schools; all families must choose which school and instructional model will be best for their child. Transportation is provided for all students to any school, regardless of where the student lives or where the school is located.

Evidence of success includes the following:

Pre-Reform	Spring 2015
Graduation Rate	55.3%65.9%
Drop Out Rate	14.7%3.0%
Average ACT Score	16.619.2
College Acceptance Rate	70%98%

In 2010, Mapleton began the process of "right sizing" its buildings for the District's "small-by-design" educational model. With support from the BEST program, Mapleton replaced its old comprehensive high school with a cutting-edge K-12 campus, which now includes five schools and a student center serving 1,852 students. Additionally, it added space to York International School, the District's International Baccalaureate school. The District is now entering the third phase of its master plan, which includes replacing two outdated schools in the western part of the District, both of which have pressing health and safety concerns, as well as significant educational suitability issues.

This grant would fund the construction of a new PK-3 facility at the Global Leadership Campus, which has a total Colorado

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Facility Index (CFI) score of 61.1% (2010 CDE School Assessment Report). The current facility houses 646 students in grades PreK – 12, 81% of whom receive free/reduced lunch and 59% of whom are learning English as a second language. The Global Leadership Campus is in the first year of a Colorado Department of Education Tiered Intervention Grant, which supports comprehensive school improvement at persistently underperforming schools. The first step identified in the planning process for this grant was the division of the current K-12 school structure into three distinct schools on the campus: a PreK-3 school, a 4-8 school, and a 9-12 school. This grant would support the construction of the PK-3 school housing 233 students, since those students are currently housed in facilities with safety, security, and educational suitability issues.

### Deficiencies Associated with this Project:

The Global Leadership Campus is located at 7480 Conifer Rd in Denver, Colorado, immediately adjacent to I-25 and close to the I-36 and I-76 interchanges. The campus has three buildings: the original building was constructed in 1961, one annex building was added in the 1970s, and a second annex building was added in the 1990s. Currently, the original building houses students in grades PreK-8 and the annex buildings house students in grades 9-12.

The primary safety issues on the Global Leadership Campus are as follows:

**SEPARATE BUILDINGS WITH UNMONITORED, UNSECURED ENTRIES CREATE SAFETY AND SUPERVISION ISSUES:** there are three separate buildings on the Global Leadership Campus. While the District does not believe that separate facilities are unsafe in themselves, several aspects of these facilities create serious safety concerns:

-The back buildings are remote and on the back of the property. The buildings are down a hill, cannot be seen from 90% of the property, and emergency responders cannot easily access the building. Unless a person has intimate knowledge of the site, it is difficult to know the buildings are even present. Because the entrances to these buildings are unsecure – without cameras, daytime locks, or staff supervision – the buildings can easily be accessed by anyone. The area has one of the highest crime rates in the District (there was a shooting just outside the campus last year and north-side windows are shattered and shot out regularly), so having a secluded space creates a significant safety and security concern for students and staff.

-Older students regularly move between the buildings, which means that the doors must remain unlocked for the day. Because of the location of the buildings, they are impossible to supervise appropriately, even with cameras and extensive staff supervision (which the District does not have funding for).

-The entries to both buildings cannot be seen by the front office. Once visitors are inside the main building, the office can see them, but the office/s in the annex have no visual line of sight to the entrance.

-There is no clear entry for visitors or emergency responders; in an emergency situation, it would be extremely difficult for emergency responders to know where to go. Because the campus has two separate communications systems that only work in classrooms (not in hallways), it would be difficult to communicate quickly to all students and staff in case of an emergency.

**SAFETY CONCERNS IN SEVERE WEATHER:** District policy recommends that students be sheltered in a brick and mortar building in the event of a tornado warning or severe wind storm. District staff do not feel safe keeping students in the back buildings during severe weather because they are wood frame construction. The District has been hit by a tornado in the past and has regular tornado warnings throughout the year, so this is a serious safety issue.

**ASBESTOS:** a recent assessment by RLH Engineering found asbestos in pipe fittings, pipe insulation, ceiling tiles, floor tiles, door and window caulking, and block filler. The biggest safety concern is with asbestos containing (ACM) floor tiles, which are coming loose throughout the building. There is also asbestos in ceiling tiles, block filler, and transite panels. Because the roof leaks, the wet ceiling tiles can fall and make the asbestos friable. Current estimates indicate that it would cost nearly \$900,000 just to mitigate the asbestos.

**FLOORING:** one of the back buildings on the campus was intended to be temporary; however, current campus use requires that a more permanent occupancy be maintained. The floor covering in that building is failing and beginning to show signs of collapse in certain areas.

**INTERIOR SAFETY ISSUES:** all classrooms need to be locked from the outside with a key, which means that teachers need to go into the hallway to lock their classrooms. In the event of an intruder, this is a significant safety concern. There are nine exterior doors just in the main building, and only one of them is viewable from the main office. Additionally, many of the classrooms do not have windows to allow law enforcement to see inside. Lastly, the back hallway that is used to access the

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

main building from the rear buildings is extremely narrow. Passing times are extremely difficult because of the narrowness of the space and have resulted in fights among older students.

**WATER INFILTRATION LEADING TO MOLD CONCERNS:** there are leaks throughout the main facility, particularly through the ceiling, leading to wet and falling ceiling tiles throughout the building. The roof was re-done in the late 1990s and according to an independent assessment, roof failure is imminent.

**ANTIQUATED COMMUNICATIONS SYSTEM LEADING TO DIFFICULTY COMMUNICATING QUICKLY:** to communicate across the campus, staff need to use two different communications systems, neither of which works in the hallways or outside. In the event of a serious emergency, it would be difficult to communicate quickly to all students and staff. This problem is compounded by the fact that classrooms do not have phones.

**UNSAFE BATHROOM FACILITIES:** there is often a lack of hot water in restrooms, leading to health concerns when students and staff cannot wash their hands after using the bathrooms. Additionally, the restrooms were originally built for older students and are now used by younger students in grades PK-1. In order for students to reach the toilets, the school constructed boxes for students to climb up on. These boxes are not fixed to the walls and are a safety concern.

**LACK OF ADA COMPLIANCE:** the main entrance is the only partially compliant ADA access point. In the event of an emergency, if a disabled student could not use the front entrance, it would be difficult for them to exit the building quickly and/or without assistance. A majority of the building does not have proper signage, restroom applications, door hardware or drinking fountain applications.

**LACK OF VENTILATION:** there is a lack of appropriate fresh air in the back buildings, which is particularly problematic because the school is located immediately next to I-25. There are two types of heating and cooling in the building because the District did not have enough money originally to install a cooling system for the whole building. A second cooling system was installed at a later date. As a result, the air handling in the building has never been appropriately balanced.

**UNSAFE DROPOFF AREAS:** the bus lane, parent drop off lane, and exit lanes are not separated, resulting in an unsafe drop-off environment for students.

In addition to the health, safety and security issues, there are many educational suitability issues at the Global Leadership Campus:

**INABILITY TO ACCOMMODATE MODERN SAFETY AND EDUCATIONAL SUITABILITY PROTOCOLS:** the building is not able to accommodate the most basic modern practices to ensure the safety of students. For example, preschool and kindergarten students need hand-to-hand drop-offs at schools. In a modern building, the classrooms are situated to accommodate this; at GLA, this is impossible.

**PRESCHOOL AND KINDERGARTEN STUDENTS IN INAPPROPRIATE CLASSROOMS:** preschool students are currently being housed in middle school science classrooms. Because the classrooms have not been renovated, there is inappropriate equipment (sinks, exposed outlets, etc.) located throughout the room. Neither kindergarten nor preschool students have required single hole restrooms in their classrooms.

**ANTIQUATED OR NON-EXISTENT SCIENCE CLASSROOMS:** the school's science rooms do not have lab stations with sinks and appropriate fixtures. There is limited storage, which results in chemicals and equipment being stored in an unsecured environment. Safety measures such as eye wash, shower stations, and hoods do not exist. The lack of eye wash, shower stations, and hoods is a serious safety concern for students doing experiments; there is no way to contain fumes or for students to wash their eyes or bodies in an emergency situation. Additionally, the back buildings do not have science classrooms, which makes meeting state high school science standards extremely difficult.

**PLAYGROUNDS LOCATED ACROSS PARKING LOT:** the current site configuration forces students to cross the main parking lot to access any of the playgrounds.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

INABILITY TO ACCOMMODATE GLOBAL'S SMALL SCHOOLS MODEL: the school's improvement plan calls for the creation of three distinct schools – one PreK-3 school, one 4-8 school, and one 9-12 school. The current facility cannot meet those needs; there is no appropriate space for preschool and kindergarteners, and the accommodation of older students has meant the creation of separate buildings that are impossible to supervise safely.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The District initially considered renovating the Global Leadership facility, but recognized quickly that the cost of renovating the building was equal to or greater than replacing the facility and would not adequately address the site/ building safety issues, ADA issues, building mechanical issues or the educational suitability of the classrooms/building. Therefore, after much consideration and review, the District has decided that a replacement building is the only fiscally and educationally sound solution to the aforementioned issues.

The District has worked extensively with architects and construction experts to create a Global Leadership Campus Master Plan to effectively address all the existing building deficiencies listed above. The Campus Master Plan includes three separate buildings for classroom instruction based on grades PK-3, 4-8, 9-12 and one building for shared student activities such as gym, cafeteria and auditorium.

THE SOLUTION PROPOSED FOR THIS GRANT APPLICATION IS THE PRIORITY 1 BUILDING OF THE CAMPUS, A NEW REPLACEMENT BUILDING FOR THE PK-3 SCHOOL.

The new PK-3 building will be located on Conifer Road on the southwest corner of the existing Global Leadership site in the area that is currently old basketball courts and the south portion of the parking lot.

The new building will be a 37,900 square feet PK-3 school designed to accommodate 250 students. The building includes the following spaces:

#### CLASSROOMS

- (3) Prekindergarten classrooms
- (1) Day care room
- (5) Kindergarten – 1st grade classrooms
- (4) 2nd – 3rd grade classrooms

#### EDUCATIONAL SUPPORT AREAS

- Music room
- Art room
- Library
- Special Education office
- Offices/ intervention spaces
- Educational resource storage
- Staff workroom
- "Serving" Kitchen
- Cafeteria
- "Instructional PE" Gym
- Gym storage

#### CORE SPACES

- Reception area
- Director's office
- Assistant Director's office
- Itinerant office
- Teacher workroom
- Clinic
- Occupational therapist storage

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

-Conference room

### SUPPORT SPACES

- Custodial spaces
- Staff restrooms
- Student restrooms
- Electrical room
- Mechanical room

The site improvements include the following components:

- Pre-school playground
- Elementary playground
- Bus drop-off loop
- Parent drop-off loop
- Visitor parking
- Sidewalks
- Storm drainage

The building will be constructed to meet the Public School Facility Construction Guidelines utilizing precast concrete exterior walls, structural steel slab on deck with crawl space floors, structural steel roof framing with R-30 insulation and fully-adhered membrane roof coverings. The windows will be thermally broken aluminum framed with low-E glass. The building envelope and mechanical systems will be designed to meet the High Performance Certification Program and will target LEED Gold.

### ADDRESSING CURRENT SAFETY, SECURITY, AND EDUCATIONAL SUITABILITY ISSUES:

The main issues at the current Global Leadership Campus are life safety and security issues. The existing dropoff configuration forces cars, pedestrians, and buses to drop off at the same place, resulting in numerous safety issues during dropoff and pick up. The layout of the existing facility poses numerous safety hazards to students as detailed above, including unsecured exterior doors, building entry ramps that are not ADA compliant and multiple front entries for different aged students that are difficult to monitor and supervise. The new building will provide both passive and active security that meets today's school security requirements. Passive security features include a clear view by administration to visitors entering the building; a reduction of the number of entrances; and simple, supervisable circulation. Active security features include electronic locks at the entry vestibule, requiring visitors to check into the office; and an intercom system that allows for ample communication in emergency situations. The building will also be fully ADA accessible, in contrast to the current building, which has portions of the building without ADA accessible paths of egress, or restrooms.

Although this grant only funds the construction of the PK3 facility, it would impact all students on the site. Once PK-3 students are moved to a new facility, the rest of the building's classroom assignments would be adjusted to allow the District to immediately decommission the back buildings, which pose some of the greatest safety hazards on the site. As soon as the campus master plan is completed, the main facility and back buildings will be demolished.

The new classrooms will be designed with ample visibility, allowing staff to see into classrooms easily, while also providing view shadow in the case of an active intruder. The design also includes simple hallways for easy supervision.

The PK classrooms will also be designed to be the appropriate size and will have the required restrooms in the rooms, which is not the case in the existing building.

The new building site design locates the PK playground directly adjacent to the building thus eliminating the need for the young students to cross the parking lot/ parent drop-off area (as is currently the situation due to the existing playground being on the far south end of the site and the school being on the north end of the site). The new building and associated playground design/site location also allows for higher levels of security and visibility of the students.

### How Urgent is this Project?

The layout of the buildings and interior and exterior safety issues are such that the buildings do not meet current standards;



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

they are a safety and security hazard on a daily basis which will only continue with time.

**Asbestos:** the existing ACM is currently non-friable and generally undisturbed (with the exception of the floor tiles). However, the more time passes, the more likely it is that the asbestos will be disturbed. Any time there is a rain event, a flood event, any construction, or any other building activity, there is a high likelihood that the asbestos will be disturbed (particularly because there is so much asbestos in the building).

**Water infiltration:** according to an independent district-wide roof assessment, roof failure is imminent so water infiltration will only increase over time.

**Communications System:** the system in the building is so old that replacement parts are not readily available. If a component goes down, the District has to scour the country to find a system to scavenge a part from. It can take weeks to procure a part, leaving the system vulnerable for a significant period of time. Because there are no phones in the rooms, the building can effectively be without internal communications for weeks. There is a contingency plan where staff can use air horns and staff are trained on the signaling for air horns (for example, two beeps means lock down, three beeps means lock out). There are three student buildings on the site, which means that staff would need to move from building to building with the air horns in an emergency.

**Bathrooms:** the wooden platforms placed in front of toilets are not a long term solution, will deteriorate rapidly, and pose a risk to students.

**ADA compliance:** the building is not ADA compliant and has not been since it was constructed, creating an urgent deficiency for students with disabilities. There is no cost-effective way to retrofit the building to make it safer because it is asbestos-coated masonry construction.

**Ventilation:** the two separate HVAC systems still work, but not together, which has already created ventilation issues in the building. It would not be possible to install a new HVAC system due to the height of the building, height of the ceilings, and the asbestos issues.

**Preschool/Kindergarten classrooms:** as noted above, preschool and kindergarten classrooms are situated in old middle school science classrooms. These spaces are not appropriate for young students according to CDE guidelines. Students are located here because the classrooms are close to an exterior door where hand-to-hand drop-offs can take place. The door is separate from the administration area and should technically only be used for egress. The only place for parents to stop while they drop their students off is in the bus/car drop off lane, or they must walk across the dropoff lane to get to the door. Students could not be moved to another classroom in the building because there is no other room in the building that could meet licensing requirements (dedicated bathrooms, dedicated entrance/exit for hand-to-hand drop-offs, etc.).

**Science classrooms:** in order to provide the necessary space for science classrooms for all students, there would have to be a major renovation to provide two sets of science classrooms. Given the asbestos issues in the building, it would not be a cost-effective solution. The proposed solution solves the problem without introducing the complications of a renovation that would not solve all of the building's issues and would also require significant asbestos remediation.

**Inability to accommodate Mapleton's small schools model:** the school's instructional programming calls for three district instructional programs: one for PreK-3rd grade, one for 4th-8th grade, and one for 9th-12th grade. Therefore, the facility needs to have three distinct spaces to meet the specific needs of each instructional program. There is no way to effectively retrofit an old, junior high school building to meet the needs of a 21st century PreK-12 school.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

This project is the Pre-Kindergarten through 3rd grade school building on a master planned PK-12 campus. This project closely conforms to CDE Public School Facility Construction Guidelines 1 CCR 303(1) for a traditional K-5 School building.

4.1 - Construction of a new facility will allow for complete compliance with all guidelines of section 4.1: Health and safety issues. The "Urgency" section of the application provides detail of how the existing facilities cannot meet the safety and

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

security guidelines. A new facility is the only way that the school can adequately meet and exceed health and safety requirements.

Specifically:

4.1.1. Sound building structures: The new building will be constructed according to IBC requirements.

4.1.2 Roofs: The new building has been budgeted as a low slope roof and will use an appropriate membrane roofing.

4.1.3 Electrical and distribution systems: The new building will meet current codes and standards.

4.1.4 Mechanical Systems: The new building will meet current codes and standards.

4.1.5 Plumbing Systems: The new building will meet current codes and standards.

4.1.6 Fire Management: The new building will be equipped throughout with a fire notification and fire suppression system.

4.1.7 Paths of Egress: The building will meet emergency exit requirements.

4.1.8 Facilities with safely managed hazardous materials: The new school would have no programs or hazardous materials, whereas the existing building has hazardous materials in the building components and houses Pre-Kindergarten through 3rd grade students in science rooms with unnecessary hazards for children of that age level. In the new building, custodial rooms with cleaning chemicals would be in separate, ventilated spaces.

4.1.9 Security: The new building will incorporate video surveillance, controlled access, emergency notification, and secure sites.

4.1.10 Health Code Standards: The new school does not have labs, shops, or vocational areas, but any area with hazardous substances will meet CDPH requirements.

4.1.11 Food preparation equipment and maintenance: The new school will have a new warming kitchen that will meet CDPH requirements.

4.1.12 Emergency Care Room: The new school will have a care room that will meet CDPH requirements.

4.1.13 Site Safety: The new building location, parking, and drop off configuration will provide safe and separate areas for pedestrian and vehicular traffic, and separate age level drop off areas. A dedicated bus drop off is planned for the future build-out of the site in the master plan. The new site would allow all traffic to be on school property, rather than parking and walking in the street to get to the school entry.

4.1.14 Severe Weather Preparedness: this project does not intend to have a designated emergency shelter.

4.2 - Construction of a new facility will allow for complete compliance with all guidelines of section 4.2, Technology, whereas retrofitting the existing facility with adequate technology infrastructure would be cost prohibitive.

4.3 - The proposed project meets the CDE Public School Facility Construction Guidelines section 4.3: Building site requirements, including functionality and capacity. The master planning team collaboratively developed programs for schools in the district to meet the overall goals of the district vision, including this PK-3 school on the Global Leadership Academy campus. The proposed plan is based on this program, and will provide learning environments that meet and exceed state model content standards.

Though the school is a PK-3, the project closely conforms to section 4.3.1 of the Public School Facility Construction Guidelines: Traditional Education Model (K-5). The school will house a classroom for 1-2 year olds, Pre-Kindergarten classrooms and associated spaces to support those functions.

4.3.1.1 – Minimum occupancy requirements: The new facility will house 250 students. Interpolating the Median GSF per pupil chart of a standard K-5 school, the total square footage is recommended to be 35,799 square feet. The proposed plan is for 37,886 square feet, slightly more than state recommendations. Because this school is a PK-3 school, there is a concentration of Kindergarten, Pre-kindergarten, and 1-2 year old rooms, each having a higher square foot per student ratio than standard classrooms. 9 of the 13 classrooms are dedicated to kindergarten and younger age children.

The cafeteria is planned to be smaller than the minimum occupancy recommendations, taking advantage of open hallway areas for flexible configurations rather than separated cafeteria space.

Second and 3rd grade classrooms in the project are planned to be 850 square feet within each room, slightly smaller than the minimum occupancy recommendations, but the classrooms share some additional common space for various activities.

In addition to classrooms, and following the minimum recommendations, the program includes a music room, art room,



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

special education room, gymnasium and media center.

The building will house a “student design center” in lieu of science room, computer lab and lecture room to fulfill the goals of the district and provide more flexible spaces for education. This space can house nearly half of the students at once and provide space for innovation, collaboration, team work and presentations.

The school also does not plan to have an auditorium space and will use a stage in conjunction with the gymnasium as an assembly area.

The program also includes administrative areas, offices, clinic, bathrooms, conference room, reception area and building support areas to accommodate the educational program. These are centrally located for students and staff.

4.4 – Building performance standards: The proposed project will meet the Performance Certification Program (HPCP) policy adopted by the Office of the State Architect.

4.5 – Historic Significance: The existing school is not over 50 years old. The existing building does not have the ability to meet the programmatic needs of younger students: Pre-Kindergarten to 3rd grade. The building would be difficult to rehabilitate in order to meet current safety and health standards. The cost to rehabilitate has proven to be close to the cost of replacement.

In summary, based on the overall goals of the district to provide various opportunities and focus schools throughout their district, the desired local programming of the proposed project does not conform to CDE Public School Facility Construction Guidelines 1 CCR 303(1) in the following ways:

-The project will house a room for 1-2 year olds, pre-kindergarten classrooms, and only go up to grade 3, but is part of a master planned K-12 campus.

-Having 4 classrooms for pre-kindergarten aged children and 5 classrooms for kindergarten causes the total building square footage to be higher than a standard K-5 because of the higher square foot per student requirements for that age.

-An auditorium is not provided. The gymnasium will be used for school assemblies and events. Space has been master planned on the site for a future auditorium, (not part of this project).

-The 2nd-3rd grade classrooms are 850 square feet rather than the recommended 960 square feet for lower grades, but shared space is allocated to enlarged hallway intervention spaces adjacent to the classrooms that provide more flexibility for the staff and students.

-The building will house a “student design center” in lieu of science room, computer lab and lecture room to fulfill the goals of the district and provide more flexible spaces for education. This space can house nearly half of the students at once and provide space for innovation, collaboration, team work and presentations.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

Mapleton Public Schools currently has a budget of \$5,392,558 dedicated to operations and maintenance, including utility costs. The actual expenditures for the past five years are found in the table below:

Operations & Maintenance	2010-11	2011-12	2012-13	2013-14	2014-15
Salaries	2,087,068	2,476,443	2,098,628	2,226,876	2,246,779
Benefits	590,296	704,406	603,524	668,014	694,820
Purchased Services	841,544	942,203	874,222	1,271,480	1,088,686
Supplies & Materials	1,145,980	1,020,746	1,229,051	1,355,246	1,272,322
Property	31,699	3,862	35,690	8,885	25,073
Other	971	946	1,379	1,935	1,574
Total O & M	4,697,558	5,148,606	4,842,494	5,532,436	5,329,254

As with most non-instructional district budgets, Operations and Maintenance allocations have fluctuated over the past several years due to pressures on other aspects of the District mission, namely, improving instruction and raising achievement. Some of the cuts to services come from contracted services, such as plumbing services, roofing services, lawn services; as well as reductions in supplies and materials. District capital needs were assessed and prioritized based on a hierarchy of impending needs to address adequate safety and security of the students. In addition to General Fund dollars,

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

the District allocates funds to the Capital Reserve Fund, which is required by state law for the purpose of funding capital project needs of the District. The following table illustrates the Capital Reserve fund allocation per pupil for the past five years:

Capital Reserve	2010-11	2011-12	2012-13	2013-14	2014-15
Total Allocation	2,090,590	2,156,590	1,959,672	1,030,062	2,340,600
Student FTE	5,811	5,769	6,043	5,786	5,836
Allocation per Pupil	\$360	\$374	\$324	\$178	\$401

In FY 2016, the Capital Reserve Fund allocation is set at \$2,502,000, or \$424.35 per funded pupil. Approximately 30 percent of these funds are dedicated to facilities repairs and improvements, with funds carrying over, year to year, when expenditures are not required. These funds may be used for HVAC, plumbing, roofing, fencing, painting and other capital site improvements. Another \$20,000 for repairs and maintenance is found in the Insurance Reserve Fund to cover the cost of uninsured damage to property. The District will be making the final payment on the Viron Energy Lease in May 2016. This will free up approximately \$429,000 of capital funds going forward to help support the costs of a new facility.

The District is not able to budget for building replacements in its capital reserve budget. The District's per pupil funding is among the lowest in the metro area. When Mapleton's low per pupil funding is combined with its many aging buildings, it is difficult to do more than replace HVAC systems, roofs, paint, and carpet. The rest of the capital budget is taken up by ongoing repairs to all of the older buildings' systems; nine of Mapleton's ten school buildings are more than 50 years old. Therefore, if a new school were funded, the district would need to hold a bond election to replace it.

Once the new building is constructed, the District will create a specific maintenance plan to ensure the long-term viability of the facility (routine inspections, maintenance schedule, etc.). The District's staff includes a groundskeeper, locksmith, plumber, electrician, and a designated HVAC technician for the building. The building would also have dedicated custodial staff (staffing is designated by the square foot). All staff will be trained on all of the new systems to ensure that staff know how to maintain the facility. Given maintenance costs for the existing facility, the District estimates that it would actually cost less to maintain a new facility. The District would also implement a preventative maintenance plan for the mechanical systems in new facility. In the current building, most of the systems are failing and the preventative maintenance plan has become nearly irrelevant.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The facility has been owned and operated by Mapleton Public Schools since its construction in 1961. It has been used as instructional space since its construction.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$6,778,669.50	<b>CDE Minimum Match %:</b>	45
<b>Current Applicant Match:</b>	\$5,546,184.13	<b>Actual Match % Provided:</b>	45
<b>Current Project Request:</b>	\$12,324,853.63	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	Yes
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		2016 Bond Election
<b>Total of All Phases:</b>	\$12,324,853.63	<b>Escalation %:</b>	5.71

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Affected Sq Ft:</b>	37,900	<b>Contingency %:</b>	10.02
<b>Affected Pupils:</b>	179	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$325	<b>Does this Qualify for HPCP?</b>	Yes
<b>Soft Costs Per Sq Ft:</b>	\$36	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$289	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$68,854	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	212		NA
<hr/>			
<b>District FTE Count:</b>	5,680	<b>Bonded Debt Approved:</b>	\$31,705,000
<b>Assessed Valuation:</b>	\$501,791,060	<b>Year(s) Bond Approved:</b>	10
<b>PPAV:</b>	\$88,336	<b>Bonded Debt Failed:</b>	\$231,165,000
<b>Unreserved Gen Fund 13-14:</b>	\$2,165,246	<b>Year(s) Bond Failed:</b>	07, 08, 09, 14
<b>Median Household Income:</b>	\$51,878	<b>Outstanding Bonded Debt:</b>	\$15,320,000
<b>Free Reduced Lunch %:</b>	61	<b>Total Bond Capacity:</b>	\$100,358,212
<b>Existing Bond Mill Levy:</b>	9.907	<b>Bond Capacity Remaining:</b>	\$85,038,212

• Facilities Impacted by this Grant Application •

**Mapleton 1 - Adventure Elementary PK-6 School Replacement - Western Hills - 1957**

**School Name: Western Hills**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	49,488
Replacement Value:	\$12,737,332
Condition Budget:	\$7,614,913
Total FCI:	59.78%
Energy Budget:	\$0
Suitability Budget:	\$5,083,700
Total RSLI:	6%
Total CFI:	99.7%
Condition Score: (60%)	2.86
Energy Score: (0%)	0.63
Suitability Score: (40%)	2.69
School Score:	2.79



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Mapleton 1

**County:** Adams

**Project Title:** Adventure Elementary PK-6 School Replacement

**Previous BEST Grant(s) Funded:** 2

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School                    | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input checked="" type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation                    | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition                      | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security                      | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

The mission of Mapleton Public Schools, a community that embraces its children through high performing schools of choice, is to ensure that the students and staff are provided a safe environment and that each student is empowered to achieve his or her dreams and contribute to his or her community, country and world. Most of Mapleton's 8,738 students live in unincorporated Adams County (immediately north of Denver) and Thornton. Of Mapleton's total student population, 6,311 are students in District-run bricks and mortar schools, while the remaining 2,420 participate in a statewide online program. As of school year 2015-2016, 69% of students in District-run schools are eligible for free or reduced lunch and 41% are English language learners. There are 15 schools, including one online charter school.

Mapleton has a long history of education reform. In 2001, troubled by consistently declining test scores and graduation rates, staff and administrators decided that the traditional public school system operating in Mapleton Public Schools was failing students and the community. In school year 2002-2003, after intensive community-wide strategic planning efforts, Mapleton's Board of Education voted to change all of its schools into research-based, small-by-design schools. Beginning in 2004, every school in the District was closed and re-opened with a new model.

Now in the final stage of these reforms, 15 small-by-design schools (including Expeditionary Learning, Montessori, International Baccalaureate, Big Picture model, and Coalition for Essential Schools, among others) are operating successfully in Mapleton. There are no default neighborhood schools; all families must choose which school and instructional model will be best for their child. Transportation is provided for all students to any school, regardless of where the student lives or where the school is located.

Evidence of success includes the following:

Pre-Reform Spring 2015

Graduation Rate 55.3%65.9%

Drop Out Rate 14.7%3.0%

Average ACT Score 16.619.2

College Acceptance Rate 70%98%

In 2010, Mapleton began the process of "right sizing" its buildings for the District's "small-by-design" educational model. With support from the BEST program, Mapleton replaced its old comprehensive high school with a cutting-edge K-12 campus, which now includes five schools and a student center serving 1,852 students. Additionally, it added space to York International School, the District's International Baccalaureate school. The District is now entering the second phase of its master plan, which includes replacing two outdated schools in the western part of the District, both of which have pressing health and safety concerns, as well as significant educational suitability issues.

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This grant would support the replacement of Adventure Elementary K-6, which has a total Colorado Facility Index (CFI) score of 97.1% (2010 CDE School Assessment Report). The District has explored renovating and/or adding onto this facility, but given the costs necessary to address the health and safety issues, there is no fiscal merit to this approach.

The school currently houses 398 students in grades PreK - 6. The school uses an Expeditionary Learning model, which differs from a traditional instructional model in three ways:

- In Expeditionary Learning schools, students learn by conducting "learning expeditions" rather than by sitting in a classroom being taught one subject at a time.
- Expeditionary Learning works on developing the character as well as the intellect of students.
- Expeditionary Learning changes not only how students learn but also a school's culture.

### **Deficiencies Associated with this Project:**

As noted above, Adventure has a total CFI score of 97.1% and a total FCI score of 49.23%. The pressing health and safety issues at the facility present daily hazards for students and parents as well as create ongoing financial problems for the District, which spends a disproportionate amount of its maintenance budget maintaining the facility. Some of the most pressing problems include:

**LACK OF ADA COMPLIANCE:** None of the interior stairwells are ADA compliant. Handicapped students must be brought down the delivery ramp to enter the building. Additionally, entrances to the building are not ADA compliant. There is no unobstructed path of egress that is ADA compliant, which creates significant safety hazards for students with disabilities in an emergency. When a student is wheelchair-bound, the school has to make a specialized dismissal plan. This plan includes two adults carrying the student down the stairs from the West stair case. In a serious emergency, this is a major hazard, since two supervising adults would need to be helping one child (instead of monitoring their whole class, etc.).

**INABILITY TO MONITOR ACTIVITIES:** the unusual layout of the building makes supervision of entrances difficult (there are 21 exterior doors, including one main entrance and three additional entrances/exits that are frequently used). The main entrance cannot be seen from the main office, and once someone enters the building, it is difficult to tell where the main office is. There are no video cameras or telephones in classrooms, which would make monitoring and communicating in an emergency impossible.

The interior layout is extremely confusing and maze-like, which means that it is difficult to oversee hallways. Monitoring the building in an emergency would be close to impossible. Teachers are required to go into the hallway to lock classroom doors and only some hallways have security doors in hallways to partition off parts of the building. There are no telephones in classrooms, so teachers cannot call out in case of an emergency. There are many small stairwells throughout the building, which are not only a fall hazard to students on a daily basis, but would also make it difficult to exit the building quickly in an emergency. Lastly, there are many classrooms without a "view shadow", making it difficult or impossible for students to be out of view of an intruder. Many of these deficiencies do not meet current educational safety codes.

**DEFICIENT ACCESS CONTROL:** The front office has no clear line of site to the front door. Additionally, it is not obvious where the front entry is from the outside of the building, making any emergency response more difficult. There are 21 exterior doors, 20 without camera monitoring, making it difficult to see who is entering and leaving the building. Most exterior doors are not labeled in case of an emergency. Visitors often comment that they couldn't tell which door was the main entry and that they attempted to open numerous exterior doors before finding the main doors.

**WATER INFILTRATION:** Water infiltration is a serious problem at Adventure. Rain water and snow melt are seeping into the building either through exterior masonry or through cracked foundation and manifesting in 2-3 classrooms during almost every moderate to heavy precipitation event. Wet ceiling tiles have also fallen from these water events due to numerous roof leaks. Last spring (March-April 2015), rooms 102 & 104 were unusable because the rooms could not be dried out between flooding events. The problem lingers after the flooding, with moisture in the flooring and walls creating air quality and surface mold concerns. Room 104 flooded 3 different days this fall. All of these water infiltration events result in students needing to be relocated, as well as health safety concerns about mold.

**BROKEN SEWER LINES:** there are significant air quality concerns in the building resulting from failed galvanizing piping which



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has resulted in sewage spills. The state assessment notes that the galvanized piping has failed and needs to be replaced. Broken and cracked sewer pipes are a common occurrence necessitating location, wall opening/repair, and pipe repair. There is a strong building odor during these incidents. Additionally, there is a Sewage Injector Pit located in a basement classroom. This Pit is a constant source of poor air quality during utility malfunctions. Students and staff often cannot walk through the building without being overwhelmed by the smell of sewage, sometimes necessitating the relocation of students or staff. Whenever there is a sewer issue in the building, the school receives calls from parents regarding student complaints of asthma flare-ups, stomachaches, and headaches. The District has spent significant resources trying to address this issue, but because of how the building is constructed, there is no feasible way to fix the issue.

**INADEQUATE BATHROOMS:** the school does not have the necessary number of restrooms required by current code. The cold water faucets and the toilets break regularly because of condition. The state assessment notes that the plumbing fixtures should be replaced. The restrooms do not have adequate exhaust which is a health safety concern.

**NON-WORKING HVAC LEADING TO HEATING, VENTILATION, AND COOLING ISSUES:** The building's radiant heaters often do not work and are in need of hard to procure parts. Combined with the sewer gas issues, it is critical that the building's fresh air systems are working optimally – and at Adventure, they are not.

**UNSAFE DROP OFF:** the drop-off conditions at Adventure are extremely challenging and have resulted in one student being hit by a car, as well as many near-misses. There is no dedicated parent drop off area on the property, so parents drop students off on both sides of multiple streets surrounding the school. Therefore, young students are regularly crossing the street and parking lot. Because this is an urban environment, there is frequent traffic which poses significant hazards to students as they cross the street. Deliveries, bus drop off, and parent drop off areas converge on the same space. Additionally, parents often park in the designated drop off areas on the street, which results in many unsafe drop-offs in the middle of the road. Because of the safety issues, all staff are outside at dismissal. There are always staff at both crosswalks (West and North sides) to help safely get students across the street. The principal has had to de-escalate several fights between parents due to parking concerns at dismissal. In addition, the principal often received calls from several neighbors who were upset about the safety of students during dismissal, highlighting the community concern over the current set up. Lastly, the principal has called law enforcement on many occasions to monitor during dismissal.

**WATER AND ICE BUILD UP DUE DRAINAGE AND GRADING:** due to deficient drainage and grading issues, water pools in the parking lot and creates extremely icy conditions in the winter time. Because the building entrance and parking lots face north, there is no opportunity for solar gain to help melt the snow and ice that accumulates. There are falls and injuries in the parking lot on a regular basis, including several that have resulted in broken bones and lawsuits against the District. There is also regular ice build-up at entries and on walkways to student areas. The state assessment noted that parking lots are in poor condition and need to be replaced.

The state assessment notes that the following systems need to be replaced due to condition:

- Roadways & Parking lots: the roadways and parking lots are in extremely poor condition, despite attempts to repair them. There are no marked fire lanes.
- Pedestrian paving: there is currently no pedestrian paving, which creates safety issues entering and exiting the building.
- Water supply system: the District has had to replace sections of the water main. The District continues to have issues with the incoming water supply based on the conditions of the pipes.
- Sanitary sewer system: there is a sanitary lift system that is inside a classroom should be outside the building. Whenever the lift system breaks (which is not infrequent), the building smell is significant.
- Storm sewer system: despite attempts to re-route water effectively into the storm sewers, water continually drains into the building, resulting in repeated water infiltration issues in the building.
- Electrical distribution system: the major electrical system is located outside, is not secured, and is not fenced.
- Site lighting system: the site lighting is poor and does not adequately light the school or parking lot, leading to safety concerns, particularly in the wintertime when daylight hours are shorter. There are also no lights on the field. The entrances are not adequately lit.
- Exterior doors
- Roof coverings: according to a district-wide roof assessment, the roof needs to be replaced (estimated to cost appx. \$175,000).

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- Interior fittings
- Interior stairs: current stairwells are not ADA compliant and the CDE assessment notes that they need to be replaced immediately.
- Plumbing fixtures: many of the fixtures, including cold water fixtures, do not work properly, particularly in the student bathrooms.
- Domestic water distribution system
- Sanitary waste system
- Rain water roof drains
- Gas distribution system
- Heat generating systems
- Terminal and package units - The compressor that runs the pneumatic HVAC control system is in final stages. The Roof Top Units (RTU's) are extremely high maintenance. Part location and procurement is very difficult. The majority of exhaust fan motors are burned up and the ceiling units are rusting and high maintenance.
- Controls and instrumentation
- Sprinkler system
- Fire alarm and protection systems
- Electrical service distribution system
- Lighting and branch wiring
- Emergency lighting system
- Food service and athletic equipment

In addition to these pressing health and safety concerns, the building has significant educational suitability issues. There is not adequate daylight in the building; some of the classrooms only have very small windows and some of the hallways are quite dark. Almost all of the special education spaces are shared and too small. None of the special education classrooms have adequate storage or support items. There are no restrooms or bathrooms close to the kindergarten classrooms. There is limited technology in the classrooms, in part due to lack of proper electrical capacity. The lack of technology in classrooms coupled with a small, crowded computer lab that has no air conditioning means that there is little access to 21st century technology in the building. There are not appropriate facilities for music; the afterschool band and chorus programs share a stage that has no storage for musical instruments. Lastly, there is no library in the building.

Given the vast number of safety, security, and educational suitability issues in this building, it is clear that the current building structure and program are deficient to serve the needs of the current student body.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The District initially considered renovating the Adventure facility, but recognized quickly that the cost of renovating the building was equal to or greater than replacing the facility and would not adequately address the site/ building safety issues, flooding, classroom indoor air quality or the educational suitability of the classrooms/ building. A recent assessment by RLH Engineering found asbestos in pipe fittings, pipe insulation, boiler and boiler flu, ceiling tiles, door and window caulking, block filler, and drywall mud and texture. Therefore, asbestos abatement costs would be extensive in the case of renovation. The District also recognized that it would be virtually impossible to fix Adventure's building site layout, which poses safety and security issues in itself, through renovation. Finally, because of the drainage, grading, and resulting flooding issues, renovating the existing facility in its current location is difficult because of the property's drainage issues and the lack of site storm drainage infrastructure from unincorporated Adams County. Therefore after much consideration and review, the District has decided that a replacement building is the only fiscally and educationally sound solution to the aforementioned issues.

The solution proposed is a new replacement building located on the north side of the site at the corner of Conifer Road and Dakin Street.

The new building will be a 60,600 square feet PK-6 school designed to accommodate 435 students. The building includes the following spaces:

#### **CLASSROOMS**

- (5) Prekindergarten classrooms



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- (1) Day care room
- (5) Kindergarten – 1st grade classrooms
- (5) 2nd – 3rd grade classrooms
- (2) 4th grade classrooms
- (2) 5th grade classrooms
- (2) 6th grade classrooms

### EDUCATIONAL SUPPORT AREAS

- Music room
- Art room
- Computer lab
- Library
- Special Education office
- Design center/ presentation room
- Offices/ intervention spaces
- Educational resource storage
- Staff workroom
- Maker space/ tinker lab
- Kitchen
- Cafeteria
- Gym
- Gym storage

### CORE SPACES

- Reception area
- Director's office
- Assistant Director's office
- Itinerant office
- Teacher workroom
- Clinic
- Occupational therapist storage
- Conference room

### SUPPORT SPACES

- Custodial spaces
- Staff restrooms
- Student restrooms
- Electrical room
- Mechanical room

The site improvements includes the following components:

- Pre-school playground
- Playground
- Bus drop-off loop
- Parent drop-off loop
- Visitor parking
- Sidewalks
- Soccer field
- Exercise loop/ walking path
- Retaining walls
- Storm drainage

The building will be constructed to meet the Public School Facility Construction Guidelines utilizing precast concrete exterior

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walls, structural steel slab on deck with crawl space floors, structural steel roof framing with R-30 insulation and fully-adhered membrane roof coverings. The windows will be thermally broken aluminum framed with low-E glass. The building envelope and mechanical systems will be designed to meet the High Performance Certification Program and will target LEED Gold.

The building main building entrance, bus and student drop-off will be south facing. Site storm water drainage system and retaining walls will address the water infiltration issues and site drainage, icing problems. The site plan design will separate parent drop-off, bus drop-off and visitor parking on the school site and off of the busy public streets adjacent to the school and thus mitigate the dangerous existing conditions related to student safely getting to and from the school.

Addressing current safety and security issues:

The main issues at the Adventure facility are Life Safety and Security issues. At the current location, the lack of dedicated drop off areas, student drop off on the street, and the safety issues posed by the configuration and condition of the parking lot are a major safety items identified by the community and the state assessment. The new site configuration will provide dedicated and separate areas for vehicle and pedestrian traffic off of any major street, and the traffic will be only school traffic. Bus drop off will also have a dedicated lane for the first time.

Because the main entrance of the building faces south, the issues with icing will be eliminated. The parking is also located on the south side of the building. Classrooms are primarily south and north facing and can be naturally lit.

Additionally, the layout of the existing facility poses numerous safety hazards to students as detailed above, including unsecured exterior doors, a maze-like layout, and a front entry that is difficult to locate and monitor. The new building will provide both passive and active security that meets today's school security requirements. Passive security features include a clear view by administration to visitors entering the building; a reduction of the number of entrances; and simple, supervisable circulation. Active security features include electronic locks at the entry vestibule, requiring visitors to check into the office; and an intercom system that allows for ample communication in emergency situations. The building will also be fully ADA accessible, in contrast to the current building, which does not have ADA accessible stairwells, paths of egress, and restrooms.

The new classrooms will be designed with ample visibility, allowing staff to see into classrooms easily, while also providing view shadow in the case of an active intruder. The design also includes simple hallways for easy supervision.

Lastly, the new building and site configuration will address the current water drainage and sewage issues, which present daily challenges at the current site. The new building will have a structural first floor and crawl space to reduce the ongoing risk of water infiltration. It will also provide long term access to utilities for maintenance and repair.

### How Urgent is this Project?

The current building conditions and layout have immediate deficiencies which need to be addressed soon. The purpose of this application is to enable replacement of the deficient systems in a cost effective manner.

**LACK OF ADA COMPLIANCE:** certain areas of the building will remain non-ADA compliant until the building is replaced, as there is no cost-effective way to address these concerns, which include stairwell access, elevator installation, and path of travel provisions.

**INABILITY TO MONITOR ACTIVITIES:** the current deficiencies related to the significant amount of ingress points into the building and the existing layout are not feasible to address via renovation. Therefore, these issues will be an ongoing concern until replacement of the building can be achieved.

**DEFICIENT ACCESS CONTROL:** there is no way to renovate the building to change the exterior layout. Therefore, the safety issues associated with the design (difficulty in locating the main entrance, difficulty supervising exterior doors) will persist.

**WATER INFILTRATION:** the District has worked with numerous contractors to mitigate water infiltration into the building. Unfortunately, there is no easy fix for this issue due to the existing topography of the property. The district has made numerous attempts to redirect water onto and within the property, but ultimately, the water finds its way back into the building and infiltrates classrooms. Student exposure to mold resulting from the water infiltration will continue to be an

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ongoing concern.

**BROKEN SEWER LINES:** as noted previously, due to the presence of asbestos throughout the building, major renovation to replace all of the pipes is not a cost effective strategy when most of the building's systems are failing. Therefore, the district will continue to fix major issues (i.e. broken pipes or lift station malfunctions) as they arise. This will result in continued disruptions to students as they are relocated around the building. The smells will continue to be a major source of disruption and potential safety concerns indefinitely.

**NON-WORKING HVAC LEADING TO HEATING, VENTILATION, AND COOLING ISSUES:** the current system is already experiencing numerous malfunctions and breakdowns. Ongoing maintenance will only provide a stopgap to future, and likely near-term, failure of the system.

**UNSAFE DROP OFF:** there is no feasible way to modify the existing drop-off areas given the current site and surrounding roadway layout. Therefore, this issue and the hazard that it poses to students will continue.

**WATER AND ICE BUILD UP DUE DRAINAGE AND GRADING:** the District has contracted with numerous contractors to mitigate damage to the building that results from the terrain of the site and the building's location on it. There is little else that can be done without relocating the building. Therefore, these issues will continue to pose immediate and ongoing deficiencies.

## **How Does this Project Conform with the Public School Facility Construction Guidelines?**

The project conforms to CDE Public School Facility Construction Guidelines 1 CCR 303(1) for an alternative Elementary school: Expeditionary educational model. The project is a PK-6 elementary school.

4.1 - Construction of a new facility will allow for complete compliance with all guidelines of section 4.1: Health and safety issues. The "Urgency" section of the application provides detail of how the existing facilities cannot meet the safety and security guidelines. A new facility is the only way that the school can adequately meet and exceed health and safety requirements.

Specifically:

4.1.1. Sound building structures: The new building will be constructed according to IBC requirements.

4.1.2 Roofs: The new building has been budgeted as a low slope roof and will use an appropriate membrane roofing.

4.1.3 Electrical and distribution systems: The new building will meet the guidelines whereas the existing building would never meet current codes and standards.

4.1.4 Mechanical Systems: The new building will meet the guidelines.

4.1.5 Plumbing Systems: The new building will meet the guidelines whereas the existing building requires constant maintenance and has regular issues.

4.1.6 Fire Management: The new building will be equipped throughout with a fire notification and fire suppression system, whereas the existing building has no fire suppression system.

4.1.7 Paths of Egress: The building will meet emergency exit requirements, whereas the current buildings could never meet the requirements.

4.1.8 Facilities with safely managed hazardous materials: The new school would have no science program utilizing hazardous materials, whereas the existing building has hazardous materials in the building components. Custodial rooms with cleaning chemicals would be in separate, ventilated spaces.

4.1.9 Security: The new building will incorporate video surveillance, controlled access, emergency notification, and secure sites, whereas the existing building would be nearly impossible to achieve line of site and monitor all exterior doors.

4.1.10 Health Code Standards: The new school does not have labs, shops, or vocational areas, but any area with hazardous substances will meet CDPH requirements.

4.1.11 Food preparation equipment and maintenance: The new school will have a new kitchen that meets CDPH requirements.

4.1.12 Emergency Care Room: The new school will have a care room that will meet CDPH requirements.

4.1.13 Site Safety: The new site building location, parking, and drop off configuration will provide safe and separate areas for pedestrian and vehicular traffic, a dedicated bus drop off, and south facing entry to limit ice build-up. The new site would allow all traffic to be on school property, rather than parking and walking in the street to get to the school entry. The current building has many site safety issues that would be impossible to resolve without a new facility and site plan.

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4.1.14 Severe Weather Preparedness: This project does not intend to have a designated emergency shelter.

4.2 - Construction of a new facility will allow for complete compliance with all guidelines of section 4.2: Technology, whereas retrofitting the existing facility with adequate technology infrastructure would be cost prohibitive.

4.3 - The proposed project meets the CDE Public School Facility Construction Guidelines section 4.3: Building site requirements including functionality and capacity. The master planning team collaboratively developed programs for schools in the district to meet the overall goals of the district vision, including this PK-6 school. The proposed plan is based on this program, and will provide learning environments that meet and exceed state model content standards.

The project conforms to section 4.3.1 of the Public School Facility Construction Guidelines: Traditional Education Model (K-5), with the addition of Pre-Kindergarten classrooms and functions, as well as the 6th grade.

4.3.1.1 – Minimum occupancy requirements: The new facility will house 435 students. Interpolating the Median GSF per pupil chart for expeditionary elementary schools, the total square footage per student is recommended to be 153 GSF/student. The proposed plan is for 60,588 square feet, at 139 GSF/student, slightly lower than the guidelines.

The cafeteria is planned to be smaller than the minimum occupancy recommendations, taking advantage of open hallway areas for flexible configurations rather than separated cafeteria space, but the gymnasium is planned to be larger than minimum recommendations to house a district climbing wall and a pre-K indoor play area.

Classrooms in the project are planned to be 850 square feet within each room, slightly smaller than the minimum occupancy recommendations, but share some additional common space among classrooms for various activities.

In addition to classrooms, and following the minimum recommendations, the program includes a computer lab, music room, art room, special education room, and media center. The building will house a “Maker lab” in lieu of science room and “presentation space” in lieu of a lecture room, to fulfil the goals of the district and provide more flexible spaces for education.

The school also does not plan to have an auditorium space and will use a stage in conjunction with the gymnasium as an assembly area.

The program also includes administrative areas, offices, clinic, bathrooms, conference room, reception area and building support areas to accommodate the educational program. These are centrally located for students and staff.

4.4 – Building performance standards: The proposed project will meet the Performance Certification Program (HPCP) policy adopted by the Office of the State Architect.

4.5 – Historic Significance: The existing school is not considered to have historical significance and would be difficult to rehabilitate in order to meet current safety and health standards. The cost to rehabilitate has proven to be close to the cost of replacement.

In summary, based on the overall goals of the district to provide various opportunities and focus schools throughout their district, the desired local programming of the proposed project does not conform to CDE Public School Facility Construction Guidelines 1 CCR 303(1) in the following ways:

-An auditorium is not provided. Either the “student design center” presentation space or the gymnasium and associated stage will be used for school assemblies and events. The square footage that would have been for an auditorium is utilized in the student design center and presentation space to accommodate about ¼ of the students.

-A “Maker lab” is planned in lieu of a science room to provide a more flexible experimentation space for students, not limited to a lab setting.

-The class rooms are 850 square feet rather than the recommended 900 and 960 square feet for lower grades, but shared space is allocated to enlarged hallway intervention spaces adjacent to the classrooms that provide more flexibility for the staff and students.

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## How Does the Applicant Plan to Maintain the Project if it is Awarded?

Mapleton Public Schools currently has a budget of \$5,392,558 dedicated to operations and maintenance, including utility costs. The actual expenditures for the past five years are found in the table below:

Operations & Maintenance	2010-11	2011-12	2012-13	2013-14	2014-15
Salaries	2,087,068	2,476,443	2,098,628	2,226,876	2,246,779
Benefits	590,296	704,406	603,524	668,014	694,820
Purchased Services	841,544	942,203	874,222	1,271,480	1,088,686
Supplies & Materials	1,145,980	1,020,746	1,229,051	1,355,246	1,272,322
Property	31,699	3,862	35,690	8,885	25,073
Other	971	946	1,379	1,935	1,574
<b>Total O &amp; M</b>	<b>4,697,558</b>	<b>5,148,606</b>	<b>4,842,494</b>	<b>5,532,436</b>	<b>5,329,254</b>

As with most non-instructional district budgets, Operations and Maintenance allocations have fluctuated over the past several years due to pressures on other aspects of the District mission, namely, improving instruction and raising achievement. Some of the cuts to services come from contracted services, such as plumbing services, roofing services, lawn services; as well as reductions in supplies and materials. District capital needs were assessed and prioritized based on a hierarchy of impending needs to address adequate safety and security of the students. In addition to General Fund dollars, the District allocates funds to the Capital Reserve Fund, which is required by state law for the purpose of funding capital project needs of the District. The following table illustrates the Capital Reserve fund allocation per pupil for the past five years:

Capital Reserve	2010-11	2011-12	2012-13	2013-14	2014-15
Total Allocation	2,090,590	2,156,590	1,959,672	1,030,062	2,340,600
Student FTE	5,811	5,769	6,043	5,786	5,836
Allocation per Pupil	\$360	\$374	\$324	\$178	\$401

In FY 2016, the Capital Reserve Fund allocation is set at \$2,502,000, or \$424.35 per funded pupil. Approximately 30 percent of these funds are dedicated to facilities repairs and improvements, with funds carrying over, year to year, when expenditures are not required. These funds may be used for HVAC, plumbing, roofing, fencing, painting and other capital site improvements. Another \$20,000 for repairs and maintenance is found in the Insurance Reserve Fund to cover the cost of uninsured damage to property. The District will be making the final payment on the Viron Energy Lease in May 2016. This will free up approximately \$429,000 of capital funds going forward to help support the costs of a new facility.

The District is not able to budget for building replacements in its capital reserve budget. The District's per pupil funding is among the lowest in the metro area. When Mapleton's low per pupil funding is combined with its many aging buildings, it is difficult to do more than replace HVAC systems, roofs, paint, and carpet. The rest of the capital budget is taken up by ongoing repairs to all of the older buildings' systems; nine of Mapleton's ten school buildings are more than 50 years old. Therefore, if a new school were funded, the district would need to hold a bond election to replace it.

Once the new building is constructed, the District will create a specific maintenance plan to ensure the long-term viability of the facility (routine inspections, maintenance schedule, etc.). The District's staff includes a groundskeeper, locksmith, plumber, electrician, and a designated HVAC technician for the building. The building would also have dedicated custodial staff (staffing is designated by the square foot). All staff will be trained on all of the new systems to ensure that staff know how to maintain the facility. Given maintenance costs for the existing facility, the District estimates that it would actually cost less to maintain a new facility. The District would also implement a preventative maintenance plan for the mechanical systems in new facility. In the current building, most of the systems are failing and the preventative maintenance plan has become nearly irrelevant.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The facility has been owned and operated by the school district since its construction in 1957. The facility has operated

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continuously as a school since its construction.

**FOR CHARTER SCHOOL APPLICANTS ONLY:** Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$10,806,079.42	<b>CDE Minimum Match %:</b>	45
<b>Current Applicant Match:</b>	\$8,841,337.70	<b>Actual Match % Provided:</b>	45
<b>Current Project Request:</b>	\$19,647,417.12	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	Yes
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		2016 Bond Election
<b>Total of All Phases:</b>	\$19,647,417.12	<b>Escalation %:</b>	5.68
<b>Affected Sq Ft:</b>	60,600	<b>Contingency %:</b>	10.01
<b>Affected Pupils:</b>	399	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$324	<b>Does this Qualify for HPCP?</b>	Yes
<b>Soft Costs Per Sq Ft:</b>	\$42	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$282	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$49,242	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	152		NA
<b>District FTE Count:</b>	5,680	<b>Bonded Debt Approved:</b>	\$31,705,000
<b>Assessed Valuation:</b>	\$501,791,060	<b>Year(s) Bond Approved:</b>	10
<b>PPAV:</b>	\$88,336	<b>Bonded Debt Failed:</b>	\$231,165,000
<b>Unreserved Gen Fund 13-14:</b>	\$2,165,246	<b>Year(s) Bond Failed:</b>	07, 08, 09, 14
<b>Median Household Income:</b>	\$51,878	<b>Outstanding Bonded Debt:</b>	\$15,320,000
<b>Free Reduced Lunch %:</b>	61	<b>Total Bond Capacity:</b>	\$100,358,212
<b>Existing Bond Mill Levy:</b>	9.907	<b>Bond Capacity Remaining:</b>	\$85,038,212



• Facilities Impacted by this Grant Application •

**Westminster 50 - Harris Park ES Roof Replacement - Harris Park ES - 1960**

**School Name: Harris Park ES**

Number of Buildings:	3
All or Portion built by WPA:	No
Gross Area (SF):	40,977
Replacement Value:	\$9,463,605
Condition Budget:	\$6,727,157
Total FCI:	71.08%
Energy Budget:	\$14,342
Suitability Budget:	\$2,808,500
Total RSLI:	10%
Total CFI:	101%
Condition Score: (60%)	3.15
Energy Score: (0%)	1.54
Suitability Score: (40%)	3.79
School Score:	3.41



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Westminster 50

**County:** Adams

**Project Title:** Harris Park ES Roof Replacement

**Previous BEST Grant(s) Funded:** 9

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

**General Information About the District / School, and Information About the Affected Facilities:**

Harris Park Elementary is home to approximately 340 students and 41 staff members. This school is included in the district's master plan. Adams County School District 50 cut 3.2 million dollars in the 14/15 budget cycle, funding for both Operating and Capital Reserve budgets were reduced accordingly. Operating budgets have been cut approximately fifty percent since 2004. The district has a limited bonding capacity. Our successful 2006 bond election for \$98 million was the maximum allowed. Due to these restrictions we have not had the opportunity to fund major projects such as roof replacement for many years. In November of 2013 and 2014 the district had an unsuccessful Mill Levy and Bond Election. It was decided by the School Board to not pursue another bond election in 2015 and 2016. Although there has been some discussion of possible Bond Campaign in 2017.

**Deficiencies Associated with this Project:**

The system was installed in 1980. It has a 20 year service life, which expired in 2000. Per the CDE school assessment report: The system is recommended to be replaced due to probable increased condition, the potential failure of its components or in order to meet the performance guidelines for this system. We have various leaks throughout the building and at one time a partial failure if you will, of the gym roof. Approximately a 1/3 of the roof blew off. The current system has a roof slope of ¼" or greater. The deck varies throughout the school to include gypsum and tectum. The insulation is expanded polystyrene and perlite insulation. The roofing system is a ballasted EPDM membrane. This roof continues to leak.

**Proposed Solution to Address the Deficiencies Stated Above:**

Replace the roof of the main building and 2 outbuildings with a new EPDM fully adhered roofing system to include:  
Rough carpentry at curbs and perimeter  
General Conditions, Insurance  
360 SQ of 90 mil EPDM Membrane and Flashings  
Setup  
Roof Demolition  
Insulation Adhesive  
227 SQ Insulation Main Building Tapered Isocyanurate  
54 SQ Insulation Gymnasium-(2) Layers 2.5 Isocyanurate  
48 SQ Classroom Addition-(1) Layer 1.5" Isocyanurate  
31 SQ Insulation Outbuildings-(1) Layer 1.5" Isocyanurate  
Minimum ¼" tapered insulation to establish slope  
360 SQ ½" Cover Board (all roof areas)  
125 SQ Concrete Pavers and Walk Treads  
79 SQ Insulation Fasteners and Plates  
360 SQ Roof Coatings



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

Sheet Metal Flashing-Painting  
Painting of misc. surfaces impacted from the project  
New overflow scuppers as required  
30 year warranty. Cost is included in the project

## How Urgent is this Project?

The system is deemed as somewhat urgent because the roof will continue to deteriorate causing more and more leaks throughout the building. Each year we wait to replace it, the situation will only get worse. An adequate roof provides proper protection of the district's fixed assets and provides improved space conditions for all learning spaces within the building.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

This project will meet the specifications in section 3.2 of the Construction Guidelines. It meets section 3.2.1.2 criteria for low sloping roofing material- Ethylene Propylene Diene Monomer. Don Ciancio and the roofing consultant/owner's representative have reviewed the guidelines, they are reasonable and the district will comply.

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

The district will require a 30 year warranty on the roof, and requires the contractor to repair any problems during the warranty period. The roof will be inspected quarterly. The district has allocated \$100,000 to roof repairs and preventive maintenance annually, which it uses to contract out roof repairs as needed for all its roofs. There are 20 elementary, middle, and high school buildings with 1 Early Childhood Center. Of these, 14 have roofs under warranty and one BEST Grant in progress. One roof grant is being applied for this BEST grant cycle. That would leave six older roofs.

The district has the following roof replacement plan in place, pending funding:

- 2017- Harris Park Elementary
- 2018- Skyline Vista Elementary
- 2019- FM Day Elementary
- 2020- Early Childhood Center
- 2021- Colorado STEM Academy
- 2022- Sherrelwood Elementary
- 2023-Auxiliary Services, Purchasing and South Annex
- 2024-Shaw Primary and Orchard Court

Unfortunately, most of these roofs were replaced in 1980 and 1981. That made their useful life due around the same time. Our current long-range plan will allow for better budgeting and planning to replace roofs starting around 2025 and beyond.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

This is a school facility that was built new for the district in 1960. This project is for replacement of the roof which is leaking and beyond all warranties. The structure is gypsum deck  
There are no visible issues with the integrity of the structure, if there are any issues there is money in the budget to take care of such repairs

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

## FY15-16 Charter School Capital Construction Allocation from the State:

Current Grant Request:	\$608,784.00	CDE Minimum Match %:	36
Current Applicant Match:	\$342,441.00	Actual Match % Provided:	36
Current Project Request:	\$951,225.00	Is a Waiver Letter Required?	No

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	Capital Reserve	
<b>Total of All Phases:</b>	\$951,225.00	<b>Escalation %:</b>	10
<b>Affected Sq Ft:</b>	40,977	<b>Contingency %:</b>	10
<b>Affected Pupils:</b>	340	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$23	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$22	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$2,798	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	121	NA	
<hr/>			
<b>District FTE Count:</b>	8,642	<b>Bonded Debt Approved:</b>	\$98,600,000
<b>Assessed Valuation:</b>	\$572,968,570	<b>Year(s) Bond Approved:</b>	06
<b>PPAV:</b>	\$66,297	<b>Bonded Debt Failed:</b>	\$20,000,000
<b>Unreserved Gen Fund 13-14:</b>	\$5,054,241	<b>Year(s) Bond Failed:</b>	14
<b>Median Household Income:</b>	\$48,301	<b>Outstanding Bonded Debt:</b>	\$86,735,000
<b>Free Reduced Lunch %:</b>	77	<b>Total Bond Capacity:</b>	\$114,593,714
<b>Existing Bond Mill Levy:</b>	16.283	<b>Bond Capacity Remaining:</b>	\$27,858,714

• Facilities Impacted by this Grant Application •

**Alamosa RE-11J - MS Security Upgrade - Ortega MS - 1964**

**School Name: Ortega MS**

Number of Buildings:	4
All or Portion built by WPA:	No
Gross Area (SF):	127,674
Replacement Value:	\$36,195,850
Condition Budget:	\$25,358,935
Total FCI:	70.06%
Energy Budget:	\$0
Suitability Budget:	\$8,506,100
Total RSLI:	7%
Total CFI:	93.6%
Condition Score: (60%)	2.87
Energy Score: (0%)	1.88
Suitability Score: (40%)	3.91
School Score:	3.29



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Alamosa RE-11J

**County:** Alamosa

**Project Title:** MS Security Upgrade

**Previous BEST Grant(s) Funded:** 3

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |  |   |
|--|---|--|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input checked="" type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase                |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings                | <input type="checkbox"/> Other, please explain:       |
| <input checked="" type="checkbox"/> Security   | <input type="checkbox"/> ADA                | <input checked="" type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

The Ortega Middle School Campus, a group of (4) buildings, provides educational space for the 500 currently enrolled students. These students spend a part of their school day in 2 or more of the buildings daily.

This design requires our students walk between buildings to access classrooms in the Out buildings at this complex. This procedure though adequate for education is sorely lacking in student security.

Unfettered, uncontrolled public access and inadequate security infrastructure, on the exterior of our buildings, mean that our students for all intents and purposes, are at-risk during these passing periods. There are numerous exterior doors that during any part of the day can be unlocked and propped open to allow quick access to student populations. Door and window glass can be quickly compromised for ease of entry. The office area cannot visually see the Main Entry doors to control and/or confirm visitor access. Lack of interior and exterior signs cause response time delays from law enforcement officers due this lack of information. Lack of exterior/ interior video surveillance equipment also cause confusion and a delay in response time.

The district Safety Committee, in consultation with our District School Resource Officer, has identified these concerns and provided solutions and procedural practices to assist in mitigating these issues but budgetary shortfalls have required that we defer infrastructural costs.

It is now time for us to act and solve these security deficiencies. The District cannot do so alone we need the assistance of CDE to transform our plans into actions. We as always Thank CDE for their past support and hope for a long and continued relationship with them.

## Deficiencies Associated with this Project:

Our intended design solution will greatly improve the safety and security conditions of this building and site. We must not only educate, but protect those that enter our halls.

The primary point of concern is the lack of a structured and controlled access system at the Middle School primary access points. The Administration offices are not directly connected (visually or with audio communication) with these primary access locations; or have little to no communication until someone is well within the school hallway system.

There are no door contact (position)connections of our perimeter doors to a security system, so our maintenance staff rely on manual checks and observations each day, validating our perimeter is secure. With four (4) independent building, this is even more vital. Our general facility's current layouts have not been upgraded to accommodate proper access control at its perimeter. Many entryways are manually controlled with no ability for audio connection with the staffed Main Office. There

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

is also a significant lack of adequate and proper way-finding signage.

Our site signage (way finding) is inadequate and non-existent. There is little identification for both public and teacher/staff parking areas. The offsetting position of both parking areas on our site has been the biggest reason for lack of any conflicts. Our parents that pick/up and drop off their students often generate conflicts with our school bus service lanes in the North parking lot.

We currently have a service driveway to the courtyard that is shared with delivery vehicles, students/staff and services with Trinidad Junior College. Current access to the courtyard is controlled manually with a locked (or open) gate position. Anyone entering this area with harmful intentions could have direct access to staff and students. This courtyard access must be better controlled through programmed or restrictive card/keypad access.

Much of our site parking and courtyard areas are without adequate site lighting. As our schools become a larger (and more often used) community venue offering events after school and evenings; we must provide adequate site and security lighting levels to those that use our facilities.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Represented throughout our application is an SOW (Scope of Work) that will address some of these desired needs. Controlled access would be available and maintained throughout the building from only a handful of perimeter doors. Those six(6)doors will also have video and audio communication with the Main Office.

Our Administrative staff will be renovated and positioned closer and within visual line-of-site to the primary entry area of the school. A new man-trap assembly will be created to allow for adequate security screening prior to access into the school hallways and classrooms.

The condition of the perimeter glazing will be improved with impact resistant glazing film on all units lower than 7-feet from grade. This will limit ability of an intruder to smash his way into the school.

Signage will be significantly improved to offer room identification both inside and outside the room as well as from the exterior for primary classrooms with windows to better assist our 1st responders. New monument and access identification signage will be placed around the site to better manage access into parking lots and building entries

New, controlled gate access will be incorporated to the rear courtyard. Access will be granted through District screening and control.

New exterior lighting (LED Type) will be added to the site extensively to offer improved lighting levels during nighttime events.

### **How Urgent is this Project?**

Our facility is currently without adequate security equipment and systems to protect the occupants within. With a National increase in school violence reaching headlines monthly, our District is running on "borrowed" time and should be protected. Should a major security breach become local to our facility, the damage could be catastrophic.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

Our grant request proposes to establish and improve the existing construction to better meet PSCG conformity under Sections 4.1.9.

The Ortega School Campus is the only MS structure within our District. Originally serving the District as its HS, the four (4) buildings have not been modified to better address the growing need for controlled access, intruder identification, unwelcome access and the changes in school building security systems that our society (Alamosa included) must respond to.

The criteria for education and access demands established during the original building designs have changed greatly over the 6-decades of continued operation. Though our allowable perimeter access is limited to only a handful of primary access doors, they all lack any type of access control, intrusion film and communication with our primary Admin. Office. The current

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

“building core” location of the administration staff was originally focused on the interior of the school with little connection to the exterior entry.

Our SRO is very concerned that there is more than 50-feet of unsupervised hall from entry door to staff and must be corrected. For that reason, we are proposing to reconfigure part of that same staff towards the primary entrance and establish a single point of entry to offer greater opportunity for a higher level of security screens and access control.

The lack of properly controlled access (key-card or keypad), proper signage and way finding along with a lack of facility-wide (and site specific) audio/video security system are also areas of concern. Our building was designed for and is capable of being locked or unlocked. Controlled access was not a planned option at inception.

The OMS Campus lacks adequate site lighting. We propose to upgrade and ADD new high efficiency LED fixtures that not only reduce power needs, but also improve the quality of "lumens on the lot". Our facility is often used well into the evening hours and site illumination will improve that condition.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Our District takes very seriously our responsibility to maintain our facilities. Our lack of funds to build specific projects does not translate into a lack of responsibility or dedication to maintaining our facilities. In fact, our District is equally committed to maintaining projects whether funded from District funds or Grant funds, from private or governmental benefactors.

Our rural District is grounded in its desire to provide the BEST facilities possible for our students. In our efforts to provide the BEST facilities, we have reached out to CDE for assistance in providing equity for our students. As a District, we honor and respect each and every dollar given to us to build the BEST facilities here in Alamosa. We do not view these funds as an entitlement but as a gift to our students.

We would be remiss in our responsibilities to accept these funds and then allow this work to fall into disarray. Our District will do all within its power to assure that any work performed on our facilities will be maintained properly for decades to come.

As we travel around the State to visit other Districts, we are happy to see that our facilities are usually cleaner and better maintained than the majority of those we visit. It is also gratifying to know that our maintenance procedures meet or exceed those of almost every district in the State.

If this Grant is awarded, Alamosa Public Schools will commit to maintaining this project with the same diligence and professionalism exhibited in the past 26 years. We will commit \$50,000 into a dedicated Capital Reserve Fund, for 5 years, to assist with the continued maintenance of this project, as specified in the application. This project as with all other projects will become part and parcel of our District and in so doing will be honored, protected and maintained properly.

Once this project is completed, the BOE is committed to hiring security personnel to man the security office, monitor video displays, control entry and access points and be the first line of defense for our student populations.

Please note that these labor costs will surpass the infrastructure costs within 10 years. This yearly commitment shows how dedicated our BOE is to providing safe and secure facilities for our students. Our BOE accepts, the fact, that there are no free hand-outs when it comes to these grants just a hand-up to assist the district in our endeavors to provide the BEST schools.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The Ortega Middle School Campus consists of (4) separate buildings. The Main Building, Auxillary Gym, Wood Shop/Art Room and Auto Shop/Gymnastics Practice Area.



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

The Main Building and Wood Shop/Art Building were constructed in 1964. In 1997, an additional(4) classrooms were added to the Main Building along with other minor interior renovations. In 1989 a Connector Tunnel was constructed from the Main Building to the Auxillary Gym. Then in 2015, this Connector Tunnel was demolished and new Connecting Tunnel was built back in the same location. The District used Capital Reserve Funds to rebuild this Tunnel. Cost to the District was \$250,000. Also in 2015, the kitchen was remodeled. Costs again came out of District Capital Reserve Funds and these costs were around \$275,000. (Please note: Our District spent \$525,000 of District funds to repair or replace deficiencies in OMS. Our District tries very hard to be self sustaining but some issues are just bigger than our ability to fund) In 2000, minor renovations to the Wood Shop/ Art Room occurred. The Auto Shop/Gymnastic Practice Area was constructed in 1972. Renovations to this building occurred in 1998 and 2014. In 2014, the Make-up Air Handler was replaced along with sidewalk replacement and erosion control. This project was funded from District Capital Reserve Funds and cost just over \$100,000. (I again stress that 100% of this project was funded using District funds.) The Auxillary Gym was constructed in 1989. No interior renovations have occurred in this building. In 2015, a new roof was installed on all (4) buildings. This work was made possible by a CDE Best Grant. Our district is grateful for all the support given to us by CDE and honors our relationship with the CDE Grant Board.

Now that our roofs are watertight, we can and must begin to look at other deficiencies within our district. An important one that we have, because of budgetary shortfalls, was to address the lack of security infrastructure. Every building on this Campus was constructed before the need for this type of infrastructure. A time before this type of infrastructure was required to protect the children of our district.

Our district has been proactive in seeking resolutions to our security needs. Our District Safety Committee meets diligently to identify our security needs. Experts and our School Resource Officer continue to assist us in upgrading our polices and procedures. However events in the world and in our locality require us to seek assistance in solving this shortfall.

The OMS Office staff cannot identify when people enter or exit the building due to the location of the office area to the main entry doors. The numerous entrance and exit points cannot be monitored or secured quickly. View of many areas on the campus is hampered due to a lack of security cameras. Public access around the campus cannot be quickly controlled or monitored. Lack of man-locks allow quick unfettered public access to student areas.

All of these issues speak to our need for CDE's assistance in making these much needed renovations. Policy is good for practice but it is hard to protect children with policy books or procedural manuals. When what is truly needed is secure entry points into our school, visible and monitored main public entry points, monitoring of exterior entrance points, better video surveillance and hardened main entrance points into this school preventing unfettered access, by those wishing to do harm, to our most prized possession (OUR CHILDREN).

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$689,435.67	<b>CDE Minimum Match %:</b>	23
<b>Current Applicant Match:</b>	\$205,935.33	<b>Actual Match % Provided:</b>	23
<b>Current Project Request:</b>	\$895,371.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		General Fund
<b>Total of All Phases:</b>	\$895,371.00	<b>Escalation %:</b>	4
<b>Affected Sq Ft:</b>	127,674	<b>Contingency %:</b>	10
<b>Affected Pupils:</b>	501	<b>Historical Adverse Effect?</b>	No

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Cost Per Sq Ft:</b>	\$7	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$6	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$1,787	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	255		NA

<b>District FTE Count:</b>	2,144	<b>Bonded Debt Approved:</b>	\$16,990,000
<b>Assessed Valuation:</b>	\$129,954,444	<b>Year(s) Bond Approved:</b>	08, 12
<b>PPAV:</b>	\$60,599	<b>Bonded Debt Failed:</b>	\$5,990,000
<b>Unreserved Gen Fund 13-14:</b>	\$1,885,634	<b>Year(s) Bond Failed:</b>	11
<b>Median Household Income:</b>	\$30,327	<b>Outstanding Bonded Debt:</b>	\$16,980,000
<b>Free Reduced Lunch %:</b>	68	<b>Total Bond Capacity:</b>	\$25,990,889
<b>Existing Bond Mill Levy:</b>	13.59	<b>Bond Capacity Remaining:</b>	\$9,010,889



**• Facilities Impacted by this Grant Application •****Alamosa RE-11J - HS Security Upgrade - Alamosa HS - 1997****School Name: Alamosa HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	118,000
Replacement Value:	\$38,868,212
Condition Budget:	\$19,253,742
Total FCI:	49.54%
Energy Budget:	\$0
Suitability Budget:	\$3,550,700
Total RSLI:	13%
Total CFI:	58.7%
Condition Score: (60%)	3.45
Energy Score: (0%)	3.23
Suitability Score: (40%)	4.42
School Score:	3.84



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Alamosa RE-11J

**County:** Alamosa

**Project Title:** HS Security Upgrade

**Previous BEST Grant(s) Funded:** 3

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |  |   |  |   |
|--|---|--|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement            | <input type="checkbox"/> Water Systems                |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                      | <input checked="" type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase                |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings                | <input type="checkbox"/> Other, please explain:       |
| <input checked="" type="checkbox"/> Security   | <input type="checkbox"/> ADA                | <input checked="" type="checkbox"/> Window Replacement |   |

**General Information About the District / School, and Information About the Affected Facilities:**

Alamosa High School was built in 1996, with funds from a local school Bond, the first classes beginning in fall of 1997. This building was built using funds derived from a District Bond election. These bonds were paid off in 2015.

Our buildings currently have limited, inconsistent surveillance equipment (controlled access or video). Locked doors are our primary prevention and barrier and there is no controlled access from our High School's Admin Office. Public functions such as parent teacher conferences, open house events, sporting and social events rely on our doors being unlocked and supervised. At the events conclusion a manual re-lock to secure the perimeter is our solution. There is limited public signage or way-finding in the building and little to none on our HS site. Often we have parking conflicts between public and teachers or public and students that need to be resolved.

A security upgrade will focus on the daily activities of our students and staff access and improve the building entry conditions necessary for today's challenges. Our "core" administration area is far from the primary entrance, nearly blind with only limited view access deep within the building. The planning criteria used for security and access control in current school design simply has not been implemented here. We intend to correct that with a close connection of Admin Office staff to the primary building entrance. Few of our perimeter access points are connected to a system that would alert an open position. During the day, a slightly propped open door would go unnoticed and after school, we rely on our maintenance staff as part of their daily effort to "check the locked doors" at night.

We need to protect our students, staff and facility with a higher level of electronic support systems and have proposed these improvements within the grant application.

The District is thankful for the support (and response time) of our emergency responders. Our School Resource Officer is a key member within our District Safety Committee. Their proactive methods are certainly a benefit in the event of a crisis situation. We recognize that creating a more secure school may not deter an event from happening or impede the event altogether, but it may allow additional time for emergency responders to reach us.

We are making this request to improve our position on the facility specific basis, by improving the security systems and enhancing the control and communication of entrance points at this facility. With the limited funding now made available to our public school districts, we have had to reduce both operating costs and maintenance budgets and rely on our staff to double their efforts to keep our kids safe.

These grant funds can provide the District with the economic support to offer a level of security (and safety) for our students and staff that best aligns with current needs and conditions we face every day. With decades of service to the community, the community conditions have changed since this facility was originally constructed and programmed. This Security Upgrade

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

would correct many of those deficiencies.

### **Deficiencies Associated with this Project:**

The primary point of concern is the lack of a structured and controlled access system at the High Schools primary access points. The Administration offices are not directly connected (visually or with audio communication) with these primary access locations; or have little to no communication until someone is well within the school hallway system.

There are no connections of our perimeter doors to a security system, so our maintenance staff rely on manual checks and observations each day, validating our perimeter is secure. Our facility's current layout has not been upgraded to accommodate proper access control at its perimeter. Many entryways are manually controlled with no ability for audio connection with the staffed Main Office. There is also a significant lack of adequate and proper way-finding signage.

Our site way finding is generally non-existent; we often have the general public parking within the teacher and student parking lots rather than being directed to the school's main entry (East side) for school access. The general and our site lighting does not completely (adequately) cover the site conditions such as our bus loop and interior parking lot areas that would offer safer passage in the evenings. Our bus loop currently has no illumination and the street passage between the HS site and the AG/ED site is simply a painted crosswalk.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Represented throughout our application is an SOW (Scope of Work) that will address these desired needs. Controlled access would now be available and maintained throughout the building from only a handful of perimeter doors. Those six(6) doors will also have video and audio communication.

Our Administrative staff office areas will be relocated closer to our intended primary entrance swapping out a classroom that will be reconfigured. This would be completed through a Tenant Improvement package that will also enhance the visual line-of-site to the primary entry area. In addition, a new man-trap assembly will be created to allow for adequate security screening prior to access into the school hallways and classrooms.

The condition of the perimeter glazing will be improved with impact resistant glazing film on all units lower than 7-feet from grade, this will limit ability of an intruder to smash his way into the school.

Signage will be significantly improved and provide identification both inside and outside the school rooms. Classrooms with window (visual) connection directly to the exterior will have identifying signage to connect the 1st responders with the students quicker. New monument and access identification signage will be placed around the site to better manage access into parking lots and building entries.

New exterior lighting (LED type) will be added to the building perimeter and site conditions to offer improved lighting levels during night time events.

### **How Urgent is this Project?**

Our facility is currently without adequate security equipment and systems to protect the occupants within. With a National increase in school violence reaching headlines monthly, our District is running on "borrowed" time and should be protected. Should a major security breach become local to our facility, the damage could be catastrophic.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

Our grant request proposes to establish and improve the existing construction to better meet PSCG conformity under Sections 4.1.9.

The Alamosa High School structure is the only HS structure within our District. Opened in 1997, the building has not been modified to better address the growing need for controlled access, intruder identification, unwelcome access and changes in school building security systems that our society (Alamosa included) must respond to.

The design criteria for access demands established with the original building design have changed greatly even over the past

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

decade of operation. Though our perimeter access is limited to only a handful of primary access doors, they lack any type of access control, intrusion film and communication with our primary Admin. Office. The current "building core" location of the Admin. staff was originally focused on the interior hub of the school with little connection to the exterior entry. Our SRO is very concerned that there is more than 80-feet of unsupervised hall from entry door to staff and must be corrected. For that reason, we are proposing to move that same staff towards the exterior and establish a single point of entry, that would result in a higher level of security screen and access control.

The lack of properly controlled access (key-card or keypad), proper signage and way finding along with a lack of facility-wide (and site specific) audio/video security systems are areas of concern. Our building was designed for and is capable of being locked or unlocked. Controlled access was not a planned option at inception.

The High School campus lacks adequate signage to separate students/teachers/general public in parking needs and access. Through improved signage, we can better manage how people access and circulate our HS site.

The overall site lighting is proposed to be replaced with new higher efficiency LED fixtures that not only reduce power needs, but improve the level of "lumens on the lot". We propose to replace (and add where necessary) both the light fixtures and fixture arms to improve the quality and quantity of security lighting. Our facility is often used well into the evening hours and site illumination will improve that access.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Our District takes very seriously our responsibility to maintain our facilities. Our lack of funds to build specific projects does not translate into a lack of responsibility or dedication to maintaining our facilities. In fact, our District is equally committed to maintaining projects whether funded from District funds or Grant funds, from private or governmental benefactors.

Our rural District is grounded in it's desire to provide the BEST facilities possible for our students. In our efforts to provide the BEST facilities, we have reached out to CDE for assistance in providing equity for our students. As a District, we honor and respect each and every dollar given to us to build the BEST facilities here in Alamosa. We do not view these funds as an entitlement but as a gift to our students.

We would be remiss in our responsibilities to accept these funds and then allow this work to fall into disarray Our District will do all within its power to assure that any work performed on our facilities will be maintained properly for decades to come.

As we travel around the State to visit other Districts, we are happy to see that our facilities are usually cleaner and better maintained than the majority of those we visit. It is gratifying to know that our maintenance procedures meet or exceed those of almost every district in the State.

If this Grant is awarded, Alamosa Public Schools will commit to maintaining this project with the same diligence and professionalism exhibited in the past 26 years. We will commit \$56,500 into a dedicated Capital Reserve Fund, for 5 years, to assist with the continued maintenance of this project, as specified within this grant application. This project as with all other projects will become part and parcel of our District and in so doing will be honored, protected and maintained properly.

If this Grant is awarded and these improvements can become a reality, the BOE is committed to hiring security personnel that will man this security station (mantrap) in this school. That same security personnel will be responsible to check entrances and exits, identify individuals prior to entering student populations, monitor video screens, check ID's and in general be the first line of defense for those who would do harm to our students.

The cost of hiring security personnel will eclipse the cost of the infrastructure within 15 years. This is no small investment by the district and shows the dedication of the BOE to protect the students and staff that attend this school. This project will be a great help in securing our buildings against the kinds of attacks that plague our nation's education system.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Alamosa High School was constructed in 1997 following a successful local School Bond. The building service life is not an issue with this grant. What has changed since opening are the conditions that surround the building and site. Like changes in education standards, Districts must also alter/adjust/improve design conditions of safety and security.

The District Administration, School Staff and local emergency responders routinely discuss ways of improving the safety and security of its buildings and sites. In the case of our HS Building, the building designs that were conceived and constructed then were in general compliance with the conditions of the mid 90's, but would not be in compliance with requirements of the same structure in 2016.

Improvement and renovation of key perimeter access points and site conditions is the major component of this grant request. Major renovation elements such as shifting the Administration Office to an area of the building more suited to view and control the buildings primary access is not a deficiency, but a response to our security needs to reduce the potential of a threat entering the building unnoticed.

The building's general perimeter entry points are being strengthened with access control and glazing improvements that will make it more difficult for a threat to enter and access the building. Improved signage and way-finding will assist the general public to make the correct choice for building access and site entrance. This signage will also support the emergency responders with a faster locate method in the event of a threat or emergency within this large facility. Minutes count in those emergency situations.

The requirement of providing general site lighting for both access and security has not changed since this structure was built, but the quality of that light and amount of energy consumption has improved tremendously. As with most rural School Districts, we utilize our buildings more than just when it is occupied for teaching; both school and local events run into the evening or on the weekends. We must not only maintain a safe building inside, but a safe and energy efficient site outside. Our proposal to increase the quality of lighting with LED units will directly decrease our overall energy consumption at the same time.

Our intended design solution will greatly improve the safety and security conditions of this building and site. We must not only educate, but protect those that enter our halls.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### **FY15-16 Charter School Capital Construction Allocation from the State:**

<b>Current Grant Request:</b>	\$1,014,859.23	<b>CDE Minimum Match %:</b>	23
<b>Current Applicant Match:</b>	\$303,139.77	<b>Actual Match % Provided:</b>	23
<b>Current Project Request:</b>	\$1,317,999.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	Capital Reserve	
<b>Total of All Phases:</b>	\$1,317,999.00	<b>Escalation %:</b>	4
<b>Affected Sq Ft:</b>	118,000	<b>Contingency %:</b>	10
<b>Affected Pupils:</b>	576	<b>Historical Adverse Effect?</b>	No

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Cost Per Sq Ft:</b>	\$11	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$10	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$2,288	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	205		NA

<b>District FTE Count:</b>	2,144	<b>Bonded Debt Approved:</b>	\$16,990,000
<b>Assessed Valuation:</b>	\$129,954,444	<b>Year(s) Bond Approved:</b>	08, 12
<b>PPAV:</b>	\$60,599	<b>Bonded Debt Failed:</b>	\$5,990,000
<b>Unreserved Gen Fund 13-14:</b>	\$1,885,634	<b>Year(s) Bond Failed:</b>	11
<b>Median Household Income:</b>	\$30,327	<b>Outstanding Bonded Debt:</b>	\$16,980,000
<b>Free Reduced Lunch %:</b>	68	<b>Total Bond Capacity:</b>	\$25,990,889
<b>Existing Bond Mill Levy:</b>	13.59	<b>Bond Capacity Remaining:</b>	\$9,010,889



**• Facilities Impacted by this Grant Application •****Adams-Arapahoe 28J - Mrachek Middle School Replacement - Mrachek MS - 1975****School Name: Mrachek MS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	134,526
Replacement Value:	\$39,530,707
Condition Budget:	\$22,856,692
Total FCI:	57.82%
Energy Budget:	\$0
Suitability Budget:	\$13,227,900
Total RSLI:	9%
Total CFI:	91.3%
Condition Score: (60%)	3.06
Energy Score: (0%)	1.98
Suitability Score: (40%)	3.70
School Score:	3.31



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Adams-Arapahoe 28J

**County:** Arapahoe

**Project Title:** Mrachek Middle School Replacement

**Previous BEST Grant(s) Funded:** 4

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** Insufficient funds in the BEST program in 2013. Project was shortlisted.

## Project Type:

- |  |   |   |   |
|--|---|---|---|
| <input checked="" type="checkbox"/> New School | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation            | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security              | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Founded in 1885, the Aurora Public School District (APS) is the fifth largest school district in the State of Colorado, covering two counties with a world of diversity. Total enrollment is over 39,000 students. The APS portfolio consists of 4 preschools, 28 elementary schools, 5 P-8 schools, 6 middle schools, 1 6-12 academy, 5 comprehensive high schools, 1 online high school, 1 vocational/technical college, 1 gifted and talented K-8 school, 6 charter schools, and 1 home school support program.

APS celebrates a significantly diverse student population with 54% Hispanic, 16% White, 19% Black, 5% Asian, 1% Native American and 5% other races. APS students come from more than 132 countries and speak more than 139 languages. Sixty-eight percent (68%) of APS students qualify for Free and Reduced Lunch and 38% qualify for Medicaid services. Additionally, approximately 20% of APS families live below the poverty line (Colorado's state average is 12%). Thirty-six percent (35%) of students speak English as a second language, 10% of students attend special education programs, and 5% have been identified as gifted and talented.

Low property values have long restricted Aurora Public Schools' capital programs. Our district has a large number of low to moderate value residential properties that yield large student enrollments but relatively few high value commercial properties contribute to our tax base. Only seventeen districts in the state (less than 10%) have lower PPAV's than Aurora. Aurora's bonded debt currently sits at at \$330,053,066; bonding capacity at \$361,298,244; and percent bonding capacity used at 91%.

In the past 18 years, Aurora's voters have been very supportive of district bond referenda but after bond issues in 1995, 2002, and 2008 many critical deficiencies such as those at Mrachek Middle School remain unaddressed. The 2008 program funded less than half of our identified needs. Our ability to complete deferred maintenance and planned replacement projects is impacted by the high proportion of bond proceeds required for new schools in growth areas. The district is considering a bond election in 2016; however, to increase our bonding capacity the question put to voters will need to all include the alternate capacity calculation (6% of market value).

Mrachek Middle School is a two-story building, built in 1975, with 134,526 square feet and an additional 15,000 square feet in modular classrooms. The building was originally designed with no exterior windows and an open floor plan with little or no separation between classrooms. Windows were added to some classrooms in 2004 and partial height interior partitions have been added over time to create some privacy between each room, but no alteration has been able to correct the fundamental flaws of the building's original design. The general shape of the building is rounded pods with a commons area in the middle. This creates strange shaped classrooms, and winding hallways that are difficult to supervise. If an intruder does gain access to the building, it is impossible to implement normal "lock-down" procedures because classrooms both lack doors and full height walls. In addition, the entire 6th grade is located outside in modular classroom buildings.



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

BEST grant funding would be specifically directed towards improved safety and better educational environments for students. Adequately-sized classrooms, sustainable facilities, and a code-compliant building are best achieved through the construction of a new facility. The new school would be LEED-Gold, meeting all CDE Facility Construction Guidelines and would save energy and operating and maintenance costs over their existing facility. Technology will be fully integrated into the school. The new facility could be built on the same site, south of the existing building. After the new school is complete, the original would be demolished and fields built on that part of the site.

### Deficiencies Associated with this Project:

Mrachek Middle School is a two-story building, built in 1975, with 134,526 square feet and an additional 15,000 square feet in modular classrooms. The school serves 6th through 8th grade students, although the entire 6th grade is currently located outside in modular classrooms.

The main building issues include a poorly controlled and vulnerable main entry, plus many exterior doors that make it difficult to monitor all ways of entry. The second floor has several stairs that exit directly to the exterior and are beginning to fail. There are fire safety and egress issues in the school despite the presence of a sprinkler system. The sprinkler system is original to the building and no longer meets code. Also, due to the original site layout, there is insufficient room for on-site parent drop-off. Presently, this activity occurs on South Telluride Street, with many students crossing the traffic lanes and the bus parking.

Mrachek Middle School has plumbing and electrical systems that are original to building and are past their service life. In addition, the regulation of temperature has been compromised by interior modifications intended to solve other problems.

### STRUCTURE

The exterior concrete stairs are beginning to fall apart and instances of concrete falling onto public areas have occurred. The stairs were built with radiant heating in the treads but those systems no longer work so the custodial staff must apply snow melt on the stairs after each snow event. Students who have lockers on this floor exit via these stairs every day. Slips and falls are a significant concern.

### FIRE SAFETY

Despite being fully fire-sprinkled, the system is original to the school and does not meet code.

With an open floor plan, the danger of fire spreading uninterrupted is a high risk. The building is classified as Type III construction. The building area is larger than allowable by current code for an E Occupancy. For a major renovation, the construction of a structurally independent, 2-hour rated fire wall would be necessary to provide a safe level of fire separation within the building.

Although the fire alarm system is currently working, it is non-addressable and beyond its expected service life.

It does not appear that certain rooms, such as STEM Lab, Science Labs, and larger storage rooms have adequate fire separation.

### SAFETY & SECURITY

School security receives the highest priority in Aurora Public Schools. The Mrachek facility is one of our most serious security concerns primarily for the following reasons:

1. It is extremely difficult to secure the building perimeter to prevent undetected access by an intruder.
2. If an intruder does gain access to the building, it is impossible to implement normal "lock-down" procedures because classrooms both lack doors and full height walls.
3. One-third of the student body is housed outside the main building in two large modular classroom buildings. These students are constantly moving back and forth between the main building and the modulars throughout the school day.
4. The exterior exit stairs from the second floor are unsafe, particularly in winter weather.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

There are 30 separate exterior sets of doors distributed around the perimeter of the school building, making the supervision and control of visitors and students coming and going somewhat difficult. Video surveillance is the main form of monitoring who approaches the main entry.

The main entry to the school opens directly into the student commons. There is no way to visually monitor a visitor once they enter the building if they chose not to proceed to the main reception.

When there is a power outage, the lack of windows does not allow for adequate light levels within classrooms. Emergency lighting inside the Mrachek building is limited to exit pathways. Essentially, the rooms go black. The faculty has to keep flashlights with working batteries on hand for such occasions.

There is congestion at the parent drop-off, parking, and bus loading areas. When parking and the drop-off areas were all together, there were several close calls of children getting hit by vehicles. To separate parent drop-off from parking and bus drop off, parents are restricted to South Telluride St., which does not have adequate pull-off areas. Many students are now exposed to street traffic. There is insufficient space to expand the parking / drop-off due to a large retaining wall on the south side of the lot.

The modulars are located on the north side of the building where they receive no sun. During the winter, ice is almost always present, resulting in students and staff falling. This is the case on the north side exterior stairs as well. The school uses large amounts of snow melt, but cannot maintain it well enough. The snow melt is also having an effect on the concrete walks and stairs, causing them to break down and pose other hazards. Also, in the middle of winter when it is dark in the morning and dark in the late afternoon when students and faculty are present, there is not adequate exterior lighting.

The corridor between the main classroom area and the elective classrooms and gym is very narrow. Multiple times throughout the day all students have to pass through there at the same time causing a bottle neck and creating a safety issue.

The exterior entries are not protected from forced vehicle entry by bollards or other protection.

### ASBESTOS & HAZARDOUS MATERIALS

The school contains the following known asbestos containing building materials: Floor tile and mastic, counter and desk tops, fire door, fiberglass sealant. The following materials are presumed to contain asbestos: roof flashing, drywall joint compound, roofing tar (has dripped throughout entire second floor), caulking on steel beams, cabinets, and ductwork, foam board glue on exterior plenum, stainless steel sink undercoating, and waterproofing foundation sealant. AHERA drawings are included in the submittal.

The school contains the following hazardous materials: mercury containing gym floor; mercury containing devices such as thermostats and boiler controls; PCB ballasts; fluorescent light bulbs; smoke detectors; and exit signs.

### BUILDING CODE

The four main staircases inside the building that take students and faculty up and down from the second floor are circular staircases with treads starting at about 8" in depth and flaring out to more than 1'-0". Per code, tread depth must be 11" minimum and be a uniform depth. There have been cases where occupants have fallen on the stairs due to the lack of tread depth. To avoid the narrower depth, occupants tend to descend the stairs in the middle, which makes the staircase narrower and congests the flow.

The curving shape of the building has created multiple classroom layout issues. There are multiple locations where an occupant must go through at least one classroom, sometimes two, in order to exit their classroom. The rooms over 1,000 square feet require two exits, but most only have one.

### EDUCATIONAL SUITABILITY

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

First floor classrooms vary in size and, while they measure at around 1,000 square feet, a substantial area of each room is dedicated to student movement (corridors without walls). The second floor classrooms have partial height walls that define an area of approximately 750 square feet, and the classrooms in the modular buildings are approximately 660 square feet. The average class size for the school is 30 students and some rooms have class sizes as high as 36 students. The district standard for middle school class size is 25 students on average and maximum of 28 students. Recent budget cuts have resulted in staff cuts and larger class sizes at all district middle schools but the hope is that class size will return to the district standard as school funding returns to a more appropriate level. The district standard for a middle school classroom is 850 SF which allows for greater flexibility with student capacity, something the existing classroom sizes at Mrachek cannot accommodate.

Because the interior partitions are partial height and most classrooms do not have doors, noise is easily transferred from room to room and room to corridor. Some classrooms have been given clear plastic freezer strips to deaden the sound, but this does not work. Objects have been thrown from room to room, and there is one instance where a person can see into a boys' restroom from the computer lab.

Only classrooms on the perimeter of the second floor have exterior windows. These windows were added in 2004 in an attempt to improve the learning environment but were located on the same wall as the teaching surface which creates problems with glare. Teachers have to close the blinds in many of these rooms to use technology. With no natural light entering the rooms or views to the exterior, the rooms feel very closed in and dark. The lights do not provide adequate light levels for the classrooms.

Most casework in the school is well past its service life, and is beginning to break down. This is also the case for ceilings and most walls.

The school lacks adequate storage for educational program materials.

Special Education does not have restrooms within their rooms. This requires faculty to have to escort students to the restrooms.

The library-media center is centrally located on the second floor, yet open to the circulation space (no true corridors exist on the second floor). The space does not allow for quiet reading or studying. Theft of reading materials has also been an issue as students can cut thru the media center to reach classrooms on the opposite side of the building.

A commons space is located directly below the media center and was originally used as the cafeteria. The main building circulation is an integral part of the commons, so the congestion of tables, student spilling into the circulation spaces to eat, and students passing between classes caused congestion in the area. In an effort to ease overlap between the circulation and dining functions, the district moved the serving line and dining space into a shop space which was no longer being used.

### CROWDING

These classrooms are at capacity or over capacity for the current enrollment, as stated earlier. Their sizes do not provide much flexibility in terms of class size and fluctuations in enrollment. The variety of sizes and shapes of classrooms on the first floor results in some rooms being overcrowded and other rooms underutilized and there is no easy way to redistribute square footage. The rooms over 1,000 square feet require two exits, but most only have one.

Not only are the modular small for the average class size, but the fact that the school needs modular indicates the need for a better, more efficient building design.

The overcrowded computer labs are very warm because they do not have proper ventilation. There is not proper storage for these rooms, so all extra equipment, paper, etc. takes up space within the room.

The cafeteria serving line and dining space has been relocated to the shop classroom to ease congestion in the main

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

commons. Only minor changes were made to the kitchen which is still oriented to the first floor commons. Food is moved from the kitchen thru the receiving door, across a main corridor and to the movable serving line. The school was willing to accept this as a 3-5 year solution.

The school does not have an actual stage. Currently, they have a raised platform that is assembled in the commons area at the time of a performance. From the platform, students are able to touch the ceiling.

### FACILITY ELECTRICAL

The school still has its original electrical service and is well beyond its service life. It still has capacity. But due to its age, a renovation would surely overload it.

There are not enough outlets in the classrooms. It was observed that power strips and extension cords are used frequently.

The lighting in the building is dated and beyond its service life. Light levels are considered very poor and do not meet lighting codes.

### FACILITY PLUMBING

All plumbing services, from plumbing fixtures and domestic water to sanitary waste and storm drains, are past their service life. Short of a few restrooms having been brought up to meet ADA guidelines, all of the systems are original to the building and do not meet current codes.

### POOR INDOOR AIR QUALITY

Although the boilers were replaced recently, there are instances of extreme temperature differences between rooms that are open to each other. It is common for people to have different temperature thresholds, but a noticeable change between adjacent rooms suggests a different issue. One reason for this might be from the modifications to certain rooms to create more privacy. The HVAC system was not originally designed to service individual spaces as much as it was to service larger, open areas.

The overcrowded computer labs are very warm because they do not have proper ventilation. There is not proper storage for these rooms, so all extra equipment, paper, etc. takes up space within the room.

Though there is a mechanical ventilation system, there is a perceived lack of fresh air due to the lack of operable windows.

### SCHOOL SITE

There is congestion at the parent drop-off, parking, and bus loading areas. When parking and the drop-off areas were all together, there were several close calls of children getting hit by vehicles. To separate parent drop-off from parking and bus drop off, parent drop-off and pick-up has been moved to South Telluride St. Many students are now exposed to street traffic as parents will wait on both sides of the busy collector street. There is insufficient space to expand the parking / drop-off due to the large retaining wall on the south side of the lot.

There is not a separate delivery area. So delivery trucks must use either the bus drop-off or parking area.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The district began planning for a future bond program in 2012. Mrachek Middle School has been identified as the highest priority school for a remodel. However, as described below, a remodel will not solve all the problems with the existing building. Therefore the district would propose to spend the funds it would commit in a 2016 bond for a remodel as a match for a BEST grant to replace the building.

To meet high-performance standards while renovating the existing school would be extremely challenging and costly. The

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

duration of disruption would extend over two years as the summers would be used for major work. More temporary modular would be necessary while renovations took place. The district believes that building a new facility is in the best interest of the community and the best use of funding.

In considering the substantial renovation of the middle school to alleviate health and life safety issues, considerations included correcting existing problems including stacked classrooms and emergency lighting, providing a safe level of fire separation between the areas of the school, improved entry security, and replacement of the inadequate electrical and plumbing systems. Classrooms would be upgraded with new walls and ceilings. Site considerations would include reworking the drop-off loops, and replacing the site electrical distribution and lighting for safety. This solution would remove the parent drop-off lane from its current on-street position, allowing students to avoid crossing traffic to enter the school.

Simply renovating the school to correct life safety standards would leave the school in a building with a limited future lifespan. Future additions for school expansion would be challenging and expensive because of the curving shape of the building.

With these long-term considerations in mind, the district has chosen to pursue a BEST grant to build a new middle school on the existing site just south of the existing building. This would allow the school to continue unbothered by the new construction. The district will close the existing middle school, and demolish the existing building within one year of closure.

In September of 2015, the district created a Design Advisory Group made up of the staff, parents and students to look at options for a replacement school. The DAG chose to use the Aurora Hills Middle School as a prototype for the Mrachek Middle School replacement school. Aurora Hills MS is also a replacement school that was built with funds from our 2008 bond program. The design team for the Aurora Hills project was hired to assist as with adapting the design to the Mrachek site. The fee for this work is being paid from 2008 bond funds.

The new facility will incorporate new building systems to alleviate the concerns involving electrical, plumbing, air quality, congestion and crowding, fire safety, security and educational suitability.

The new school will meet the requirements of the High Performance Certification Program, providing a new, easy-to-maintain, low-cost facility with a life expectancy of 50 years or more.

The new school will be constructed of a Type I or II, non-combustible, fully-sprinkled construction with adequate egress and fire separations throughout. Corridors will be properly sized and constructed for building safety.

New classrooms will have adequate daylight and sufficient acoustical separation. The new facility will be fully ADA accessible.

The main entry will be secured by a vestibule leading through the administrative suite, and the remaining entries will be able to be secured during the day.

New site circulation will be designed to separate visitor traffic, bus drop off, and parent drop off into their own paths or areas

### How Urgent is this Project?

#### STRUCTURE

The extent and timing of the crumbling is unknown and must be monitored. The urgency for correction is high (within 2 years.) The importance factor is high with regards to life safety.

#### FIRE SAFETY

The combustible nature of the building is a significant risk despite the sprinklers. The urgency for correction is medium and should be remedied within 3 years. The importance factor is high with regards to life safety.

#### SAFETY & SECURITY

The poor entry control and supervision is a significant risk. Icy conditions and traffic congestion is also a significant risk. The urgency is high and should be corrected within 2 years. The importance factor is high with regards to life safety.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

### ASBESTOS & HAZARDOUS MATERIALS

If any renovations took place, a lot of the asbestos containing items would have to be abated or removed. The urgency is medium and should be corrected within 3 years. The importance factor is high with regards to life safety.

### BUILDING CODE

The stair tread issue would need to be corrected during a renovation project. The urgency is medium and should be corrected within 3 years. The importance factor is high with regards to life safety.

Existing from one room through other rooms is not allowed per code. This issue would need to be corrected during a renovation project, but would be very difficult without drastically changing the layouts of the rooms. The urgency is medium and should be corrected within 3 years. The importance factor is high with regards to life safety.

### EDUCATIONAL SUITABILITY

The undersized classrooms and open learning spaces should be corrected before enrollment increases again. The urgency is low (corrected within 5 years.) The importance factor is high with regards to educational adequacy.

### CROWDING

The overcrowded hallways and locker bays are the most urgent crowding issue. Lockers have been relocated to accommodate floor plan changes but have created constricted area for egress. The urgency is high. The importance factor is high with regards to life safety.

### FACILITY ELECTRICAL

In order to keep up with modern technology demands, the electrical system should be replaced, also to alleviate the unsafe practices and tripping hazards occurring within classrooms. The urgency is high and should be corrected within 1 year. The importance factor is high with regards to life safety.

### FACILITY PLUMBING

The plumbing system would need to be corrected during a renovation project. The urgency is high and should be corrected within 1 year. The importance factor is medium with regards to life safety.

### POOR INDOOR AIR QUALITY

There is evidence of existing poor air quality and thermal comfort due to various building modifications. The urgency is medium and should be corrected within 5 years. The importance factor is medium with regards to life safety.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

CDE 3.3 A continuous unobstructed path of egress from any point in the school...

The proposed new school would be fire sprinkled and within allowable area limits or provided with safe area separations. The corridor paths of egress would be clear, evident, and more easily supervised.

CDE 3.5 A building fire alarm and duress notification system

The new school will provide a fully addressable fire alarm system.

CDE 3.8 An Event Alerting and Notification System / Intercom phone system

The new school will provide complete video monitoring and P.A. / event notification systems as well as a monitored fire alarm system.

CDE 3.9 Secured facilities including a main entrance and signage directing visitors to the main entrance door.

The current entry is difficult to supervise and control. The new school will have a clearly-defined main entry with secured access through the admin suite during the day.

CDE 3.10 Safe and secure electrical service

The new project will allow for new, energy efficient lighting, adequate technology, and safe amounts and locations of power and data outlets to eliminate extension cords and other hazards.



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

CDE 3.11 A safe and efficient mechanical system that provides proper ventilation and maintains the building temperature... An efficient and easy-to-maintain HAVC system would take the place of the existing, 37-year-old distribution piping and valves which are a constant headache for district maintenance personnel.

CDE 3.12 Healthy building indoor air quality.

The current school has indoor air quality and thermal comfort issues due to the aging HVAC components. The issues would be eliminated with a new school.

CDE 3.17 A facility that complies with the American Disabilities Act (ADA)

The existing school is not fully ADA compliant with regard to restroom accessibility, building access and circulation. The replacement facility would be built to full ADA accessibility standards.

CDE 3.18.1 Separation of traffic modes

At the middle school, bus loading, parking and parent queuing conflict. Replacing the school would provide the opportunity for on-site parking, drop-off lanes and bus staging.

CDE 3.18.3 Adequate driveway for car stacking.

The middle school lacks a parent drop-off area and this activity occurs on the street. The size of the site does not allow for on-site drop off lanes. Replacing the school would provide the opportunity for adding on-site parking, drop-off lanes, and bus staging.

CDE 3.18.9 Restricting vehicle access at school entrances.

The existing entry is only protected by a concrete curb and a few planters. There are no bollards at the entry. A new school facility would include a physically protected main entry.

CDE 3.19.2 Clear lines of sight from a single vantage point.

A new design for the administrative area would provide supervision of both the main entry as well as the school parking lot. This would replace the current admin area which only supervises the entry commons.

CDE 3.19.5 Exterior buildings and walkways should be lighted.

The middle school site is poorly lit which is a safety hazard. A new building and site amenities as proposed would alleviate this danger with adequate site, field, building, and parking lights.

CDE 4.8 Buildings that functionally meet...programming..., are not overcrowded, and are located in permanent buildings.

The new school would meet District Educational Specifications, will not be overcrowded, and all grades will be housed in a permanent building.

CDE 4.11 Daylight and views shall be incorporated.

At the middle school, many of the classrooms have no outside windows. This condition can only be corrected with a replacement facility.

CDE 4.11.4 Classrooms should provide 32 square feet/student.

Currently classrooms vary greatly in terms of square feet/student. Because open space schools assumed that circulation would occur between teaching times, circulation space and teaching space overlapped. In trying to restrict circulation space and the accompanying noise, small teaching spaces with relatively large student populations have been created at Mrachek. A new school would provide more space per student in the classrooms, along with having a rectangular shape, and natural light. Properly designed corridors would connect the classrooms so that student circulation would be accommodated outside the classrooms.

CDE 4.11.5 Library media center.

A Centralized, technology-driven library Media Center for the students and community will be provided at the new school.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

CDE 4.11.8 Science lab with teaching demonstration table, emergency shower / eyewash, demonstration hood, student work stations provided with water and gas receptacles...

The equipment, casework, storage, hoods and workstations at the existing middle school science labs are in very poor condition. Some casework is damaged to the point of not functioning. There is only one large science lab and that is shared by all science teachers on a rotating basis. The proposed replacement project would include new science spaces.

CDE 4.11.16 Cafeteria / Multi-Purpose

The cafeteria will be adequately sized for the new middle school. The lack of existing table storage will be corrected so that furniture does not have to be stored along corridor walls or restrict exiting width for the students.

CDE 5.1 Facilities that conserve energy through High Performance Design.

A new facility would be energy and water efficient, have low life cycle costs, healthy for its occupants, and has a low impact on the environment. Pursuing LEED Gold would be a set goal.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Management of the requested repairs and improvements will fall under the responsibility of the district's Director of Maintenance and Operations and will be accomplished under our normal facility management processes. Aurora Public Schools operates a full service Maintenance and Operations Department. The department carries out a regular program of routine, preventive, emergency and capital repairs for all district facilities.

The Maintenance Department is comprised of 1) three interdisciplinary teams, 2) exterior operations, 3) electronic and controls group, 4) natural and renewable resource management, and 5) custodial operations. Their goal is to provide a level of building maintenance that promotes and complements learning environments.

The three interdisciplinary teams accomplish general building maintenance for the district. Each team is responsible for maintaining 1.5 to 1.6 million square feet. The teams oversee a variety of building maintenance services including heating, ventilation and air conditioning, electrical, plumbing, carpentry, painting and small construction projects.

Exterior operations is responsible for a variety of site services including: irrigation, turf, tree and shrub maintenance, asphalt and concrete, play grounds, fencing, athletic fields, exterior graffiti, and snow removal.

Electronic and controls team is responsible for district wide support of fire-alarm systems, intrusion-alarm systems, access control, intercom systems, two-way radios, clocks, and scoreboards.

Natural and renewable resources group monitors and optimizes the District's use of energy, water and waste. This is accomplished through the oversight of various software applications, student and staff engagement, incentive programs, and community and business partnerships.

Custodial operations is an integral part of building and site maintenance. They are responsible for building hygiene, building security, minor maintenance, grounds safety, monitoring building systems, energy and resource management.

The district's annual capital reserve program currently averages approximately \$6 million per year and includes a program of cyclical major facility repairs.

The district carries on a program of periodic district-wide facility condition assessments that form a basis for planning annual capital reserve project programs and bond funded capital construction programs. The most recent of these assessments is expected to be complete in spring of 2016.

The district's Long Range Facilities Advisory Committee meets on a regular basis and advises the board of education on facility project needs.



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:

The school was built in 1975 using construction standards of the time and for an educational philosophy that was not successful.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$16,054,888.00	<b>CDE Minimum Match %:</b>	45
<b>Current Applicant Match:</b>	\$24,082,332.00	<b>Actual Match % Provided:</b>	60
<b>Current Project Request:</b>	\$40,137,220.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	Yes
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		2016 Bond Election
<b>Total of All Phases:</b>	\$40,137,220.00	<b>Escalation %:</b>	7
<b>Affected Sq Ft:</b>	130,000	<b>Contingency %:</b>	8
<b>Affected Pupils:</b>	879	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$309	<b>Does this Qualify for HPCP?</b>	Yes
<b>Soft Costs Per Sq Ft:</b>	\$25	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$284	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$45,662	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	148		NA
<b>District FTE Count:</b>	38,058	<b>Bonded Debt Approved:</b>	\$215,000,000
<b>Assessed Valuation:</b>	\$2,146,328,646	<b>Year(s) Bond Approved:</b>	08
<b>PPAV:</b>	\$56,397	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$30,501,809	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$46,335	<b>Outstanding Bonded Debt:</b>	\$344,985,000
<b>Free Reduced Lunch %:</b>	70	<b>Total Bond Capacity:</b>	\$429,265,729
<b>Existing Bond Mill Levy:</b>	20	<b>Bond Capacity Remaining:</b>	\$84,280,729

• Facilities Impacted by this Grant Application •

**Aurora Academy Charter School - Aurora Academy Security Remodel & Addition - 1974**

**School Name: Aurora Academy Charter School**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	63,430
Replacement Value:	\$21,449,824
Condition Budget:	\$15,533,860
Total FCI:	72.42%
Energy Budget:	\$22,201
Suitability Budget:	\$2,152,500
Total RSLI:	4%
Total CFI:	82.6%
Condition Score: (60%)	3.28
Energy Score: (0%)	2.50
Suitability Score: (40%)	3.63
School Score:	3.42



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**Applicant Name:** Aurora Academy Charter School

**County:** Arapahoe

**Project Title:** Aurora Academy Security Remodel & Addition

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof                  | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement    | <input checked="" type="checkbox"/> Fire Alarm | <input type="checkbox"/> Lighting                      | <input type="checkbox"/> Facility Sitework      |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement    | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase          |
| <input checked="" type="checkbox"/> Addition   | <input type="checkbox"/> HVAC                  | <input type="checkbox"/> Energy Savings                | <input type="checkbox"/> Other, please explain: |
| <input checked="" type="checkbox"/> Security   | <input type="checkbox"/> ADA                   | <input type="checkbox"/> Window Replacement            |   |

**General Information About the District / School, and Information About the Affected Facilities:**

Aurora Academy Charter School (AACS) is a K-8 charter school with 540 students in its 16th year of operation. AACS has consistently been a proficient school in a failing school district and plays a vital role in the community. 53% of our students receive free and reduced lunches. The school has always met enrollment goals and has no trouble attracting students. As the oldest Charter School in the Aurora Public School District, Aurora Academy will continue strong into the future.

As reflected in our Facility Master Plan, AACS has developed a long term vision for the future of the Charter School. AACS has explored all options to meet the School's facility needs including developing and construction of a new site, relocating to an existing facility and improving our current campus. After meeting with the City of Aurora and with the School District it has been determined that moving is not feasible due to the lack of appropriate available buildings and/or land within the district boundaries. Therefore, we must remain in our current location and correct existing deficiencies.

Critical security risks exist in the building due to isolation of the main office and lack of a clear line of sight with the front door. Currently the main office is located on the second floor of our building. For appropriate security measures the office must be relocated to the main floor. As the design of schools has evolved to address security issues in response to tragic events, both locally and nationwide, time is of the essence to address our entry sequence. Our building was a remodeled office building 16 years ago and does not have an appropriate, secure entrance or lobby area.

The lack of security and access control at the main building entrance is the most critical risk Aurora Academy faces. The proposed remodel and addition project will correct this security issue and also allow Aurora Academy to address other facility needs including ADA compliance and added classroom and meeting space. These secondary goals can be accomplished without adding cost to the project.

ADA Compliance - Presently the school facility is not ADA compliant as there are stairs to access the elevator to the second floor and main office.

Additional Classroom and Meeting Space - Classrooms are needed for teachers who presently do not have a classroom and for our increased numbers of English as a second language (ESL) students. A mandate by the Office of Civil Rights which states ESL students must receive 40 minutes each day of specific instruction separate from the general population requires additional instructional space. In addition, more offices/meeting spaces are needed for; the school psychologist, speech/language pathologist, occupational therapist and special education support staff.

Annually, we address on-going maintenance items such as, replacing flooring and carpeting, caulking, minor remodeling, door replacement, replacement of plumbing fixtures and painting. The project requested with this BEST application is beyond what we can accomplish with our maintenance budget and staff.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

We believe we can correct these deficiencies and create a safe and functional educational environment for our students, parents and staff with the proposed building project.

### **Deficiencies Associated with this Project:**

The primary purpose of the project is to correct a major security issue within the building. The Main Entrance to the school is located on the first floor however, the Administration Office, is located on the second floor and does not have any visual or direct physical connection to the main entry. Office staff are separate from the entry by a long hallway approximately 30 feet from the lobby. The entire building can be accessed from the front door without ever being seen by school staff. Someone wishing to do a student harm could get to them virtually undetected. Once into the main corridor of the building it would be impossible to prevent an intruder from leaving the building.

Currently, once you enter the exterior doors you must ascend a flight of stairs and cross to the far side of the lobby to enter the office. The only separation between the lobby and the rest of the school is two sets of glass doors, one on each floor, that lead directly to the main corridor running the length of the building. These doors are to remain locked as part of the Schools security plan but can easily be left open by someone exiting the corridor or be opened by a passing student. In the past, this has allowed many visitors to short-circuit the proper entry sequence through the Administration Office. There have been multiple instances at the school in which visitors have gained access to the building without school staff ever knowing they were there. This deficiency directly relates to Public Schools Construction Guidelines section 4.1.9 and specifically section 4.1.9.1 and 4.1.9.3.

In most school facilities entrants have to at least pass by the main office, down a hallway, and across some distance before they reach children. In our building someone could harm a student without ever encountering a locked door, a staff member or a barrier of any kind.

While not the primary drivers of the project, there are other lower priority deficiencies, such as ADA Compliance, an outdated Fire Alarm System and the presence of Asbestos that will be addressed as part of the planned project. The new addition will also provide a much needed visual sense of entrance that the current building lacks.

Because the buildings first floor is partially below grade at the main entry, entrants come thru the doors to a small landing and must either ascend stairs to the second floor or go down a set of steps to the first floor. The elevator cannot be accessed from outside without traversing stairs. The proposed entry addition will correct this problem.

### **Proposed Solution to Address the Deficiencies Stated Above:**

There is no way to properly secure the main building entrance within the current building configuration. To correct the security issue the Administration Offices must be relocated to the first floor. A new entry vestibule and two-story addition will be constructed adjacent to the new office location. This new entry will replace the current entrance as a gateway to the building and will meet CDE Public School Facility Construction Guideline sections 4.1.9.1 and 4.1.9.3. This new design will force any visitor to check in at the reception desk and pass through the main office all while in clear view of school staff.

The existing entry lobby will continue to be used for circulation between the first and second floor and to access the elevator but will no longer be accessible from outside.

To accommodate the relocation of the office several existing spaces within the building must move. The library, two classrooms and technology lab currently occupy the space needed for admin. Because of occupancy maximums as well as structural limitations the library must remain on the first floor. The library will shift east to the current 2nd Grade Classrooms and the 2nd Grade Classrooms and Tech. Lab will move to the current location of the Administration Offices.

The Admin Offices will also be reconfigured creating a more appropriate and usable space in terms of size and adjacency. Five personal offices (Principal, two Assistant Principals, Business Manager and an office for the Counselor), Board Room, a small kitchenette, storage room, Health Office with an accessible restroom, Front Desk (w/ 3-4 seats, including Volunteer Coordinator), waiting area and staff restroom will all be included in the new first floor admin space. The specialists and interventionists associated with the current administration office will be relocated to new spaces throughout the building.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Office space for 2-3 interventionists, in addition to the current interventionists, are also accounted for within the project.

The second story space of the addition, above the entry vestibule will house a new multi-purpose room that can be utilized as additional classroom space. The addition will also allow for an added staircase which could alleviate potential exiting width issues associated with future growth.

Along with the office relocation and new entry addition the project will address other ancillary security concerns. An upgrade to the existing security system and the possible addition of surveillance cameras are being considered. There may also be an opportunity to upgrade existing interior classroom door hardware to conform to CDE guidelines.

### How Urgent is this Project?

In developing the proposed project Aurora Academy has worked with architects, contractors and consultants who specialize in school construction. It is the opinion of all involved that the security issue at our facility must be corrected as soon as possible. The risk that an intruder may bypass the Main Office and enter the school un-challenged is very high, as parents have been able to do so in the past. The school has educated its students not to open the doors for anyone, but that is not an acceptable solution.

Recent tragedies in Colorado and across the country have driven drastic changes in school security design. The new threat of “active shooter” scenarios and other major dangers make it critically important to address security and access control immediately. Every school faces these threats but the current configuration of our facility makes the risk much higher at Aurora Academy. It is very likely that because of the current design Aurora Academy could be the least secure school facility in Aurora.

This project will eliminate the serious security problem when entering the building during and after school hours. In addition, relocating the main entrance will allow the students and staff to traverse from one floor to another, in the old entry lobby, in a secure manner.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

4.1.2 Roofs. - A weather-tight roof that drains water positively off the roof and discharges the water off and away from the building. All roofs shall be installed by a qualified contractor who is approved by the roofing manufacturer to install the specified roof system and shall receive the specified warranty upon completion of the roof. The National Roofing Contractors Association divides roofing into two generic classifications: low-slope roofing and steep-slope roofing. Low-slope roofing includes water impermeable, or weatherproof types of roof membranes installed on slopes of less than or equal to 3:12 (fourteen degrees). Steep slope roofing includes water-shedding types of roof coverings installed on slopes exceeding 3:12 (fourteen degrees)

The construction of the new entry vestibule and two-story addition will include a new EPDM 60 mil low slope roof, complying with 4.1.2.1.2.

4.1.4 Mechanical systems. - A safe and efficient mechanical system that provides proper ventilation, proper sound levels and maintains the building temperature and relative humidity. The mechanical system shall be designed, maintained and installed utilizing current State and Federal building codes, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

The construction of the new entry vestibule will include an energy efficient compliant heating unit. This space will not require cooling or ventilation. Each floor of the addition will be conditioned with a stand-alone HVAC unit, supplying heating, cooling and ventilation. The existing renovated space for the new location of the administration suite, classrooms, and library will be conditioned with the existing HVAC units with reconfigured duct work.

4.1.7 Paths of egress. - A continuous and unobstructed path of egress from any point in the school that provides accessible routes to an area of refuge, a horizontal exit, or public way. A facility code analysis shall be conducted to determine all code requirements.

The new vestibule and stair will provide additional safe means of egress from both floors of the school.

4.1.9 Security. - The degree of resistance to, or protection from, harm. It applies to any vulnerable and valuable asset; such as



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

a person, building or dwelling. Security provides "a form of protection where a separation is created between the assets and the threat." These separations are generically called Adopted 09/02/2015 5 "controls," and sometimes include changes to the asset or the threat. These separations and degrees of resistance can be achieved through several models and techniques. The current administration space is on the second floor, while the main entry is on the first floor. The main purpose of this project is to address this deficiency. A new secure entry vestibule will be constructed adjacent to the relocated administration suite.

4.1.9.3.1- Front door security: Building vestibules - Where appropriate, buildings shall employ double entry door designs that provide a secured area for visitors to authenticate and gain clearance. Known as "man traps", security vestibules solve several common security issues such as students opening doors for visitors, visitors bypassing check-in points, direct access to the interior from attackers, piggy-back entrances, and propped doors.

The current administration space is on the second floor, while the main entry is on the first floor. The main purpose of this project is to address this deficiency. A new secure entry vestibule will be constructed adjacent to the relocated administration suite.

4.1.9.4.1- Interior classroom doors shall have locking hardware for lock downs, which does not interfere with automatic closing and latching functions required by the fire code and may Adopted 09/02/2015 7 have door sidelights, or door vision glass that allow line of sight into the corridors during emergencies, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

Renovated spaces that will become new classrooms will have door hardware compliant with the code and statute described above.

4.2.11.1 - Connectivity standards: Wireless. - Data cabling shall be planned to support appropriately spaced multiple-antenna wireless networking infrastructure allowing for a centrally located antenna every 2500 to 5000 square feet (or preferably performing a professional site survey/ resonance analysis). Support for 802.11b/g/n, 802.11ac, and/or newer protocols are recommended.

Existing wireless access points will be re-positioned as necessary to maintain connectivity equal the current layout.

4.2.11.2.1 – Connectivity standards: Wired: Cabling. - All new runs of copper data cable should be augmented category 6 cable or newer standards. Any data jack should be backed by two cable runs.

New data locations will be located at the renovated office suite and classrooms. Data wiring will be reused / relocated as allowed. New cabling will match existing CAT 5 cabling.

4.3.1.1 – Minimum occupancy requirements for schools:

Newly configured classrooms will be sized to fit the available space. Each classroom will be approximately 950 s.f. which is within the tolerance of the recommended 960 sf for grades 1 through 3.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Aurora Academy has developed a capital renewal budget to insure proper maintenance and eventual replacement of the components of this proposed project. A maintenance plan to not only maintain and extend the life of the proposed project, but also fund and maintain all of the other building systems will be implemented should a BEST grant be awarded.

The Capital Construction Revenue from the state will be used to establish a Capital Renewal Reserve. The annual reserve, based on the full-time equivalent count of 523 students, will be, based on the state's minimum required contribution of \$100/ per pupil, will be \$52,300. The administration, board, the maintenance supervisor and with possible third-party assistance, will identify the building systems, rate them upon their life-expectancy, maintainability and cost, and develop a plan to modernize them in the following years.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The building and property were leased in 2000 and the school opened in the fall of that year. The school purchased the

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

property in 2004. Originally constructed in 1974 as an office, the building consists of precast concrete walls with concrete beam and double-tee second floor and roof elements. The overall construction is sound and is actually fairly similar to recent school construction techniques.

The initial remodel to adapt the facility from an office to a school was completed prior to opening and reused the existing mechanical, electrical and plumbing systems, as they were found to be in good condition and met the existing building codes. The majority of the work was to relocate interior partitions for classrooms and office spaces and to build appropriate restroom facilities. The first remodel also added exterior second floor exit stairs to meet egress requirements.

Once the initial remodel was completed the facility needed a gymnasium and warming kitchen, which were addressed in subsequent remodel projects, but was otherwise successfully adapted as a school facility and has served Aurora Academy well over the past 16 years.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

During Aurora Academy's 16 years as a Charter School, many capital improvements have been completed to enhance the quality of the educational environment. In 2004, the school remodeled part of the building to accommodate additional classrooms and a kitchen. In 2005, a gymnasium was added to the west end of the building. In 2007, the kitchen was remodeled. In 2009, the roof of the two-story building was replaced and in 2010, a new playground was constructed. In 2013, a new phone system was installed.

Aurora Academy applied for a BEST Grant in 2014 to add security measures to the building entry but the application was denied. Because the security issue was so critical Aurora Academy added a new public address system and video cameras using internal funding. These systems help with monitoring and warnings but unfortunately do not address the overall security threat. The only way to properly control access to the building is to complete the remodel and addition project proposed in this grant application.

Other work completed in 2014 included repaving and replacing parking lots and installing new internet cables into the building. In 2015, the school continued to improve the educational infrastructure by increasing wireless computer access and improving the appearance of the exterior by replacing an old monument sign with a digital one and improving the landscaping along First Avenue.

In addition to the major capital projects, the school has always sought to improve the facilities through annual projects such as replacing flooring and carpeting, caulking, minor remodeling, door replacement, replacement of plumbing fixtures and painting. Each year the Board, Principal and Maintenance Supervisor review and approve a list of projects to implement during breaks in the school year. In the future, the school will continue to improve and ensure the students, staff and visitors remain healthy, safe and secure within its building and on its property.

**FY15-16 Charter School Capital Construction Allocation from the State:**      \$134,719.00

<b>Current Grant Request:</b>	\$1,966,498.62	<b>CDE Minimum Match %:</b>	31
<b>Current Applicant Match:</b>	\$883,499.38	<b>Actual Match % Provided:</b>	31
<b>Current Project Request:</b>	\$2,849,998.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		General Fund Reserves and a Loan
<b>Total of All Phases:</b>	\$2,849,998.00	<b>Escalation %:</b>	8
<b>Affected Sq Ft:</b>	14,271	<b>Contingency %:</b>	8
<b>Affected Pupils:</b>	543	<b>Historical Adverse Effect?</b>	No

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Cost Per Sq Ft:</b>	\$199	<b>Does this Qualify for HPCP?</b>	Yes
<b>Soft Costs Per Sq Ft:</b>	\$31	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$168	<b>Who owns the Facility?</b>	3rd Party
<b>Cost Per Pupil:</b>	\$5,249	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	123	In the event AACS ceases to exist the facility would be sold and the monies used to pay the balance of the debt. Any remaining assets would become the property of the Aurora Public School District.	

**District FTE Count:**

**Assessed Valuation:**

**PPAV:**

**Unreserved Gen Fund 13-14:**

**Median Household Income:**

**Free Reduced Lunch %:**

**Existing Bond Mill Levy:**

**Bonded Debt Approved:**

**Year(s) Bond Approved:**

**Bonded Debt Failed:**

**Year(s) Bond Failed:**

**Outstanding Bonded Debt:**

**Total Bond Capacity:**

**Bond Capacity Remaining:**





**Office of the Superintendent**  
15701 E. First Ave., Suite 206  
Aurora, CO 80011

Phone – 303-365-7800  
Fax – 303-326-1280  
Web – [www.aps.k12.co.us](http://www.aps.k12.co.us)

February 9, 2016

Ms. Cheryl Honigsberg  
Division of Capital Construction Assistance  
Colorado Department of Education  
1580 Logan Street, Suite 310  
Denver, Colorado 80203

Dear Ms. Honigsberg,

Please accept this letter in support of the Aurora Academy Charter School application for a Building Excellent Schools Today (BEST) grant. The Aurora Public School District works hard to ensure healthy and safe learning environments for all of the district's children. BEST funds will significantly assist Aurora Academy in ensuring their facility maintains healthy and safe environments for students to learn and thrive.

Further, the mission of Aurora Academy is to provide a well-rounded, rigorous curriculum with high academic standards for K-8 students. BEST funds are needed to ensure safe spaces for students and staff in support of this mission.

Aurora Public Schools is pleased to support the grant application of Aurora Academy. It is my hope that the Capital Construction Assistance Board looks favorably on this request for funding.

Sincerely,

D. Rico Munn  
Superintendent

**• Facilities Impacted by this Grant Application •****Lotus School For Excellence - Health and Safety Upgrades - 1980****School Name: Lotus School for Excellence**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	83,000
Replacement Value:	\$25,379,852
Condition Budget:	\$15,812,769
Total FCI:	62.30%
Energy Budget:	\$0
Suitability Budget:	\$7,989,600
Total RSLI:	9%
Total CFI:	93.8%
Condition Score: (60%)	2.87
Energy Score: (0%)	1.53
Suitability Score: (40%)	3.29
School Score:	3.04



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Lotus School For Excellence

**County:** Arapahoe

**Project Title:** Health and Safety Upgrades

**Previous BEST Grant(s) Funded:** 1

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** The 2015 Lotus School for Excellence BEST grant application did make the list of approved projects, but was #35 in the sorting. The first 26 projects received funding.

## Project Type:

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input checked="" type="checkbox"/> Addition   | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input checked="" type="checkbox"/> Security   | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Lotus School for Excellence (LSE) is a K-12 public charter school chartered through Aurora Public Schools (District Adams-Arapahoe 28J.) The school was established in 2006 with an enrollment of 68 students and has grown to serve 840 very diverse students with a rigorous curriculum focused on the S.T.E.A.M (science, technology, engineering, art and math) disciplines. The founding team of parents, educators, scientists, engineers and community members recognized a lack of rigorous and effective math, science and technology education and career preparation for Aurora students. These founders understood that skills in these fields were crucial for the workforce of the future. Particularly for low-income students in Aurora, educational achievement in the science, technology, engineering and math fields provide an excellent foundation for entry to college and high-wage careers, and in many cases, a path out of poverty.

The mission of Lotus School is to provide high quality academic, professional, and applied technology learning opportunities to advance the intellectual, cultural, social, and economic well-being of the citizens of Aurora and the surrounding communities. The overriding goal of the school is to graduate 100% of its students college and career ready.

Lotus School for Excellence provides an effective education in one of the most diverse and economically challenged areas of Aurora. Of the 840 students currently enrolled at LSE, 67% qualify for free or reduced price lunch. Demand for a LSE education can be seen in an extensive waitlist: 388 students are on the waitlist for the 2015-2016 academic year, and 226 are on the waitlist for the 2016-2017 year. The school has seen impressive results, outperforming district averages based on TCAP scores for each of the past five years. Many students have earned recognition in engineering and robotics competitions. Students participate in Project Lead the Way (PLTW) curriculum, which allows students to apply engineering, science, math, and technology to solve complex, open-ended problems in a real-world context. College readiness scores, and a college acceptance rate of 100% are among the highest in the Aurora School District and fare well compared to schools across the state of Colorado. LSE also has received accolades in recent press. The school was recently ranked #8 in the state of Colorado and ranked highest high school in the Aurora School District for "most challenging" by the Washington Post. It also was awarded a Bronze Award in the "Best High School" category by U.S. News and World Report, which evaluated high schools nationwide.

When LSE was founded in 2006, the school occupied space in the Community College of Aurora Lowry Campus. As demand for a Lotus education grew, LSE rented classroom space at the Aurora First Assembly of God Church at East Alameda Avenue in Aurora. In 2009, LSE purchased this facility from the church, and the school still operates at this location today. This 83,000 square foot facility was constructed in 1980 and despite many accommodations to adapt the space for instructional use, much of the infrastructure is outdated and instructional space is inadequate.

## Deficiencies Associated with this Project:

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

DEFICIENCY #1 – Science Laboratories lack adequate space and important health and safety measures, resulting in unsafe learning environments for students and staff.

LSE is a S.T.E.A.M. school largely focused on applying science, engineering and technology in laboratory settings. Therefore, LSE students, particularly high school students, spend a great deal of instructional time in science labs. LSE offers a number of Advanced Placement and Project Lead the Way (PLTW) courses in the science, technology and engineering disciplines. These curriculums require lab work. Therefore, in order to successfully implement the curriculum, LSE must deliver on the laboratory instruction and curriculum. Currently, classroom spaces at LSE are significantly inadequate to safely and effectively deliver necessary instruction and experimentation that should be conducted in a laboratory setting. Classrooms utilized as labs are significantly smaller than minimum size requirements suggested in the Colorado Department of Education's Public School Construction Guidelines. At LSE, classrooms used in physics and physical science, chemistry, biology, environmental science, robotics and engineering range in size from 450 square feet to 600 square feet.

Public School Construction guidelines state that a minimum size for "exploratory spaces," including science labs, should be 675 square feet (CDE Division of Public School Construction Assistance; space requirements Copyright 2014 Cuningham Group Architecture, Inc.) For high school science labs, space allowance should be 44 square feet per pupil. With class size averaging 26 students at LSE, classroom spaces in which lab work is happening are extremely cramped. Existing classroom conditions cause a safety threat, as students do not have adequate room to conduct experiments which require care, precision and in certain cases, chemicals.

The National Science Teachers' Association has offered a Position Statement on Safety and School Science Instruction. It reads:

"Science activities, including hands-on investigations, explorations, and demonstrations are essential for high-quality K–12 science instruction and occur in various locations both inside and outside schools, including science classrooms, laboratories, or the field (Bass, Yumol, and Hazer 2011). These activities build student knowledge and skills in science and address the nation's critical need for high-quality education in science, technology, engineering, and mathematics (STEM) subjects. These skills are supported by the Next Generation Science Standards (NGSS) (NGSS Lead States 2013). Inherent in conducting science activities, however, is the potential for injury.

The National Science Teachers Association (NSTA) encourages K–12 school leaders and teachers to promote and support the use of science activities in science instruction and work to avoid and reduce injury. NSTA provides the following guidelines for school leaders (including principals, assistant principals, school and district science supervisors, superintendents, board of education members, and others) to develop safety programs that include the effective management of chemicals, implement safety training for teachers and others, and create school environments that are as safe as possible."

NSTA recommends the following to establish and maintain the safest environment possible for science activities:

- All schools, even if not required by law, should provide appropriate safety engineering controls (e.g., eyewash stations/showers, fume hoods, ventilation systems, and extinguishers); procedures (e.g., chemical management policies and emergency procedures); and personal protective equipment (e.g., goggles, gloves, and aprons).
- Teachers should identify, document, and notify school and district officials about existing or potential safety issues that impact the teaching and learning environment—including hazards such as class sizes in violation of occupancy load codes (ICC 2012, NFPA 2015), an insufficient number of labs, or labs of insufficient size (NSTA 2014b); practices that are contrary to safety research (West and Kennedy 2014); inadequate or defective equipment; or improper facility design (Motz, Biehle, and West 2007)—and give necessary recommendations to correct or rectify the issue.
- School leaders and teachers should consult research that identifies three safety concerns regarding overcrowding: adult supervision, individual workspace area, and occupancy load for which the space was designed. Classes containing more than 24 students engaged in science activities cannot safely be supervised by one teacher. Additionally, research data show that accidents rise dramatically as class enrollments exceed 24 students or when inadequate individual workspace is provided (West and Kennedy 2014). For more information, visit *Overcrowding in the Instructional Space* and other documents located in the NSTA Safety Portal.

(NSTA Board of Directors, 2015) from, <http://www.nsta.org/about/positions/safety.aspx>.

Classrooms which are currently used for engineering and robotics at LSE are extremely cramped, averaging 450 square feet

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

for classes with 24 to 26 high school students. In addition, due to drainage problems throughout the building (detailed in Deficiency #2) these classrooms have frequently experienced water damage and flooding. These leaks and water-damaged carpet and equipment pose health and safety concerns for students and staff.

It is important to realize that LSE believes this issue to be one of health and safety, above overcrowding. This is a health and safety issue due to the fact that insufficient workspace in a lab setting is, first and foremost, a safety concern. In fact, a recent report by the National Science Teachers Association Safety Advisory (NTSA) reports that: “Stephenson et al. (2003) and West and Kennedy (2014) identified a statistically significant correlation between space per student and the frequency of incidents and accidents in the science classroom.

Perhaps even more alarming than overcrowding however, is the lack of adequate safety measures in each of the current science and technology classroom spaces at LSE. Instructional spaces lack basic safety measures conforming to the American National Standards Institute (ANSI). Chemistry, biology and physics classrooms lack eyewash stations, emergency safety showers and fume hoods which would allow for proper ventilation in the case of students experimenting with chemicals and gasses.

Current LSE science classroom also lack adequate storage for science supplies and chemicals. Teachers at LSE struggle to find safe spaces in which to store these supplies, and inadequate storage is a safety concern.

As a S.T.E.A.M school, the lack of adequate laboratory spaces seriously hinders LSE in its mission to provide applied science, engineering and technology education. However, more importantly, these inadequate lab spaces create significant health and safety concerns for students and staff. Students and teachers at school science labs across the country are injured in laboratory accidents each year. In fact, the Denver area saw a severe case of a student who was badly burned in a lab fire in 2014 (Chemistry Lab Fire Burns Students at Denver School, Associated Press, 2014.) While LSE does everything it can to ensure student safety, including staff training and safe handling of chemicals, we must be proactive in avoiding lab accidents. It is imperative that Lotus School for Excellence be proactive in avoiding lab accidents and that the school employ every precaution and safety measure available in responding to student injury or accidents in the lab.

**DEFICIENCY #2 – Bathroom spaces are original to the building and create unsanitary conditions and resulting health concerns.**

Several bathroom finishes and fixtures at LSE have not been renovated since the building was constructed in 1980. Plumbing fixtures are badly in need of repair, and because of inadequate drainage in the restrooms, leaks and flooding problems are persistent at the school. Back-ups and water leaks from bathrooms are common and create ceiling damage, carpet damage and damaged equipment. (Examples of this damage can be seen in the photos accompanying this grant request.) Leaks have frequently damaged instructional spaces, computers and equipment. Ceiling leaks create damp carpets, building and equipment damage and potential for slip and fall accidents.

Many plumbing fixtures are original to the building and broken toilets, urinals and sinks are a reoccurring problem. Aging fixtures such as overflowing toilets and broken sinks create unsanitary conditions, foul odors and clogged toilets. While LSE does its best to maintain cleanliness in its restrooms, recurring problems lead to unsanitary conditions and health concerns.

Health and safety concerns as a result of this deficiency are:

- Slip and Fall Accidents
- Unsanitary conditions creating potential for illness
- Potential for mold and mildew concerns.

**DEFICIENCY #3 – The main elementary school entrance lacks a security vestibule, creating a safety concern.**

LSE works diligently to put school safety measures in place. However, the main entrance to the elementary school portion of the building lacks a double-entry door system, a serious deficiency in the safety and security measures of the school. In fact, CDE’s Public School Construction Guidelines indicate: “Where appropriate, buildings shall employ double entry door designs that provide a secured area for visitors to authenticate and gain clearance. Known as “man traps”, security vestibules solve several common security issues such as students opening doors for visitors, visitors bypassing check-in points, direct access to

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

the interior from attackers, piggy-back entrances, and propped doors” (section 4.1.9.3.)

LSE holds student and staff safety as its first priority. The lack of a vestibule at a main building entrance is a severe deficiency in the school’s building security, creating a high-priority safety concern for students and staff.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Solution #1: With the support of BEST funds, Lotus School for Excellence will add adequate and safe laboratory spaces.

A total of 9,285 square feet will be added, on two floors, creating 6 lab spaces which accommodate up to 28 work stations (although actual class size will average around 24 students, as recommended by NSTA). These spaces will accommodate instruction in:

- Chemistry and Advanced Placement (AP) Chemistry
- Biology, AP Biology and PLTW Biomedical Science
- Physical Science, Physics and AP Physics
- Life Science, AP Environmental Science and Earth Sciences
- PLTW Engineering
- Robotics

Each of these lab spaces will be approximately 1,100 square feet and will comply with CDE’s Public School Construction guidelines. Labs will contain necessary safety measures such as eye wash stations, emergency showers, safe storage, adequate ventilation and fume hoods where appropriate.

This additional instructional space will be made possible by adding an exterior wall to a section of the school that is currently an outdoor courtyard enclosed on three sides. The infill will create new, larger science laboratories to address the significant health and safety concerns that currently exist. This space will enclose what is currently an open, outdoor courtyard at the school, and therefore is an extremely cost-effective method for the addition of space. Preliminary architectural drawings have been developed for this addition and these plans include preliminary structural engineering notations. All drawings are attached.

Solution #2 – Restroom facilities throughout the LSE building will be renovated in order to address current unsanitary conditions and the resulting health concerns.

Work to address the health and safety concerns in the bathrooms will include

- upgrades to drains and fixtures to eliminate leaks and drainage problems
- tile demolition and replacement
- plaster and drywall repair and replacement
- replacement of all outdated or broken fixtures (26 sinks, 30 toilets and 7 urinals in total).

Solution #3 – A second set of doors will be added at the Elementary School entrance, creating a security vestibule to address the safety and security concern which currently exists.

A security vestibule will create the recommended “man trap” as indicated in the CDE’s Public School Construction Guidelines. Office administrative staff will be able to clearly see visitors as they enter the building through the double-entry door system, and staff will be able to lock these doors remotely in the case of danger or a threatening situation. This entry system will integrate into the current video-monitoring system in place at LSE.

To ensure a fair and transparent vendor selection process, a Request for Proposals and Qualifications (RFP/Q) will be developed for each project listed. LSE will consult templates provided by the CDE Division of Public School Construction Assistance and seek advice from BEST Program Directors as it develops the RFP/Qs. The cost estimates of the additional laboratory space have taken into account LEED Gold Certification standards, and the addition would be constructed according to these standards. However, it should be noted that these standards will not apply to the currently existing building structure.

### **How Urgent is this Project?**

Solutions to the health and safety concerns outlined above are long overdue at LSE. The space constraints and lack of safety



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

measures in science, engineering and technology instructional space have created unsafe learning environments for middle and high school students. These safety concerns should be remedied as soon as possible, and before a laboratory accident occurs.

The age of the plumbing and plumbing fixtures are beyond expected life and should be replaced. This is reinforced by the most recent Lotus School for Excellence Facility Assessment.

Unfortunately, the urgent need for strong security measures in schools has been made evident in Colorado too many times, with students and staff injured and too many lives lost. Every school in our state should employ the very best security measures, including security vestibules, to keep students and staff safe.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

The proposed project will conform to the CDE's Public Schools Construction guidelines.

The proposed new addition (solution #1) will adhere to guidelines 4.1.1 – Sound Building Structures and 4.1.2 Roofs. This proposed laboratory space addition will also comply with all Minimum Occupancy Requirements for Schools; 4.3.1.1.

Plumbing in the building (solution #2) will conform to all guidelines 4.1.5 Plumbing.

The proposed security vestibule (solution #3) will bring LSE into direct compliance with security guidelines 4.1.9.3.1 – Building Vestibules.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

LSE will maintain a capital renewal budget at the suggested rate of PPR x \$100. Based on current student enrollment, that budget is \$84,000. LSE has a maximum student capacity (according to its charter agreement) of 850 students. LSE does not plan to expand student population in the future, but aims to provide an excellent education in the S.T.E.A.M fields to its current enrollment numbers.

The Capital Renewal Budget will be funded by the per pupil reimbursement and other sources of income that make up the general operating budget.

Historically, costs related to facilities make up approximately 14% of operating expenses, based on an average over the last three years. LSE will continue to budget appropriately to ensure that facilities are well maintained.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Lotus School for Excellence (LSE) occupies a building in Central Aurora that was constructed in 1980 as a church and a church school. LSE purchased this facility in 2009. The building did have a small number of classrooms and instructional space which accommodated LSE's small enrollment. Since that time, and largely due to excellent educational outcomes, enrollment has grown tenfold.

The rationale for purchasing the facility was based on the need for a large space that would accommodate the school's rapidly expanding enrollment. Another crucial rationale was the facility's location in Central Aurora, where the need for additional, high-quality educational choices for the socially and economically diverse population was badly needed. The educational spaces were adequate for the first several years of LSE's operation. However, many of the restrooms are now in need of repair and increased security has become a high priority for every school in Colorado. Also, as high school enrollment has grown and the school has added additional Advance Placement and advanced level science and technology instruction, spaces for advanced laboratory curriculums are inadequate.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Enrollment growth necessitated that additional space be converted to classrooms, which was done over time as operating funds allowed. The school was structurally sound at the time of purchase, although due to the age of the building, certain mechanical systems have been upgraded by the school.

**FY15-16 Charter School Capital Construction Allocation from the State:** \$212,186.00

<b>Current Grant Request:</b>	\$3,112,072.47	<b>CDE Minimum Match %:</b>	37
<b>Current Applicant Match:</b>	\$424,373.52	<b>Actual Match % Provided:</b>	12
<b>Current Project Request:</b>	\$3,536,445.99	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	General Fund	
<b>Total of All Phases:</b>	\$3,536,445.99	<b>Escalation %:</b>	3.7
<b>Affected Sq Ft:</b>	13,300	<b>Contingency %:</b>	6
<b>Affected Pupils:</b>	839	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$266	<b>Does this Qualify for HPCP?</b>	Yes
<b>Soft Costs Per Sq Ft:</b>	\$29	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$237	<b>Who owns the Facility?</b>	3rd Party
<b>Cost Per Pupil:</b>	\$4,215	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	16	Lotus School for Excellence would seek other leasing opportunities so that the debt service would be addressed. As a last resort the facility could be sold.	

<b>District FTE Count:</b>	<b>Bonded Debt Approved:</b>
<b>Assessed Valuation:</b>	<b>Year(s) Bond Approved:</b>
<b>PPAV:</b>	<b>Bonded Debt Failed:</b>
<b>Unreserved Gen Fund 13-14:</b>	<b>Year(s) Bond Failed:</b>
<b>Median Household Income:</b>	<b>Outstanding Bonded Debt:</b>
<b>Free Reduced Lunch %:</b>	<b>Total Bond Capacity:</b>
<b>Existing Bond Mill Levy:</b>	<b>Bond Capacity Remaining:</b>

## BEST Charter School Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as practicable by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents or other relevant documentation as applicable to support the responses provided.

For questions 4-15

Only answer the questions which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your charter school.

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your charter school.

Lotus School provides an excellent education in the applied sciences, technology and engineering fields to a majority low-income population (67%) in an economically diverse area of Aurora. The demand for an LSE education is very high, with the current waitlist over 650 students (combined for the 2015/2016 and 2016/2017 academic years) across all grade levels. This demonstrates the community's need and desire for this type of high-quality education. LSE has seen impressive results in student academic achievement and college acceptance rates. Much of this success is due to the addition of advanced science, technology, robotics and engineering instruction and Advanced Placement courses at the High School Level. While the school is required to offer science lab instruction, the spaces sincerely hinder instructors' ability to safely administer all components of the laboratory requirements. Upgrades to the outdated restroom and addition of the requested security vestibule will create a healthy and safe environment for students and staff, enhancing their day to day experience at the school. The badly-needed addition of safe laboratory spaces will significantly increase LSE's ability to safely offer hands-on experimentation, lending to a greatly enhanced educational experience, and LSE believes, increased student achievement.

2. Please describe why the cost of complying with the matching contribution would significantly limit educational opportunities within your charter school.

The costs of the entire 37% match requirement would mean that in all likelihood, LSE would not be able to make the requested upgrades to restrooms and security, and would certainly not be able to add safe laboratory spaces at the school. The school simply cannot shoulder the entire 37% match requirement and operate with fiscal integrity and responsibility. However, safe lab spaces and upgrades to health and safety measures as outlined in the LSE BEST grant application are very badly needed. LSE has done a financial analysis and believes that the school could absorb 12% (\$395,140) of program costs within its general operating budget.

The ability of the school to safely deliver on the required laboratory components of its rigorous science, engineering, technology and robotics curriculum is seriously hindered due to inadequate lab space. This limits the educational opportunities available to LSE students.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

The school did some initial outreach to private foundations in early 2015. However, LSE has not had the resources to include fundraising or development staff, and certainly has not had prior relationships with grant funders from the private sector. The school will continue to seek relationships and opportunities to leverage additional dollars from community based organizations and additional grants, however without prior relationships, LSE has not been able to secure donations that are nearly large enough for the capital needs of the school.

4. Weighted average of district matches which comprise the student population.

0

5. Does the authorizing district have 10% or less bonding capacity remaining?

Yes, District 28J has less than 10% bond capacity remaining.

6. Is the charter school in a district owned facility?

Lotus School for Excellence is not in a district owned facility. It is important to note, that in the Adams-Arapahoe 28J District, charter schools do not receive facilities maintenance support or funding for facilities needs from the district.

7. How many times has the charter school attempted or attained bond proceeds from an authorizer's ballot measure for capital needs?

The school had a meeting with the district LRFAC (Long Range Facilities Advisory Committee) on November 19, 2014. LSE presented its capital construction projects and requested to be included in the upcoming (at that time) bond process

Jan 11, 2016, We had another meeting about the bond process at APS. The school district informed LSE that it was unable to include LSE in the bond process because of these statutes:

*Colorado Revised Statute 22-30.5-403*

*"Charter school" means a charter school as described in section 22-30.5-104, and also includes a nonprofit corporation exempt from taxation under section 501 (c) (3) of the federal "Internal Revenue Code of 1986", as amended, that owns a facility used for occupancy by pupils enrolled or to be enrolled in a charter school on behalf of a charter school and that was created for the sole purpose of holding title to such facility.*

*Colorado Revised Statute 22-30.5-404 (2015)*

*Notwithstanding any other provision of this section, no bonds shall be issued for*



*the purpose of financing charter school capital construction unless the charter school that is to receive bond proceeds and the district have entered into a contract specifying that, if the charter school's charter is revoked or not renewed, the charter school becomes insolvent and can no longer operate as a charter school, or the charter school otherwise ceases to operate, following payment of all other debts secured by the capital construction, the ownership of any capital construction financed by the bond proceeds shall automatically revert to the school district.*

8. How many times has the charter school attempted to do a special mill levy override pursuant to 22-30.5-405 for capital needs?

Never.

9. How many times has the charter school attempted or attained grant funding through a non-BEST source for capital needs?

As indicated above in question #3, LSE has made some attempts to reach out the private philanthropic sector. The school did some initial outreach to funders in early 2015. However, LSE has not had resources to expand its staff to include a fundraising or development role, and has lacked the resources and relationships to secure large donations for capital needs.

10. How many times has the charter school attempted or obtained funding through CECFA or another type of financing?

LSE has not attempted funding through CECFA. The school has a restrictive loan through Self-Help with a balloon payment due in the next couple of years. Due to the nature of this loan, the lender will not entertain the school acquiring secured debt through other sources since the major asset would be the building to be used as collateral. As a result of this, any sources of funding would need have to come from further financing with Self-Help. This encourages a non-competitive process and high interest rate which goes against LSE's approved financial policies and procedures, and LSE will not entertain this option.

The school has explored opportunities for additional financing through BB&T Capital Markets – Education Finance Group. However, because of the stipulations in the current mortgage, LSE was unable to pursue this financing.

11. Charter school enrollment as a percent of district enrollment.

LSE enrollment is 2% of total district enrollment.

12. Free/reduced lunch percentage in relation to the statewide average charter school free/reduced lunch percentage?

The free/reduced lunch percentage at LSE is 67%. The statewide average for charter schools free/reduced lunch percentage is 35%

13. Percentage of PPR spent on non M&O facilities costs.

The non M&O facilities cost obtained by the CDE is 90.8%. However, this is not an accurate measure when taking into consideration actual costs to the school including utilities, repairs & maintenance, building insurance, janitorial services, grounds keeping, and all other costs associated to the facilities. The actual non M&O costs are 83.5%.

14. Unreserved fund balance as a percent of budget.

10.23%.

15. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

The BEST grant matching requirement for Lotus School has increased significantly, from a 21% match in 2015 to a 37% match in 2016. The school understands that the increase in match requirement is likely due to an increase in property values throughout Aurora. However, LSE is located in a low-income area of the district, and, as noted 67% of LSE



students come from low-income families who qualify for free or reduced lunch. The increase in housing costs has been a strain to LSE families.

Additionally, despite the fact that more Colorado students are enrolled in charter schools than any single district across the state (over 101,000 students), the average Colorado charter school students receives 15% less public funding than the average peer student in a traditional public school (*Colorado League of Charter Schools*). When these facts are considered, along with the fact that the district (Adams-Arapahe 28J) simply does not have the ability to provide facility support to charters, it is clear that LSE has had incredible success despite difficult financial realities. BEST funds are badly needed to continue to raise the high standards of STEM education at the school.





**Office of the Superintendent**  
15701 E. First Ave., Suite 206  
Aurora, CO 80011

Phone – 303-365-7800  
Fax – 303-326-1280  
Web – [www.aps.k12.co.us](http://www.aps.k12.co.us)

February 9, 2016

Ms. Cheryl Honigsberg  
Division of Capital Construction Assistance  
Colorado Department of Education  
1580 Logan Street, Suite 310  
Denver, Colorado 80203

Dear Ms. Honigsberg,

Please accept this letter in support of the Lotus School for Excellence application for a Building Excellent Schools Today (BEST) grant. The Aurora Public School District works hard to ensure healthy and safe learning environments for all of the district's children. BEST funds will significantly assist Lotus School for Excellence in ensuring their facility maintains healthy and safe environments for students to learn and thrive.

Further, the mission of Lotus School is to deliver on the promise of high-quality S.T.E.A.M (science, technology, engineering, art and math) education. BEST funds are needed to ensure safe laboratory spaces for students and staff, in support of this mission.

Aurora Public Schools is pleased to support the grant application of Lotus School for Excellence. It is my hope that the Capital Construction Assistance Board looks favorably on this request for funding.

Sincerely,

D. Rico Munn  
Superintendent

**• Facilities Impacted by this Grant Application •****Archuleta County 50 JT - MS Roof Replacement - Pagosa Springs Intermediate - 1917****School Name: Pagosa Springs Intermediate**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	20,910
Replacement Value:	\$6,578,714
Condition Budget:	\$4,040,463
Total FCI:	61.42%
Energy Budget:	\$0
Suitability Budget:	\$2,237,600
Total RSLI:	4%
Total CFI:	95.4%
Condition Score: (60%)	3.31
Energy Score: (0%)	3.02
Suitability Score: (40%)	3.06
School Score:	3.21





# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Archuleta County 50 JT

**County:** Archuleta

**Project Title:** MS Roof Replacement

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Archuleta School District 50 Jt. serves K-12 students in both Archuleta and Hinsdale Counties. A comprehensive educational program that focuses on educating the whole student is provided in four buildings: an elementary school in one building which serves students in grades K-4; a middle school in two buildings on the same campus which serves students in grades 5-6 in one building and grades 7-8 in the other building; a high school serving students in grades 9-12 in the newest of the schools, built in 1996. Winters in Pagosa Springs, where all schools are situated, regularly have large amounts of snow and roofs need to be built to withstand large snow loads and have adequate drainage for the spring thaw.

We are requesting assistance in funding a roofing project for the 5-6 Building, the oldest in the district. The 5-6 building, which was built in 1917 and commissioned in 1924, has a roof that was installed in 1995. The roof is a flat roof system which currently has a built up roof, with the final material being foam that has outlived its design life expectancy. The CDE School Assessment Report indicates that the roof "was found to be currently deficient." That the "Roof is currently leaking and beyond repair." And that "The system should be replaced." The affected building houses all students in grades 5 and 6 and is a two story building. The building, while almost 100 years old, is NOT on The National Historic Register.

Due to reductions in state revenue over the last seven years, the maintenance of the roof has been deferred. The district has replaced the roof on both the K-4 elementary school (2012) and the 7-8 building on the middle school campus (2013) at our expense, without outside funds. These two buildings were deemed more in need at the time than the 5-6 building.

## Deficiencies Associated with this Project:

The existing elastomeric coating over a spray applied polyurethane three inch thick foam has weathered and aged far beyond a time when patching was an option. Efforts to maintain this coating has yielded little benefit. The foam is saturated with moisture, water has intruded into the finished space below through the original built-up roof that was left as a substrate for the foam. Water stained ceilings and damaged plaster cannot be repaired until this pattern of leaks is cured for good.

## Proposed Solution to Address the Deficiencies Stated Above:

The District has employed Division 7 Design, Inc., a roof consultant who guided the District in a successful replacement of the roof at our Pagosa Springs Elementary School. D7D has prepared plans and a project manual as contract documents for a bidding process that is in progress parallel with this application. See hard copy submitted with this application. Strategies employed promise correction of design defects that have compromised earlier installations.

## How Urgent is this Project?

The District believes this project earns the highest priority due to the ever increasing risks to students and staff for health and safety matters. The indoor air quality has the potential to become a health detriment to students and staff and falling plaster ceilings are causing a safety concern for all who enter the building.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

This project will install a weather-tight roof that drains water positively off the roof and discharges the water off and away

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

from the building. All roofs shall be installed by a qualified contractor who is approved by the roofing manufacturer to install the specified roof system and shall receive the specified 30 year warranty upon completion of the roof. Low slope roofing membranes shall be Ethylene Propylene Diene Monomer with 90 mil thick field sheets and 60 mil thick flashings for an adhered system over mechanically attached insulation that meets current ASHRAE 90.1-2013 Energy Standard for Buildings. The steep slope turret roofs shall be protected by triple laminated fiberglass shingles that come with a fifty year warranty.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

A memorandum to District Staff Re: Roof Maintenance

The District has adopted a policy intended to protect the value of one of our most important assets; the roofing assembly on every one of our buildings. This policy is in addition to the published warranty requirements of a manufacturer with a current roof system warranty. The following program is to serve as the first draft of an evolving document that will be reviewed and revised as needed. The Maintenance Department is the primary staff intended to implement this directive; however, reporting moisture intrusion is the responsibility of the entire staff. If you see something, say something.

The District has employed a Professional Roof Consultant who will offer an in-service training session to Maintenance Department Staff so they may serve as inspectors.

Perhaps surprisingly, the starting point of a roof inspection should actually be the interior of our buildings. The interior walls and ceilings should be examined for any signs of water staining which would indicate a problem above on the roof.

The roof itself should then be visually inspected. The following key areas should be checked in this order:

- Cap flashings;
- Edge metal;
- Base flashings;
- Penetrations;
- Field of the roof;
- Ballast;
- Roof adhesives; and Surface coatings, if present.

Cap flashings, which are metal or other rigid covers at membrane terminations, should be inspected for:

- loose areas of attachment or loose or missing fasteners;
- loose or displaced sections of metal;
- deformed metal that could collect water and funnel it through an end joint;
- corrosion;
- missing or loose joint covers; and
- sealants showing signs of cracking, weather and/or aging.

Edge metal, installed at the edge of a roofing system to terminate the roof and provide waterproof flashing, should be checked for:

- loose areas of attachment or loose or missing fasteners;
- loose or missing stripped-in flashing;
- splits in the stripping at metal flashing joints;
- corroded metal;
- missing or displaced metal sections or joint covers;
- open joints and sealants displaying signs of cracking or weathering or aging.

Base flashings, which are roof membrane terminations at walls and curbs, should then be looked at. Watch for:

- a secure and sealed top termination;
- continuous adhesion of base flashing to substrate, with no loose membrane or extensive bridging;
- a covered top seal of the membrane base flashing;
- closed seams at the bottom of the base flashing at its attachment to the field membrane;

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

- sealed seams at vertical laps;
- sealants in good condition, without signs of cracking, weathering or aging; and
- base flashing material without signs of deterioration or building movements.

Penetrations are pipes, drains and other items that are inserted through the roof membrane. They must be flashed properly to assure a watertight roof. An inspector should examine the following:

- the drain clamping ring and drain strainer to ensure proper securement for a watertight seal at the membrane-to-drain interface;
- thorough adhesion of sealant inside pitch pockets and membrane adhesion around the outside of pitch pockets;
- pitch pockets containing adequate fill material to prevent water from collecting;
- pipe boot flanges sealed tightly to the roof membrane; and
- a tight seal and termination around pipe(s) at the top of pipe boots.

In the field of the roof, be sure that:

- No fasteners protrude against the membrane, causing a "tenting" effect; or that there are no visibly loose fastening points;
- the membrane contains no worn spots, deteriorated areas, or holes in the membrane;
- insulation panels are in their original positions; no buckling or warping,
- there are no changes in insulation or substrate firmness when the roof is walked on;
- adequate drainage is present; and
- around rooftop equipment, no areas have been degraded by equipment leaks or spills, or have been punctured by dropped tools or equipment parts from workers maintaining roof-mounted equipment.

If the roof membrane has a coating on it, it should be examined. Coatings will generally require reapplication(s) during the life of the roof system; frequency depends on many factors, such as the local environment, ponding water, roof slope, and the type and quality of the original coating. Recoating work is typically the responsibility of the building owner and should be performed by a professional roofing contractor. The inspector should also pick up debris like paper, bottles, broken glass, tree limbs and vegetation and dispose of it properly. Likewise, he should also remove obstructions, such as leaves or dirt from roof drains and/or scuppers, ensuring that they flow freely. Clogged drains and/or scuppers can lead to excessive ponding on the roof, which frequently causes leaks or even roof collapse. However, caution should be exercised when clearing debris from drains because significant suction can be created by draining water; it can quickly suck tools into a drain.

Roof inspection may uncover the need for repairs in a variety of categories, including spot patches, emergency repairs, general repairs and permanent repairs.

If membrane repairs are needed, they should be performed by professional roofing contractor specifically authorized by the membrane manufacturer. Not doing so could also void the warranty. And in keeping with typical warranty requirements, the manufacturer of a warranted roof system should be notified promptly about the need for repair(s) and the procedures to be followed. Typically manufacture warranties require written notification to the warranty department within thirty (30) days of discovery of any leak. The District policy is to report leaks discovered immediately by phone followed up by email to the warranty department with written notification by mail as required by the manufacturer's warranty. All procedures should be documented in order to create an informative history of a roof system's performance.

Future roofing projects will require the Contractor to deliver a care and maintenance manual for his products. An in-service training program will be required to acquaint District personnel with methods of procedure for temporary patches of damaged or defective areas. Specialized tools and small quantities of peel and stick membrane material will be a contract requirement.

The Maintenance will control access to our roofs. Outside contractors hired to service rooftop equipment must coordinate access through the Maintenance Department. Each contractor will be required to provide certificates of insurance naming the District as additional insured. Contractors will be informed of their responsibility to protect our roofs. Failure to follow District guidelines in this matter will result in an insurance claim filed directly with the contractor's insurance company.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Contractors with a pattern of disregard of our policy will be barred from future work.

Building Principals will be responsible to restrict access to the roof by staff and students. Any rooftop equipment or cabling needed to support the educational needs of students or staff must be performed by the Maintenance Department or an approved contractor. Lost toys or car keys or other valuables will be retrieved by the Maintenance Department, without exception.

Please review this new policy, feel free to offer revisions, additions or suggestions you believe will make this policy a collaborative effort.

The District will adhere to this policy.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

This Facility was built by the School District in 1924 and has been in continuous use from that date. The structure is sound but the roof is in failing condition. The ever increasing pattern of leaks presents a health and safety crisis for the District, our staff and students. As such this remedial action program earns the highest priority.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$109,119.29	<b>CDE Minimum Match %:</b>	63
<b>Current Applicant Match:</b>	\$185,797.71	<b>Actual Match % Provided:</b>	63
<b>Current Project Request:</b>	\$294,917.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		Capital Reserve
<b>Total of All Phases:</b>	\$294,917.00	<b>Escalation %:</b>	0
<b>Affected Sq Ft:</b>	10,480	<b>Contingency %:</b>	10
<b>Affected Pupils:</b>	231	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$28	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$2	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$26	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$1,277	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	45		NA

<b>District FTE Count:</b>	1,322	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$270,762,855	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$204,736	<b>Bonded Debt Failed:</b>	\$49,000,000
<b>Unreserved Gen Fund 13-14:</b>	\$7,742,721	<b>Year(s) Bond Failed:</b>	11

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Median Household Income:** \$47,844

**Outstanding Bonded Debt:** \$5,700,000

**Free Reduced Lunch %:** 52

**Total Bond Capacity:** \$54,152,571

**Existing Bond Mill Levy:** 3.37

**Bond Capacity Remaining:** \$48,452,571

• Facilities Impacted by this Grant Application •

**Las Animas RE-1 - Upgrades to improve Indoor Air Quality - Las Animas MS/HS - 1968**

**School Name: Las Animas MS/HS**

Number of Buildings:	3
All or Portion built by WPA:	No
Gross Area (SF):	106,905
Replacement Value:	\$34,735,861
Condition Budget:	\$20,821,733
Total FCI:	59.94%
Energy Budget:	\$0
Suitability Budget:	\$1,627,700
Total RSLI:	13%
Total CFI:	64.6%
Condition Score: (60%)	2.94
Energy Score: (0%)	3.18
Suitability Score: (40%)	4.50
School Score:	3.56





# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Las Animas RE-1

**County:** Bent

**Project Title:** HS - Upgrades to improve Indoor Air Quality

**Previous BEST Grant(s) Funded:** 3

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** The Capital Construction Assistance Board agreed with the need and urgency of our project and recommended it to the shortlist, however it fell below the amount of funding available.

## Project Type:

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof                          | <input checked="" type="checkbox"/> Asbestos Abatement | <input checked="" type="checkbox"/> Water Systems |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm                    | <input type="checkbox"/> Lighting                      | <input type="checkbox"/> Facility Sitework        |
| <input checked="" type="checkbox"/> Renovation | <input checked="" type="checkbox"/> Boiler Replacement | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase            |
| <input type="checkbox"/> Addition              | <input checked="" type="checkbox"/> HVAC               | <input checked="" type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain:   |
| <input type="checkbox"/> Security              | <input type="checkbox"/> ADA                           | <input type="checkbox"/> Window Replacement            |   |

## General Information About the District / School, and Information About the Affected Facilities:

Las Animas School District RE-1 is located in the Arkansas Valley in southeast Colorado. The school operates in Bent County, a high poverty, high minority area with a large number of undereducated people. The local poverty rate is 19% compared to 13% in Colorado. The Hispanic population is 32% compared to 21% in Colorado. The percentage of people in the county who hold Bachelor's degree is only 9% compared to 37% in the state. Students in our school have many risk factors that jeopardize learning. In fact, 318 students of the district's 529 students total are classified as at-risk and 80% of students qualify for the free/reduced lunch program. Our school struggles to get students to finish their education, and of those who graduate, many chose not to further it. The shift from a community with balanced economic diversity to one that became poverty stricken occurred after several large employers left the valley and a cycle of poverty ensued. The town is decreasing in size resulting in a lower overall population, fewer employment opportunities, and a declining student enrollment.

As do many rural districts, Las Animas operates on a four-day week to manage limited resources. The district consists of two campuses and three school buildings. The elementary enrolls 358 students in preschool through sixth grade in the newest building built in 2003. We offer full day kindergarten and partner with Early Head Start for full or half day preschool. Middle school and high school are in separate buildings located on one campus. The schools share common areas such as the cafeteria, library, and gym, but maintain separate classroom space. The Middle School has 87 students in grades 7/8 and is a newer building built in 1998. The High School is the oldest building in the district operating since 1968. Built for the large classes of baby boomers at that time, enrollment has steadily decreased from over 100 students per class to just 30. The High School originally built for 500 students now has 119 students grades 9-12. Total enrollment district wide is 529. This project will address a health and safety concern in the HVAC system in the east wing of the high school which affects all students in the district.

Over the last five years, the school district has had a 40% decline in revenue due to declining student enrollment and inconsistency in state school funding. This has forced the district to dip into reserves for the last three years to maintain programs and teachers for core subject areas in all grade levels. Programs outside of the core such as music, elementary art, and high school vocational programs have been cut. In addition, the district cut the Maintenance Director position for a number of years, but rehired in 2012. The new Director found the overall condition of buildings and general maintenance needs were not being met. The district has been trying to "catch up" since then. The district has purchased the service of RTA and Associates to perform an updated Facility Master Plan which was completed in January 2015. The Plan is being used to assist the district in developing both short and long-term goals to improve facilities and address life safety issues.

## Deficiencies Associated with this Project:

In 2008, the original hydronic HVAC systems in the west wing of the high school were replaced with a geothermal system. This wing, which is primarily classroom space, is heated/cooled by unitary geothermal heat pump systems. Heat is rejected to the



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

8' deep horizontal (300' long) geothermal field to the west of the high school building. This project resulted in much of the original hydronic load to be removed from the school's boiler system, leaving the boiler system over-sized for the remaining heating load.

The east wing of the building consists of a kitchen, cafeteria/auditorium, gymnasium, locker rooms, wrestling room, weight/fitness room, main corridor, and storage area. The cafeteria and gymnasium are shared spaces with the middle school, and the high school cafeteria prepares all meals for every student in the entire district. In addition, the gymnasium and cafeteria are the largest public facilities in our community and are used for many community events. The east wing is heated with unit heaters and heating ventilator units original to the 1968 building. This vintage equipment has received general maintenance, but has never been upgraded. It has exceeded its intended life span by 18 years and has been identified as a critical repair in the next 12 months according to the school assessment report. Parts to repair existing original unit heaters are obsolete. Should a breakdown occur, the only option would be replacement. The hydronic piping and accessories that remain in the building appear corroded and evidence of leaks are prevalent. Original pneumatic controls do not operate the heating components and do not afford facilities/maintenance staff feedback, scheduling, or precision in control. The east wing has no cooling or dehumidification capabilities and ventilation (outside air) quantities are insufficient to meet current indoor air quality standards. The Master Plan Assessment cites this portion of the building has asbestos issues with finishes that have reach the end of their life expectancy along with poor moldy air quality in the gymnasium. The Air Quality Report confirms these results and is attached. This is a concern when large crowds gather in these spaces. Due to the multi-functioned used of the east wing of the high school (gymnasium, kitchen, cafeteria), this project will impact all 500 students and most community members.

### **Proposed Solution to Address the Deficiencies Stated Above:**

In order to provide improved thermal and air quality conditions to the students, it is recommended to remove all of the old, obsolete heating and ventilation equipment that currently serves the approximately 33,000 square foot east wing of the high school. All corresponding electrical, hydronic piping, boiler natural gas piping, and pneumatic controls will be removed as well. The existing hydronic boiler system, pumps, and accessories will be demolished. A smaller boiler system including a new pump and all necessary accessories will be installed in the boiler room to serve the existing greenhouse radiant slab. New energy efficient, ASHRAE 90.1 compliant packaged gas/electric rooftop units will be installed to provide cooling, dehumidifying, heating, and ventilation for the building. The packaged equipment will be furnished with roof curbs, economizers for free cooling, and powered relief components. A web-based control system will allow facilities/maintenance staff to monitor system operation and be notified of alarms. New natural gas piping will be routed from the existing meter to the various rooftop locations. CO2 sensors will be integrated into high occupancy spaces to allow for a simple demand controlled ventilation strategy that will reduce energy for conditioning outside air during low occupancy and increase ventilation when spaces are full to provide optimal indoor air quality. Electric unit heaters will be required at entry vestibules.

Electrical modifications will be required to serve new mechanical equipment including a properly sized 240V, 3 pole, NEMA 3R fusible disconnect switch and associated branch circuit for each new RTU to a new 3 phase, 4 wire, 120/208V panelboard. In addition, we will connect the new panel board to a new 3 phase, 4 wire, 120/208V switchboard. The new switchboard is to replace the existing outdated, 1600 amp switchboard. The new switchboard is to contain branch circuit breakers to match existing sizes for connection of existing branch loads. The existing 1600 amp switchboard and associated feeder will be removed entirely. A new copper feeder to the existing pad mount transformer will be provided as well as a properly sized 240V, 3 pole, NEMA 1 fusible disconnect switch and associated branch circuit for each electric unit heater which will connect to the new 600 amp, 3 phase, 4 wire, 120/208V panel board. A 120V power branch circuit to new Boiler control will be provided, and a new addressable duct detector for each RTU. The system will also connect to existing fire alarm control panel which will receive updated programming as required. The existing electrical connections will be removed from the existing HVAC equipment.

Structural modifications will need to be made in order to replace the HVAC system as described. The 1968 high school is a pre-engineered metal building. The structure is efficient but does not have the capacity to add the weight of new HVAC units on the roof. Platforms and supporting columns will need to be added in order to support the new units. In the preliminary design scheme for pricing, units were placed above the locker rooms to supply heating/air to the locker rooms and the gymnasium. A unit supplying heating/air to the weight/fitness room and wrestling room would be located above those spaces. The unit supplying heating/air to the cafeteria/auditorium would sit on a platform above the kitchen ceiling. Finally,

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

some ceiling and other patchwork will be required in order to supply the school with a new HVAC system. In most areas, as in the gymnasium, weight/fitness room and wrestling room, exposed ductwork is acceptable. The cafeteria/auditorium could be supplied by side-walling the units placed in the interstitial space between the kitchen ceiling and roof. The only space that will require a new ceiling will be the music room, after the HVAC and ductwork is completed.

### Gymnasium Architectural Deficiencies

The gymnasium is provided with the original vinyl faced batts insulation and has apparent water damage from years of roof leaks and condensation. A noticeable musty odor is present in the gymnasium space. The school district has tested the air quality in this space and results have revealed that there is a form of mold in the insulation of the gymnasium. It is recommended that this insulation be replaced. The grant request includes removal and replacement of this insulation system. The new insulation system proposed is a fiberglass batt insulation above a continuous board insulation to achieve a R13.5 continuous plus R-13 fiberglass batt to comply with 2015 IECC. The board insulation must comply with air barrier requirements and be taped. It is our intent to leave the existing roof system in place for the installation of new insulation.

### How Urgent is this Project?

The HVAC equipment in the 1968 high school is 18 years passed its life expectancy and critical in nature to repair. The equipment could fail at any moment and the school would be in an emergency situation. Parts for this equipment are obsolete, so there would be no choice but to replace equipment. This has already occurred in the wrestling room. A heating unit had to be replaced when it failed. We would rather plan ahead with a project to replace the entire system with an energy efficient system rather than piece together parts here and there as they fail. Replacing the HVAC equipment in the east side of the high school is the first phase of a long term goal to comprehensively address the facility and educational needs of the district outlined in the Master Facility Plan. The High School- East Side Air Quality Improvement project will be the first step to create an effective secondary school that will combine grades 7 through 12 on one main campus appropriate for the student population and their educational needs. This is a long range project to be phased over the next 10 years. A schematic shows the final design in the Facility Master Plan on page 129. Though the district has one million dollars in reserves and \$417,00 in the capital budget, it is well below what is needed to complete this large project of two million dollars and future phases of \$20 million. Fully funding the project at this time would leave the district in financial disaster and would be fiscally irresponsible. BEST dollars will be matched with the district's capital fund, private foundation grants, and an insurance policy claim to begin the first phase of a ten-year project. The Facility Master Plan Committee agreed that getting voter support for a bond election will be necessary for future phases. This plan will begin this fall when the school district will ask for a mill levy override and increase in local taxes to support the district. This is a long-range plan that will possibly take several attempts to approve. In the meantime, limited local resources must be leveraged with outside grant dollars to make large capital improvements possible. The financial forecast in school finance for the years of 2016-17 and 2017-18 is looking dismal for school districts. If we are going to be able to complete phase one without passing a bond, it will have to be now while we have the reserve and capital funds to do so.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

Although this renovation project will be designed according to high performance design criteria, certification should not be required due to the following criteria outlined in the HPCP program which does not apply:

1. In the case of a renovation project, the cost of the renovation exceeds 25% of the current value of the building.

The estimated total cost of the renovation project is \$1.94 million dollars. The value of the building according to the state assessment report is \$32 million for the combined Middle School / High School and including the old middle school. The value of the High School building individually is approximately \$19 million. The value of the renovation project is only about 10% of the building value.

The renovation project at the Las Animas High School is limited to an HVAC replacement in a portion of the building plus insulation replacement in the gymnasium. The project will be designed for reduced energy usage by employing high efficiency HVAC units complying with current energy codes at areas where mechanical systems are to be replaced. Based on the criteria outlined above and the limited project scope, we are requesting that the HPCP requirement be waived for this project. It is understood that the project will meet the intent of the HPCP program in limited areas and on systems that are included in the renovation project.

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

Las Animas School District is committed to upgrading and/or maintaining school properties. Evidence of this commitment is the \$100,000 set aside in the capital reserve fund each year. These funds are used for large unexpected capital repairs that occur each year. This is how the heating unit was replaced in the wrestling room recently when it failed. In addition, the maintenance for this capital construction project will be funded from the existing maintenance budget. Newer equipment should mean less maintenance and fewer repairs for many years. It will also mean energy savings which will impact the operating budget of the district. The maintenance program will be updated to reflect the removal of the boiler and HVAC terminal package units and the addition of the new HVAC equipment. The portion of the maintenance budget used to maintain the hot water boiler and terminal packet units for the east wing of the high school will be used for maintaining the new HVAC system and its new components. New HVAC maintenance items such as filter replacement, belt tightening/replacement, clean and inspect component repairs as necessary, and occasional rebalancing as required would be included in this budget. In addition, the portion of the janitorial budget used to care for the east wing of the high school will still be used for the newly renovated areas of the high school. Overall, we expect fewer maintenance issues with the new equipment for an indefinite period of time allowing maintenance personnel to use their time and resources to focus on other aspects of the buildings.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The current Las Animas High School was built new in 1968 to accommodate the growing high school student population. These baby boomer classes had over 100 students per class. The new high school replaced a 1914 building which was not handicap accessible and lacked the capacity for the growing student population. The new high school was a fantastic asset for the growing community. Over the last 50 years, the community and school district have changed dramatically while the facility has not changed at all. It is time to begin the process of updating the school to meet current student population needs.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

## FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$1,593,312.06	<b>CDE Minimum Match %:</b>	35
<b>Current Applicant Match:</b>	\$398,328.02	<b>Actual Match % Provided:</b>	20
<b>Current Project Request:</b>	\$1,991,640.08	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		General Fund and Capital Projects Fund
<b>Total of All Phases:</b>	\$1,991,640.08	<b>Escalation %:</b>	7
<b>Affected Sq Ft:</b>	33,990	<b>Contingency %:</b>	16
<b>Affected Pupils:</b>	212	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$59	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$8	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$51	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$9,395	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	160		NA

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>District FTE Count:</b>	474	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$58,863,130	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$124,053	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$1,374,797	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$37,611	<b>Outstanding Bonded Debt:</b>	\$1,345,000
<b>Free Reduced Lunch %:</b>	79	<b>Total Bond Capacity:</b>	\$11,772,626
<b>Existing Bond Mill Levy:</b>	3.329	<b>Bond Capacity Remaining:</b>	\$10,427,626

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant’s waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

For questions 4-11

Only answer the questions which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your school district.

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES.

Las Animas School District contracted with RTA Associates to complete a comprehensive Master Facility Plan. This plan was completed in January 2015 and contains short and long-term goals to improve the district’s facilities and education. Las Animas School District is requesting a reduction of the matching contribution in order to support the specific short-term goal of the Facility Master Plan stating “poor air quality on east end of high school”, and the long-range goal “too much building stock and classroom space.”

The waiver is being requested because the High School- East Side Air Quality Improvements is the first phase of a plan to renovate the high school/middle school campus to create an effective secondary school that combines grades 7 – 12. The current east wing of the high school will be the portion of the building that will be renovated with this project. The west wing will eventually be removed and replaced with middle school classroom pods, a media center, and central administration offices. High school students will move into the current middle school building. A schematic shows the final design in the Facility Master Plan on page 129. By creating an efficient and modernized secondary

school appropriate for current student population sizes, the current health and safety issues with a large and outdated building will be eliminated and the learning environment will be improved.

In considering the limited funds that Las Animas School District has in reserves, the match required for a BEST Grant, and the potential difficulty in passing a bond by the community, it is necessary for the school to implement the Master Facility Plan solution in phases and leverage as many sources of funding as possible along the way. The Air Quality Improvement project including HVAC replacement is phase one of a ten year plan. Though the district has a million dollars in reserves and \$417,000 in the capital projects fund, this is well below the amount needed to build the combined campus at \$20 million dollars. These funds can be leveraged, however, to provide a match for a BEST grant for phase one. The more these funds can be leveraged with outside dollars, the more financially stable the district will remain and more potential it has for capital improvements in the long run.

Getting voter approval will be necessary in the long run, and efforts are already underway to get that support. However, the culture of the community is extremely resistant to mill levy increases and chances of passing a bond in the next two years is extremely slim. With the HVAC equipment in the east side of the high school facing imminent failure, it is necessary for the district to move forward now with a BEST grant and use existing dollars as the match. Efforts to gain local tax payor support will continue for future phases on this long-range plan

2. Please describe why the cost of complying with the match contribution would significantly limit educational opportunities within your school district or BOCES.

The project total cost of the High School- East Side Air Quality Improvements is \$1.992 million. The current BEST match percentage for the district is 35% which equals \$697,000. That total match constitutes 69% of the total reserves for the school district. This would limit the district's ability to complete current projects that address life safety issues needing immediate attention at our football field facility. In addition, it would place the district's reserve dangerously low and put us out of compliance with CDE recommendations. The district would be unable to address emergencies that may arise with facilities, staff, or education programs. Spending 69% of the reserve fund would be fiscally irresponsible and would put the district in financial instability. It is vital for our district to reduce the match amount in order to maintain financial stability in the coming years and ensure we have emergency funds available for educational purposes.

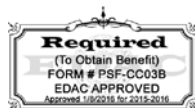
3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants, or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

The school facilities are used a great deal in our small community because they are the largest public facilities available. We have an interagency agreement to share resources with the City of Las Animas, Bent County Recreation League, and Las Animas School District. This allows us to pool our resources to improve our school, community, and county. The school district actively participates with numerous community boards. The district has communicated to these boards and organizations the need to pass a bond election in the future. The challenge in our small community is to ensure that we do not pursue bond initiatives at the same time. We partnered with the Bent County Recreation League in 2015 to support a mill levy increase for the Historical Society and Recreation League. Unfortunately, the community rallied against this increase and the initiative was kicked out on a technicality before it could even reach the ballot. It will be a team effort of all our supportive partners to pass mill levy increases for the school district in future years

The school district also plans on submitting private foundation grant request to assist with this project and with other capital improvement projects on this campus. A Colorado Health Foundation grant to improve the outside grounds at the middle school is currently pending. We will seek out all outside sources of funding to help our community leverage limited resources to improve our schools.

4. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

The district's per pupil funding after the negative factor is \$7,799 which is close to the state average.



5. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

The median household income for Bent County is \$37,340. This is more than \$20,000 less than the state median income of \$58,433. In addition, 19% of residents are below poverty level compared to only 13% in Colorado.

6. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

Las Animas School District consistently has an 80% free and reduced lunch rate. That is 37% higher than the state's 42% average for free and reduce lunch rates.

7. Bond Election failures and successes in the last 10 years – The more attempts the school district has had, the lower the match.

The school district has not pursued a bond election within the last ten years. The most recent voter approved bond mill levy increase was in 2001 for the construction of a new elementary building. The district had attempted two previous bond elections before getting the 2001 bond to pass. The first was in 1995 and the second in 1999. The 2001 bond election only passed because the 1896 elementary school building was to be condemned. Voters had little choice but to support the building of a new school. This bond equals 3.121 mills and generates \$180,000 annually. It will be complete in 2022.

In 1998, the school district did not pursue a bond mill levy increase for the construction of the middle school building. The district funded this construction.

If the district was forced to pass a bond to create the match for a BEST grant, it would take 11 mills to generate enough local tax dollars. This would never pass in our poor community.

8. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

The Las Animas School District Property Tax Mill Level was based on the current assessed valuation of \$58,863,130. The total program mill levy will be 19.498 mills and an additional bond redemption fund of 3.121 mills. This brings the total district mill levy to 22.619 mills. This is average for small schools similar in demographics and geographical area.

9. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

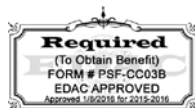
n/a

10. The school district's unreserved fund balance as it relates to their overall budget.

The school district's unreserved fund balance is \$1.076 million. This is barely over the CDE recommended reserve amounts. The district has had to dip into this reserve over the last three years to cover budget deficits. If this trend continues, the district will be in financial trouble in a few short years. If the district were to take the entire match requirement of 35% out of reserve funds, the district would be in immediate financial trouble.

11. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

Las Animas School District, like many other small districts, labors over spending down contingencies when enrollment continues to decline and state share funding minimally increases. The school board has decided to maintain educational programs by dipping into the contingency reserve. Over the last two years, the district will have to dip into reserves for over \$500,000 to compensate for declining enrollment and additional district construction projects. Additionally, the financial forecast in school finance for the years of 2016-17 and 2017-18 is looking dismal for school districts. If we are going to be able to build without passing a bond, it will have to be now while we have the reserve to do it.





**• Facilities Impacted by this Grant Application •****Centennial R-1 - Remediation of BEST Grant FY2008-09 Deficiencies - Centennial K-12 - 2010****School Name: Centennial K-12**

Number of Buildings:	3
All or Portion built by WPA:	No
Gross Area (SF):	55,030
Replacement Value:	\$16,402,492
Condition Budget:	\$12,529,844
Total FCI:	76.39%
Energy Budget:	\$19,261
Suitability Budget:	\$8,542,900
Total RSLI:	1%
Total CFI:	129%
Condition Score: (60%)	2.90
Energy Score: (0%)	1.56
Suitability Score: (40%)	2.21
School Score:	2.62



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Centennial R-1

**County:** Costilla

**Project Title:** Remediation of BEST Grant FY2008-09 Deficiencies

**Previous BEST Grant(s) Funded:** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |  |   |
|---|---|--|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement        | <input type="checkbox"/> Water Systems                |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                  | <input checked="" type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade        | <input type="checkbox"/> Land Purchase                |
| <input type="checkbox"/> Addition           | <input checked="" type="checkbox"/> HVAC    | <input checked="" type="checkbox"/> Energy Savings | <input type="checkbox"/> Other, please explain:       |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement        |   |

## General Information About the District / School, and Information About the Affected Facilities:

Centennial School District is a pre k-12 school District housed in one building and located in San Luis, Costilla County, which is the poorest county in Colorado. We have worked closely with Colorado Education Initiative, (formerly the Legacy Foundation) over the past 4 years to improve our academic instruction for students. We are showing growth each year in our student academics and have been recognized by CDE for our significant student growth and quality of instruction.

Centennial School K-12 was designed in 2009. Construction was completed, in part, at the end of 2010, with the balance completed during 2011. This Construction effort was funded, in part by a BEST Grant. There were fundamental Heating System and construction defects. Centennial School District R-1 filed a legal claim and recently was given a settlement in the claim. The Heating System intended for the Centennial K-12 Main and Maintenance Buildings was a Ground Source Heat Pump System. The installed system is undersized due to fundamental errors in the Design. Impacts from the Design Deficiencies occur in the subsystems, throughout the building. A Boiler was installed, after the initial construction, to supplement the undersized heating system, but was ill-conceived, improperly applied and an insufficient solution to the heating deficits.

In addition to the Heating System defects, there are Construction defects in the general categories of Stucco, Interior wall insulation, Interior wall cracks, Interior Concrete cracks, exterior concrete cracks, inadequate gutter/downspouts, inadequate site drainage at the building perimeter and improper site grading, which is resulting in cement raising and preventing exit doors from opening at certain times of the year.

This BEST Grant request is made to supplement the settlement funds, to the value necessary to correct the myriad of problems with the Heating system and the Construction. The remedial work cannot be done piecemeal, or over the course of a few years. The inadequate heating system and poorly performing controls do not provide sufficient comfort levels in the School, for most months of the School year. Construction defects are causing continued deterioration and stop-gap maintenance costs. A cost effective manner to re-mediate all problems in a single effort is warranted, so that dollars expended are spent to fix the problems, instead of wasted to fight the symptoms.

In order to minimize the duration of remedial work and maximize the benefit-to-cost ratio for the School, it has been suggested to use a Design/Construction Team and a Design/Build delivery method.

The Design/Construction team would consist of a Construction Manager/General Contractor (CM/GC), who would coordinate the work of Design professionals; Mechanical, Electrical, Architectural, Civil and the Sub-Contractors. Supporting work by other professionals includes Commissioning. The CM/GC would be chosen from a number of pre-selected/referred firms, interviewed by the School Board, then hired. The Design Professionals would be pre-selected by the School Board, interviewed as necessary, then hired. The remedial Heating system design is intended to provide a Ground Source Heat Pump

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

system as originally promised to the school, but properly sized, installed and operated, so that energy savings may be realized. The remedial Architectural/Civil Design is intended to fix deteriorated conditions and correct construction defects.

### Deficiencies Associated with this Project:

Heating system is undersized; Central Heat Pump Capacity, Circulation Pump capacity and Ground Heat Exchanger capacity. The installed equipment was improperly applied for a number of systems; Central Water-to-Water Heat Pumps, Finned Tube Radiation (Baseboard Heaters), Displacement Ventilation, Radiant Floor Heating. The installed heating capacity is between 35 and 50% of the required heating capacity, over the range of all installed equipment and Ground Heat Exchanger. The Building Automation System/DDC Controls are too complex and have control routines that do not give clear control direction to the equipment served. The central control panel has a poor user interface and lacks remote service access and diagnostics. The School has had to close on numerous occasions in the past due to Heating System failure and the inability to quickly diagnose and correct the problems.

Interior construction defects include; cracked concrete floors, cracked interior walls, missing insulation at exterior walls in the Gymnasium and Learning Media Center.

Exterior construction defects include; cracked concrete sidewalks, most notable near entry doors, poor Building perimeter and Site drainage, failed, cracking stucco, improper and undersized gutter and downspout system.

### Proposed Solution to Address the Deficiencies Stated Above:

Demolish improperly sized and applied equipment. Install properly sized and applied Heat Pumps, Install Duct systems only as needed to support the distribution of Heat to the Classrooms and Offices, incorporating the required Ventilation Air, previously delivered by the Displacement Ventilation devices. Install properly sized pumps for Heat Pump Water and Heating Hot Water. Install a Plate and Frame or Brazed Plate Heat Exchanger to provide the proper amount and temperature of Heating water to the Radiant Floor Heating System in the Maintenance Building. In every aspect of the remedial design work, existing equipment, piping, ductwork, control devices and wiring will be reused to the greatest extent possible, to conserve materials costs. The manner in which the existing materials are reused, will be changed to suit the remedial design concept.

Simplify the DDC Control system, improve graphical user interface to more readily understood and manipulated format, add web-based remote access for the School and contracted Service Companies to easily access the HVAC system, diagnose and understand problems, to expedite maintenance, repair and prevent school closures.

Remove and replace cracked sections of concrete, both; inside and outside the building with soil treatment as needed to stabilize and re-grade at the building perimeter, to achieve positive slope drainage away from the building.

Repair cracked interior walls. Provide insulate where it is missing in the exterior walls.

Regrade areas of the site and swale. Add fencing around the swale.

Provide and install underground piping as required to carry drainage water away from the building, to prepared site areas. Reseed re-graded and other disturbed areas. Remove and replace the lowest 12" of deteriorated stucco finish. Repair and patch larger stucco cracks on the exterior walls of the Classroom Wings of the Building.

Replace and supplement the gutter and downspout system of roof drainage, adding heat tape to gutter sections to manage drainage in sub-freezing weather.

### How Urgent is this Project?

There has been inadequate Heating in the School since it became occupied during the Winter of 2010/2011. Students regularly wear coats, hats, scarves and mittens to stay warm in their Classrooms. Electric Space Heaters have been purchased and located in the coldest rooms, so that classes may be held, but are not a permanent solution. Students who were in Kindergarten during School Year 2010-11, will be in 6th Grade for the 2016-17 School Year. During that time, they have never known a School Building that was warm enough.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Original project was intended to conform to Public School Construction Guidelines.  
Remedial work does not alter that intent.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

Budget/Maintenance plan was submitted with the original project.  
Remedial work does not alter the plan.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The facility was built in 2010 but experienced significant design/construction defects in the heating system, building perimeter and site grading/drainage, roof leaks, stucco defects and cracked interior walls and floors.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$1,120,681.84	<b>CDE Minimum Match %:</b>	23
<b>Current Applicant Match:</b>	\$2,547,671.16	<b>Actual Match % Provided:</b>	69.45
<b>Current Project Request:</b>	\$3,668,353.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	Building Account	
<b>Total of All Phases:</b>	\$3,668,353.00	<b>Escalation %:</b>	2
<b>Affected Sq Ft:</b>	75,000	<b>Contingency %:</b>	3.5
<b>Affected Pupils:</b>	229	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$49	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$4	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$45	<b>Who owns the Facility?</b>	3rd Party
<b>Cost Per Pupil:</b>	\$16,019	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Sq Ft Per Pupil:</b>	328	NA	
<b>District FTE Count:</b>	204	<b>Bonded Debt Approved:</b>	\$7,000,000
<b>Assessed Valuation:</b>	\$52,688,456	<b>Year(s) Bond Approved:</b>	07
<b>PPAV:</b>	\$258,911	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$1,550,900	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$26,023	<b>Outstanding Bonded Debt:</b>	\$6,625,000
<b>Free Reduced Lunch %:</b>	88	<b>Total Bond Capacity:</b>	\$10,537,691
<b>Existing Bond Mill Levy:</b>	8.74	<b>Bond Capacity Remaining:</b>	\$3,912,691

• Facilities Impacted by this Grant Application •

### Colorado Springs Early Colleges - CSEC Roof Replacement - 1980

**School Name: Colorado Springs Early Colleges(Leased)**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	19,340
Replacement Value:	\$2,158,259
Condition Budget:	\$75,217
Total FCI:	3.49%
Energy Budget:	\$0
Suitability Budget:	\$1,514,700
Total RSLI:	63%
Total CFI:	73.7%
Condition Score: (60%)	3.57
Energy Score: (0%)	2.61
Suitability Score: (40%)	3.54
School Score:	3.56





# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Colorado Springs Early Colleges

**County:** CSI

**Project Title:** CSEC Roof Replacement

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

CSEC is chartered through the Colorado Charter School Institute. The concept is based on motivating students to excel in their academic studies, beginning with taking college courses and completing high school with an Associate's Degree.

CSEC's mission is: "To prepare a diverse population of students for life by providing an opportunity for them to develop life, body and character through rigorous academic studies. All students regardless of their background or skill will have the opportunity to pursue a growth mindset that will allow them to achieve mastery, and demonstrate they can succeed in school, in college and in their chosen career. No exceptions. No excuses."

CSEC's Student Bill of Rights, below, give students the opportunity to control their own destiny at the school:

- 1) Mastery of reading, writing and math skills with the goal of being ready to pursue college courses without remediation.
- 2) Access to college courses as a high school student with the opportunity to earn college credits, or an Associate's Degree or higher in addition to a high school diploma.
- 3) Academic advising, including an Individual Academic and Career Plan in both a high school and postsecondary counseling.
- 4) Success regardless of background, skill gender, earnestness and intensity.
- 5) Appropriate assessments ensuring accurate placement regardless of grade level to promote academic progress.
- 6) Quality classroom instruction by engaging engaged committed faculty.

Students who successfully complete CSEC's curriculum will have earned 60 college credits or more toward the completion of a post-secondary credential. CSEC is a charter school organized pursuant to the Colorado Charter School Act. The school has received the designation as of an "Early college" pursuant to the Concurrent Enrollment Act of 2009, C.R.S. §22-35-103(10).

CSEC has been excluded from the Concurrent Enrollment Act in accordance with the statutory provision C.R.S. §22-35-110(4), which states that early colleges do not need to comply with the act. This gives CSEC educators the freedom to create a program that is unregulated by state statute; this provides a maximum opportunity for students to receive an education including an Associate's Degree for free.

In CSEC's college prep program, students prepare for college course. If they test successfully on the Accuplacer tests, they can enroll in college courses offered through either Pikes Peak Community College or the University of Colorado, Colorado Springs. Students in grade nine through 12 are allowed to attend college courses if they pass the Accuplacer test.

Once a student's academic level has been determined, CSEC Academic Advisors interview students and work with them to complete an Individual Career and Academic Plan. This includes the pathway toward a full Associate's Degree, or beyond. CSEC's program ensures that all students will have taken college course before leaving the school.



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

In Colorado, nearly 40 percent of all students who graduate from high school need college remediation in either English, reading or math. CSEC's unique program also guarantees that all students will graduate remediation free in English, reading and math. This commitment is called our Postsecondary Workforce Readiness Guarantee.

This makes it possible for a college preparation curriculum that meets or exceeds the requirement for basic skills for any Associate's Degree at the community college system. It also complies with the higher education admission requirements standards: If a student is proceeding in a bachelor's degree, they will be ready to accomplish this upon leaving CSEC.

Once a student starts taking college courses, they typically take "guaranteed transfer pathway courses" (GT Pathway) which are freshman college course that transfer into any Associates of Arts or Science, Applied Science Associate's Degrees, or Bachelor Degree programs. Students are encouraged to stay at the school until they complete their GT Pathway courses.

## **Deficiencies Associated with this Project:**

Colorado Springs Early Colleges has three roof sections: the EPDM (Ethylene Propylene Diene Terpolymer) Section; the TPO Section; and the Metal Mansard Section. Please see additional documents for an aerial image of the building, which showcases the three roof sections in three separate colors for easy identification.

### **EPDM Roof**

According to Cave Consulting Group, the EPDM roof section is over 20 years old and is past its useful life; it should be replaced, as there have been multiple leaks throughout the section.

After the August 2015, rainstorm, CSEC spent thousands of dollars trying to restore the building to a safe condition for students and staff. The EPDM roof is the roof section that experienced the most severe leakage.

CSEC hired a vendor to patch the 41 leaks in the EPDM roof. Carpets were dried and floors were mopped. In addition, some of the sheetrock was cut off to prevent mold.

In February of 2016, a major snowstorm caused more damage to CSEC's EPDM roof. The entry vestibule ceiling was damaged which is the single controlled access to the building the ceiling was damaged, floors were wet and additional damage occurred in the classrooms. As a result, additional damage to this section of the roof occurred. New leaks occurred in the EPDM roof; in addition, new leaks occurred in some of the areas that were patched after the August 2015 rainstorm. Water also leaked through the ceiling and through a window into a classroom. The February snowstorm also caused damages to the gutters and downspouts.

CSEC chose not to file an insurance claim for these repairs because the deductible would have been much higher than the cost of the repairs.

If the EPDM roof is not replaced, CSEC will experience more leaks related to rainstorms and snowstorms.

### **Costs Related to EPDM Roof Leakage**

To further underscore the various costs related to the EPDM roof, as well as the projected costs to repair the damages incurred from the recent snowstorm, here is a breakdown of projects related to roof leakage:

Big Boyz Gutters Plus

9/11/2015 \$2,273.00

Installed PVC fittings and materials; gutters; downspouts; and cleanouts.

Check #002609

6/2/2015 \$150.00

Put downspout and conductor head back on. Check #0000260

Central State Roofing

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

5/26/2015 \$996.33

Conductor heads on outside of wall were leaking. Installed backer rod and caulking around conductor heads. Removed heads in space between wall and scupper. Re-installed conductor heads and connected downspouts. Check #00000258

4/7/2015 \$756.57

Cleared off snow and cleared gutter of ice. Caulked termination bar and cleared ice from downspout on vestibule. Removed ice from two downspouts and electrical panel. Check #00000223

12/12/2014 \$4,979.90

Removed all pitch pockets, pipe penetrations that have foam insulation and are abandoned and repair. Patched old curbs areas with new EPDM rubber. Repaired any old patch work that has white membrane or caulking with new black EPDM materials.

Replaced collapsed pipe boot, qty.=2. Removed two parapet pipe penetrations and patch parapet wall.

Restoration King

8/25/2015 \$2,642.78

Flooding in multiple areas; mitigation and dryout. Extracted water; used dehumidifier; used air mover. Check #002595

10/21/2014 \$5,793.36

Gutter work; Cleaned and replaced gutters; replaced gutters and cleaned drains; removed and replaced downspouts. Check #002041

Weathercraft

May 2015-August 2015 \$953.00

Three investigations and leak repairs, which included nine patched holes on EPDM roof Labor. Check #1055

TPO (Thermoplastic polyolefin) Roof

Cave Consulting Group estimates this section of the roof to be between 15 and 17 years old. Although this section has not yet reached the end of its useful life, Cave Consulting recommends that it is considered for replacement. In the long run, it will be more cost-effective to replace this section when the other sections are replaced. This will prevent the school from having to do multiple roof replacements throughout the years.

Metal Mansard Roof

The metal roof is showing signs of aging including peeling finishes, missing or damaged battens. According to Cave Consulting, it is likely the waterproofing underlayment is deteriorated. Also, it appears the standing seam metal may be original to the building. Cave Consulting recommends that this section to be replaced.

### Proposed Solution to Address the Deficiencies Stated Above:

EPDM Roof

Cave Consulting recommends that as part of the reroofing, all obsolete rooftop equipment be removed from this section. This will reduce the amount of penetrations on the roof, which will help reduce future leaks. This section is about 21,500 square feet.

TPO Roof

This roof section is about 28,000 square feet; Cave Consulting recommends that this section be replaced with fully adhered EPDM.

Metal Mansard Roof

Cave Consulting recommends that the mansards are replaced with new standing seam metal. This roof section is about 5,500 square feet.

### How Urgent is this Project?

The safety of CSECs' students and the staff is of utmost importance. It is very important that not another school year goes by

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

without these repairs to the roof, gutters and downspouts.

Student safety is jeopardized by these falling ceiling tiles as well as water on the carpet, tiles, computers, desks and classroom desks. There is no other safety concern more important right now than the replacement of CSEC's roof. There is no better way to ensure the quality of education than by having a roof that will not leak and will fully support instructional processes occurring in the classrooms.

Another big factor contributing to the urgency of this project is the economic significance of the current roof. During the rainstorm of August, 2015, and now the snowstorm of February, 2016, CSEC has spent in excess of \$25,000.00 on repairs to the roof, to the carpet, to the paint and to the ceiling tile and repairs to the interior of the buildings. CSEC also had to replace much of the existing drain spouts and gutters.

If the roof is not fixed this summer, weather events will most likely continue to create problems for the school. The school will continue to face patching of the roof, replacing damage to the interior of the school and the interruption of school activities in addition to the financial issues.

CSEC has gone above and beyond to make sure that it can maintain the roof as much as possible with its existing systems. The schedule CSEC would like to propose is to begin soliciting consultants prior to the close of school which is May 2016 to allow construction to begin and complete during the summer break.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

CSEC's Best Grant application seeks to align the school's current construction with the Public School Facility Construction Guidelines under Articles 4.1 and 4.4:

4.1.2 Roofs. To ensure the safety of the school's students and staff, CSEC needs a weather-tight roof that drains water off the roof and that discharges the water off and away from the building. CSEC's old and worn roofing causes ongoing moisture to accrue; this creates a potentially dangerous atmosphere for those in the building and for the property on which it sits. CSEC goes to great measures to ensure students and staff members are safe. The current roof could cause serious injury from falling ceiling tiles and light fixtures, and possible injuries from water touching electrical cords. CSEC's Best Grant application proposes to reduce the moisture problem by implementing and restoring effective flashing conditions by way of a new roof to be installed by a qualified, approved contractor. CSEC will receive a specified warranty upon completion of the roof. If this issue is not addressed, students and staff face a variety of potentially dangerous situations, including falling ceiling tiles, slippage due to water leakage from the roof and the potential for roof itself to face structural damage.

Article 4.1.2.1 Low slope roofing systems:

As stated in Section I.V.2, the current roof is past its warranty, and if it is not replaced will place building occupants in potentially harmful situations. Sections of ceiling tile could, at any time during or after a snow or rain storm, collapse on people in the building. All roofing membranes, currently compromised by age and harsh weather, will be taken down and replaced. These will have a ballasted or adhered system or mechanically system, when necessary. New low-slope roofing assemblies will be installed. These will have adequate and effective slope and flashing details to prevent leakage and moisture.

Article 4.4.4.3.2 The new roofing and materials will contribute greatly to the building's energy efficiency. The increase in the amount of solar heat reflected by the new roof assemblies and materials will help decrease the amount of air conditioning needed during the summer months.

Article 4.4.4.3.3 Water leakage has damaged the thermal protection, which has damaged the current insulation. The new roofing will include new insulation to ensure effective thermal protection.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

At the project's completion, selected school personnel will be trained by the roofing contractor to perform simple roof repairs; large roof repairs will be conducted by a competent roofing contractor. The roof will be methodically inspected on a yearly basis to determine deficiencies that need to be repaired. School personnel will access the roof to remove debris from

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

gutters and downspouts as well as and other areas on the roof. This will be performed at least two times a year.

The proposed roofing system should perform for about twenty five years before the next replacement occurs. The estimated cost to reroof the school at that time will be about \$665,000 which amounts to \$26,600 a year from now until then.

CSEC's location, near Garden of the Gods and near its I-25 exit, is an exceptional location for a high school. The facilities themselves are in great condition. CSEC will stay in this location and has no intention of ever moving to another facility. Thus, school officials want to create and maintain the school's top-notch buildings.

How will we do this?

CSEC has budgeted \$200,000.00 a year for its Common Area Maintenance budget, established in January of every year. It takes into consideration all the previous year's expenditures and makes sure that there is enough money in the budget to do the required maintenance on the facilities, the parking lots and all areas of the entire business park. The main priority of this maintenance budget will be maintaining the new roofs and the associated gutters and downspouts. Optimum maintenance of these items will provide the maximum safety to students, staff and visitors as it will ensure no roof leaks and will also allow water go away from the buildings.

The Common Area Maintenance also includes the cost of painting the walls of the exterior and interior areas of the building. This will have to be done once we have solved the issue of the roof not leaking and the downspouts and gutters working appropriately.

One of the requirements in order for the Colorado Early College Building Corporation to receive a loan from Sunflower Bank was a necessity for the schools to set aside a Capital Construction Reserve Fund. This fund is required to have \$175,000.00 placed into it every year of the loan until the required reserve equals \$750,000.00. This money is set aside to be used in case of an emergency; it is also set aside to maintain the building in conjunction with the appropriate building codes, to make sure that the building is maintained at the highest quality possible.

It is the desire of the leadership of CSEC and the Colorado Springs Early College Building Corporation to maintain these buildings in the highest quality possible. We believe that if we maintain the buildings appropriately that the repairs will be less expensive and that the maintenance will be able to be covered by the Common Area Maintenance, paid for each year by the school through Common Area Maintenance funding.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

In 2007, when Keith King was in between service of the House and Senate in the Colorado State Legislature, he became interested in starting an early college in the Colorado Springs area. Shortly after, he heard about the location of Colorado Technical University (CTU), located at the Springs Business Park.

Upon further looking at the park, CTU agreed to let Colorado Springs Early Colleges (CSEC) use six classrooms during the day. However, as CSEC began conducting informational meetings, it became obvious that six classrooms would not be adequate for the number of students who wanted to attend the school.

Mr. King discovered a section of the office park, at approximately 40,000 square feet of space, which was not being used and had been empty for over five years. After negotiating some of that space, CSEC was able to lease 12,349 square feet from Presidio, the business park owners, from 2007.

CSEC opened its first year in 2007 with 320 students. In the second school year, officials realized they needed additional space in other portions of the facility. In 2008, CSEC leased an additional 6,991 square feet, bringing its total lease amount to 19,430 square feet.

The school continued to grow. CSEC began negotiation for an additional 23,117 square feet of building space in the park. At the same time, CSEC began negotiations to purchase the facility. It became apparent to Colorado Early Colleges that purchasing the facility was a better option than continuing to lease.

In 2014, CSEC purchased the entire facility for \$6,638,000.00 with a loan from Sunflower Bank. CTU became a tenant at that

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

time.

When CSEC opened in 2007, the facilities, built in 1980, were in average condition. The facilities had been empty and unused since 2000. Prior to 2000, the buildings were used by many different companies, including electronic companies, which had a cleaning room in one of the wings of the building.

Because the building had been used for a variety of causes and projects, its roofs had several problems by the time CSEC opened its school. One of the roofs was, and is still, a storage place for large electrical equipment. CSEC occupies this area. During the summer remodel process of 2015, CSEC school officials discovered that they needed to repair a tremendous amount of the roof. They noticed that much of the roof was rubber and that it was old and deteriorated. On Aug. 15, 2015, during the remodel, Colorado Springs endured a severe rainstorm. This caused 41 leaks in the building. Colorado Early Colleges paid for all 41 leaks to be patched. This is when school officials knew they needed to replace the entire roof because the old one was beyond patching and repair. CSEC has spent nearly \$20,000.00 on repairs to the roof from 2014 to 2015. School officials' rationale for purchasing the property at the Springs Business Park was multifaceted. First, the purchase price was extremely reasonable compared to other properties in the Garden of the Gods area. CSEC purchased the park's facilities for approximately \$62.00 a square foot. The going rate for most real estate office buildings in the office park area in 2014 was \$120.00 per square foot. The office park had not been updated with tenant improvements in about 15 years. Each portion that CSEC leased had to be gutted as a school configuration. The expense to remodel the facility was \$40.00 per square foot. In addition, the first lease for the facility in 2007 was at \$5.00 triple-net, for five years. CSEC leased additional space in 2008 at the same lease price because of the growth of the school. The lease price was still lower than any other place in the area because it needed tenant improvements. The office park had enough empty space to accommodate the schools' expansion and ongoing partnership with CTU. CSEC also began partnerships with Pikes Peak Community College and the University of Colorado at Colorado Springs.

School officials, in the beginning, knew the aging building would need extra work. Officials concentrated most of the remodel on the inside of the building. CSEC received an investment from CTU of \$250,000.00 to do the tenant improvements for 12,349 square feet. In addition to that, CSEC spent an additional \$120,000.00 on the space to have it ready for students in 2007.

CSEC agreed to pay tuition to CTU for their courses at the rate of \$80.00 per credit hour, which normally was \$300.00 per credit hour. This was credited against the \$250,000.00. CTU agreed to spend that money on fixing up the facility. CSEC also agreed to allow CTU to use the facility from 5 to 11 p.m. for the extra classrooms CTU needed for its student population. The agreement at the time also split the cost of the utilities and IT infrastructure necessary for classroom instruction. In two-and-a-half years, CSEC paid back the full \$250,000 that CTU lent the school for tenant improvements.

CSEC's final lease was to make the school adequate for students in Suite D, the area the school moved into in August of 2015. This roof is in the most need of being replaced on campus because it has never been replaced.

Another rationale to purchase the facility was to give CSEC a property that it could afford with the per-pupil revenue the school receives from the state. Our decision has been made to continue to fix up this property to make it a first-class facility for our students to learn in and be proud of attending.

### **FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

CSEC had occupied about 20,000 square feet of this space before buying the building in 2014. CSEC bought the building with this space empty. This particular space had been used for blood lab work. CSEC officials knew it had to be gutted to make it suitable for a school.

When school officials began this remodel in the beginning of the summer of 2015, they did not know at the time the severity of the roof's condition. A major rainstorm on Aug. 15, 2015, however, revealed the state of the roof. The storm caused 41 leaks in the roof. School officials then knew they had a serious problem. CSEC hired a vendor to patch up the 41 leaks, but knew more work had to be done to make the building suitable for students and staff. Money has continued to be put into the facility to fix the HVAC systems and patch the roof in many places.

Before purchasing the building in 2014, CSEC did not want to invest in a new roof. It was after that time, in 2014, after CSEC had purchased the building and remodeled the interior of the space for classrooms that it became time to fix the roof.

During the 2014 remodel of the interior of the building, CSEC spent \$660,000.00 on tenant improvements. The location has made the tenant improvements very valuable. Since occupying the building in 2007, CSEC made over \$1,000,000.00 in tenant improvements on the inside of the property. In 2015, it was now time to concentrate on the outside of the buildings to improve the parking lot and landscaping.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Due to a major snowstorm from February 1st – 3rd, 2016, CSEC experienced more leaks. A new major problem developed in the flooding of the vestibule at the entrance of the school. This area is very important because it is used every day. For safety reasons, these are the only doors to the school that are left unlocked during the school day. The flooding of the vestibule jeopardizes not only the safety of our students but any visitors including parents and small children they might bring to visit the school.

**FY15-16 Charter School Capital Construction Allocation from the State:** \$162,067.00

<b>Current Grant Request:</b>	\$743,067.63	<b>CDE Minimum Match %:</b>	25
<b>Current Applicant Match:</b>	\$247,689.21	<b>Actual Match % Provided:</b>	25
<b>Current Project Request:</b>	\$990,756.84	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	General Fund	
<b>Total of All Phases:</b>	\$990,756.84	<b>Escalation %:</b>	3
<b>Affected Sq Ft:</b>	25,155	<b>Contingency %:</b>	5
<b>Affected Pupils:</b>	639	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$39	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$3	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$37	<b>Who owns the Facility?</b>	3rd Party
<b>Cost Per Pupil:</b>	\$1,550	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	39	There is no intention ever for Colorado Springs Early Colleges to relocate.	

<b>District FTE Count:</b>	<b>Bonded Debt Approved:</b>
<b>Assessed Valuation:</b>	<b>Year(s) Bond Approved:</b>
<b>PPAV:</b>	<b>Bonded Debt Failed:</b>
<b>Unreserved Gen Fund 13-14:</b>	<b>Year(s) Bond Failed:</b>
<b>Median Household Income:</b>	<b>Outstanding Bonded Debt:</b>
<b>Free Reduced Lunch %:</b>	<b>Total Bond Capacity:</b>
<b>Existing Bond Mill Levy:</b>	<b>Bond Capacity Remaining:</b>





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## CHARTER SCHOOL INSTITUTE

February 24<sup>th</sup>, 2016

Grant Committee  
Capital Construction  
1580 Logan Street, Suite 310  
Denver, CO 80230

Re: Colorado Springs Early Colleges Grant Application

To Whom it May Concern:

The State Charter School Institute is an independent state agency organized under the Colorado Department of Education, charged with authorizing and accrediting public charter schools.

Colorado Springs Early Colleges is one of the schools currently authorized by CSI. The school is in good standing with CSI, producing scores on the most recent state assessments that academically place CSEC in the top quartile of all schools in the state of Colorado. In fact, CSEC is currently accredited with a Distinction plan type, the highest tier of accreditation designated by CSI. In addition to consistently high levels of academic performance, this rating also asserts that the school has met or exceeded standards along financial and operational indicators monitored by the Institute, confirming the school's strong and continued financial viability and operational sustainability.

The school opened in 2007, replicating its program in Ft. Collins in 2012, again in Douglas County in 2013, and expanding service to middle school students in 2014. The continued accomplishments and development of the entire network marks the Colorado Early Colleges as one of the most successful charter networks in the state of Colorado. The Institute fully advocates for the programs' identified needs and supports its continued growth.

Please call if you any questions or would like any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kristen Stolpa', written over a white rectangular area.

Kristen Stolpa  
Chief Authorizing Officer  
Charter School Institute



- Facilities Impacted by this Grant Application •

**Ricardo Flores Magon Academy - Ricardo Flores Magón Academy K-8 New School - 1906**

*No Statewide Facility Assessment Information Available*



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Ricardo Flores Magon Academy

**County:** CSI

**Project Title:** Ricardo Flores Magón Academy K-8 New School

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School                    | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input checked="" type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation                    | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition                      | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security                      | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Located in the Berkley Neighborhood, Ricardo Flores Magón Academy (RFMA) has served students across the greater metro Denver area since 2008 in a piece-meal building. The oldest portion was constructed in 1906 and the newest in 1998. We serve a community that is 98% Latino, 92% Free and Reduced Lunch, and 94% English Language Learners. Many of our families are first or second generation from Mexico and our focus on culturally relevant education combined with recruiting and hiring teachers and staff of color contribute to a unique and powerful bond between the school and our families.

Because our students come from neighborhoods of high poverty, many manifest stress-related behaviors. As research demonstrates, this can be linked to a need to create order and safety out of a chaotic environment. This reality has given rise to one of our most fundamental mantras: "As soon as you walk in the doors, you are safe." This is a promise we've made to our kids and families.

But this feels like a false promise because the building is putting them at risk. The obvious safety and security failings, like an internally located administrative office that prevents first-contact with visitors; lack of a monitoring and alert system; a multitude of unsecured, unmonitored external doors in low-traffic areas of the school; the immediate proximity to a busy thoroughfare all combine to create incredibly unsafe premises. During a hostage situation in 2013 and a bomb scare in 2015, there was no easy way to alert faculty and staff about the situation and no monitoring systems to support preventative measures.

As a Colectivo, we believe very deeply in the power of our culturally engaging curriculum as a lever of change in our students' lives. Our teachers and staff work tirelessly to construct learning experiences that validate the heritage of our students while ensuring they feel equally a part of their new culture. This culturally responsive teaching takes tremendous patience and empathy to both create and deliver. If you stand just outside the front office doors at roughly 8:45am, you could hear the commitment in the voices of our Magóniastas as they chant "No hay atajo con el trabajo!" (No shortcuts to work!) from RFMA to College. This commitment is what drives every single adult in our building to be the best we can be. We fundamentally believe that regardless of home language and circumstance they all can go to college.

It is hard for us to be our best – and to expect the best from our Magóniastas – when our physical space is an environmental and physical "trap." The constant threat of mold due to the water intrusion and low ventilation combined with the multiple locations of asbestos (tile flooring, mastic, and portions of the boiler) creates a hazardous environment for our children. This summer our basement flooded by several feet. Although we immediately attempted to minimize the impact, the water disturbed the mastic in some of the flooring and seeped into the wall paneling. As a result the asbestos was agitated and mold took root because our HVAC systems are antiquated and inefficient. We suffer grievously from poor ventilation and are concerned about the impact on students' health.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Perhaps one of the most illustrative events demonstrating the degree of threat our building poses to our children occurred this autumn in one of our fourth grade classrooms. I received an email from the teacher requesting I look for a grant for windows because that day a strong gust had knocked a window out of its casing onto one of her students. We were quite lucky that he was okay but it was terrifying to know that this could happen in any number of our rooms.

Despite the extensive facility challenges, RFMA has persevered and our students continue to excel in academics and in their commitment to social justice. Our teachers and students are ready for a facility that supports and furthers their dedication to learning and equity instead of distracting from it.

### Deficiencies Associated with this Project:

#### DEFICIENCIES ASSOCIATED WITH THIS PROJECT

The current facility has not been assessed by the CDE Statewide Facility Assessment. The deficiencies identified below are only some of the most severe observed by the Facility Master Plan's site and building assessment from 2015.

#### SAFETY HAZARDS + FACILITY SECURITY

1. Internally located main administration and staff offices with no exterior windows or supervision of the main entry.
2. Antiquated video and speaker system to control main entry and student entry-door. Video and audio are unclear visually and audibly.
3. Unsecure entry provides easy and immediate access to students prior to checking in at the front office.
4. No video surveillance or public address system. There is no video surveillance system in the building. There is no public address system within the building, making it impossible to alert the entire school of an emergency at one time. School-wide communication is accomplished through the telephone speaker system, which is unreliable because the volume is typically too low to interrupt class.
5. Vehicle-stacking driveway creates backup in staff parking and into neighborhood. The school is located on a small site in Denver. The current vehicle-stacking driveway is short, winds through the staff parking lot, and forces cars to back up into, and triple-park on the surrounding neighborhood streets.
6. Immediate proximity to a busy thoroughfare. The main entry faces Lowell Boulevard, a busy two-lane street running north-south between Interstates 70 and 76. The traffic is increased due to the school's proximity to Regis University, only a block away to the southeast.
7. One dead end corridor that permits egress only through existing classroom. There is one dead-end corridor condition which currently allows for exterior egress through an existing classroom, and so has been approved with a variance. It would be advisable to correct this life safety issue as part of the building renovation.
8. Inability to separate classrooms and gym-cafeteria-restrooms during after-hours functions.
9. Exterior door monitoring on only two of 13 exterior doors. Antiquated surveillance and security equipment on the 2 monitored doors.

#### HEALTH CONCERNS

10. Mold threat in basement area due to standing water damage. The combination of poor ventilation, roof leaks and basement flooding makes the building in danger of harboring mold in many educational spaces.
11. The building suffers from poor indoor air quality and inadequate HVAC systems. Many of the classrooms have poor ventilation due to the lack of an operable or adequate unit ventilator. Several classrooms are relying on portable electric air

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

conditioners. Classes are frequently cancelled during the shoulder seasons, with interior temperatures at times reaching over 100 degrees F.

12. There are numerous types of asbestos-containing materials present in the building. There is asbestos-containing floor tile and mastic adhesive covering approximately 20% of the original floor area, as well as an asbestos-containing boiler and sealants in the mechanical room. Perimeter sealant around the failing windows in the elementary wing is suspected to contain asbestos as well.

13. Roofing issues related to a combination of shingled pitched roof and low-slope membrane roof types. Areas of the membrane roof are delaminated. Several of the steel roof drain are rusted out and deteriorated, allowing rain directly into the ceiling area below instead of into the drain. This water often penetrates into the classrooms, many of which have inoperable ventilators, and are thus prone to harboring mold. A few areas of the roof eave/parapet are clearly within reach of the ground and provide easy access to the roof, exposing the membrane to further damage or vandalism.

14. Lead paint is present in numerous classrooms and corridors on overhead ceiling trim. With low ceiling heights in several classrooms, the likelihood of the paint being disturbed is high.

15. Site Drainage and Water Intrusion. The school building forms 2 courtyards and surface drainage in these areas is a problem. Drainage in some areas is directed towards the building and into the below-grade entry wells, frequently flooding the basement.

### **Proposed Solution to Address the Deficiencies Stated Above:**

#### PROPOSED SOLUTION TO ADDRESS THE DEFICIENCIES STATED ABOVE:

In conjunction with HCM, the leadership of RFMA undertook a thorough analysis of several options as possible solutions to the deficiencies identified. Based on research and findings, it has been determined that the most fiscally prudent solution to address all the deficiencies inherent within the building is to build new.

A cost analysis, provided by two independent contracting firms, clearly identifies that the cost to renovate and make changes to address the building deficiencies and health/safety issues would exceed 80% of the cost to replace the current structure with a new one and that option would still leave some health and safety issues unresolved.

While the option to renovate would address 12 of 14 major health and safety deficiencies, it is clear that this option was not as effective or fiscally reasonable as building a new building entirely. A new school will remedy all identified hazards at a rate only about 20% higher than the second option and will increase the building's lifespan by at least 50 years. The current building, regardless of renovations or upgrades, will continue to have some health and life-safety issues.

The new school facility will fully comply with the CDE School Facility Construction Guidelines and will meet standards for LEED Gold Certification. It will incorporate high-quality HVAC systems, increase site safety, and enhance the school's operational security. New site circulation will be designed to separate visitor traffic, drop off and deliveries into their own paths and alleviate vehicle stacking concerns.

### **How Urgent is this Project?**

The deficiencies at Ricardo Flores Magón Academy are of immediate and escalating concern. Mechanical, roofing and waterproofing failures have all occurred within the last calendar year.

The school has responded to serious concern from the community and staff regarding deficiencies at the facility. In 2013 the school took out a loan to address health and safety issues that were beginning to impede the school's existence. While these adjustments (full sprinkler system, two classrooms brought to minimum code, a gym brought to code) have meant that the school has been able to house the number of students enrolled; however, since those were addressed issues of greater significance and concern have become increasingly apparent.

Because the building sat vacant for the better part of a decade the immediate extent of the state of the facility was not

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

apparent; but after the better part of two years its condition became apparent and increased the concern of all stakeholders. In the last two years, due to it being a well-lived-in facility, the roof leaks have increased, classroom unit ventilators are at risk of failing at any moment and replacement mechanical parts for the aging systems are in short supply.

Urgency:

### SAFETY HAZARDS AND FACILITY SECURITY

1. Internally located main administration. The lack of a clear line of sight to the entry and direct entry supervision is a deficiency with an urgent need of correction. The main entry faces Lowell Boulevard and is subject to high amounts of both pedestrian and vehicular traffic.
2. Antiquated entry video and speaker system. Poor communications between the office and the entry door locations make it tempting for students to allow in visitors without proper screening, and easy for staff to allow visitors entry without clear understanding of who is arriving. With new visitors arriving and main-entry deliveries being made on a daily basis, the school is in a vulnerable position on a daily basis. The need for correction of this deficiency is highly urgent.
3. Unsecure entry provides easy and immediate access to students prior to checking in at the front office. If an intruder gained access at the front doors, he or she would have direct access to the gymnasium, cafeteria, and two classrooms before passing by the door to the main office. The need to provide a secure and supervised entry vestibule is highly urgent.
4. No video surveillance or public address system. A school-wide emergency cannot be communicated effectively and this puts both staff and students at immediate risk. With any number of school safety threats having already happened, including break-ins/intruders, dangerous weather, bomb threats and nearby hostage situations, the need to communicate future dangers effectively is of the highest urgency at the school.
5. Vehicle-stacking. There is urgency for site reconfiguration to prevent on-street stacking of vehicles. The complicated route of drop-off / pick-up queue occurring around the parking lots is currently combined with the tendency of parents to park on neighborhood streets. With students crossing the streets to their parents cars and vehicle queues backing up into the streets, the conflict of cars and pedestrians presents an urgent situation. As the school continues to grow, this traffic issue will become more of a nuisance and safety concern. Most drop-off occurs within feet of a neighborhood public street rather than from an on-site driveway. Parents frequently express anger and concern over the school traffic patterns.
6. Immediate proximity to a busy thoroughfare. The best way to minimize this urgent traffic concern is to move the main entry away from the busy road and to provide on-site parking and circulation.
7. One dead end corridor that permits egress only through existing classroom. It is likely the no further building improvements would be allowed until this life safety concern is corrected or the building is replaced.
8. Inability to separate classrooms and gym-cafeteria-restrooms during after-hours functions. The inability to partition off classrooms and other unused portions of the building during after-hours activities presents an urgent security concern due to past break-ins at the school.
9. Exterior door monitoring on only two of 13 exterior doors. The inability to maintain control over all of the 13 access points to the school is more likely to result in a security issue as time goes on.

### HEALTH CONCERNS

10. Mold threat in basement area due to standing water damage. The basement currently floods during every significant rain event due to poor site and stairwell drainage. The flooding has already saturated interior flooring and gypsum board walls, and permanently damaged the electrical system in the basement. Although the spaces are not currently used for instruction, the need to repair or replace the building is of the highest urgency before it begins to affect the remaining spaces in the building.



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

11.The urgency for correction of the air quality issue is of the highest degree due to the periodic increases in sick absences as well as class cancellations due to heat. There is a regular loss of educational time due to environmental quality issues that should be corrected as soon as possible.

12.There are numerous types of asbestos-containing materials present in the building. As more parts of the building start to fail, the asbestos is more likely to be disturbed. For example, when an exterior window recently became detached due to wind and fell into a classroom (narrowly missing a student), asbestos sealant around the window perimeter was almost certainly released in the classroom. This issue is becoming more and more urgent.

13.The roof replacement and repair is of the highest urgency because the current water intrusion is promoting mold and affecting air quality, not to mention damaging the facility on an ongoing basis.

14.Lead paint is present in numerous classrooms and corridors on overhead ceiling trim. With low ceiling heights in several classrooms (accessible to students' reach) and numerous existing roof leaks, the likelihood of the paint being disturbed is high, and so the need for immediate correction.

15.Site Drainage and Water Intrusion. The school building forms 2 courtyards and surface drainage in these areas is a problem. Drainage in some areas is directed towards the building and into the below-grade entry wells. The basement currently floods during every significant rain event due to poor site and stairwell drainage. The urgency of this deficiency is clearly high.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

Existing Project Non-Compliance and Proposed Compliant Solutions:

A replacement school will be designed to comply with all CDE Facility Construction guidelines.

The current facilities do not meet the specific CDE standards listed below and will be corrected with a new facility as follows:

CDE 4.1.2 A weather-tight roof that drains water positively off the roof...

A new facility will eliminate the roof leaks and water intrusion.

CDE 4.1.3 Electrical and Distribution Systems. A safe and secure electrical service

A new facility will provide safe and adequate electrical systems. The new project will allow for new, energy efficient lighting, adequate technology, and safe amounts and locations of power and data outlets to eliminate extension cords and other hazards. Electrical panels will be secured and inaccessible to students.

CDE 4.1.4 A safe and efficient mechanical system that provides proper ventilation...

The project will include HVAC systems that provide adequate heating, cooling and ventilation to each space in the building.

CDE 4.1.4.1 Healthy building indoor air quality...

The project will include HVAC systems that provide adequate heating, cooling and ventilation to each space in the building. The new school will have an efficient and tight exterior envelope to control the interior environment.

CDE 4.1.6 Fire Management. Building fire alarm system and emergency notification systems...

The new facility will provide a complete and effective fire alarm and emergency notification system connected with the local authorities.

CDE 4.1.7 A continuous unobstructed path of egress from any point in the school that provides an accessible route to an area of refuge...

Dead-end corridors will be eliminated in a new building.

CDE 4.1.8 Facilities with safely managed hazardous materials...

Asbestos Containing Materials and Lead Paint will be abated throughout the building before demolition.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

### CDE 4.1.9.2 Video Management Systems

A new security access and monitoring system will be incorporated into the facility

### CDE 4.1.9.2 Controlled Access

Exterior entry points can be minimized and controlled with a new facility design.

### CDE 4.1.9.3.3 Line of Sight. The front entrance should be designed to maximize the line of sight....

The new facility will locate the front office at the building front perimeter to allow for supervision of the entry and the school site.

### CDE 4.1.9.5 Event Alerting and Notification System.

The new school will provide complete video monitoring and P.A. / event notification systems.

### CDE 4.1.9.6.3 Roof Access

The new school design will eliminate easy roof access points.

### CDE 4.1.9.6.6 Bollards at main entrances...

The school entry will provide protection from vehicle access.

### CDE 4.1.13.3 Provide an adequate driveway zone for stacking cars...

Developing a replacement school will allow for the reconfiguration of the site, which will provide better on-site stacking and student safety.

### CDE 4.1.13.5 Building service loading areas...

Developing a replacement school will allow for the reconfiguration of the site, which will provide a separated delivery path not crossing the main entry or other student traffic paths.

### CDE 4.3.1.1 Minimum Occupancy Requirements for Schools

The new school will meet or exceed the minimum adequate floor area for both instructional and shared school spaces.

### CDE 4.4.1 High Performance Certification Program

A new facility will allow for compliance with the HPCP for new schools, most likely through LEED for Schools 2009. The school will address energy-efficiency measures primarily through a high-performance HVAC system, efficient lighting, an efficient building envelope and new fenestration.

CDE 4.5.2 Historic significance... When determining if a facility should be replaced, the cost to rehabilitate versus the cost to replace should be evaluated.

Multiple options for upgrading, renovating or replacing the school building were examined with costs established by local general contractors. It was ultimately determined that benefits of a new facility outweigh the minimal savings seen from limiting the project to a renovation.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Ricardo Flores Magón Academy (RFMA) adheres to a rigorous budgeting and financial reporting process, reviewed quarterly by the Board of Directors and our executive team, which ensures any emergent facility needs and expenditures are immediately identified and allocated. For the past five years, Ricardo Flores Magón Academy has been a fiscally sound entity and the school has consistently maintained positive net assets and generated a positive fund balance carry forward. RFMA receives capital construction funding from the state's Department of Education as a "qualified charter school." The 2015-16 allocation for RFMA is \$75,000.

An expectation at RFMA is that students work with staff to keep our campus clean and in good repair as part of our community's commitment to a "leaving it better than we found it." The school engages the services of a maintenance and custodial team that is charged with maintaining our building's cleanliness and making immediate repairs to our facility.



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Professional tradespeople from our community are contracted to tackle major improvement and repair efforts. Moving forward, RFMA is confident in our maintenance and renewal strategies that have proved historically appropriate and achievable.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

At the time of purchase and relocation the building had environmental and structural concerns but they were not severe enough to prohibit habitation of the space by students and staff.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

In 2011, prior to the current administration, the school took out a loan for \$1.5M to renovate several classrooms, the gymnasium, media center, and to install a sprinkler system throughout the school.

**FY15-16 Charter School Capital Construction Allocation from the State:** \$86,384.00

<b>Current Grant Request:</b>	\$13,404,734.28	<b>CDE Minimum Match %:</b>	16
<b>Current Applicant Match:</b>	\$2,553,282.72	<b>Actual Match % Provided:</b>	16
<b>Current Project Request:</b>	\$15,958,017.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		Third Party Financing, Capital Campaign, and Grants
<b>Total of All Phases:</b>	\$15,958,017.00	<b>Escalation %:</b>	6
<b>Affected Sq Ft:</b>	40,000	<b>Contingency %:</b>	12
<b>Affected Pupils:</b>	351	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$399	<b>Does this Qualify for HPCP?</b>	Yes
<b>Soft Costs Per Sq Ft:</b>	\$61	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$338	<b>Who owns the Facility?</b>	Charter School
<b>Cost Per Pupil:</b>	\$45,464	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	114		As a charter school, our assets will be redistributed to another charter school or non-profit entity.

<b>District FTE Count:</b>	<b>Bonded Debt Approved:</b>
<b>Assessed Valuation:</b>	<b>Year(s) Bond Approved:</b>
<b>PPAV:</b>	<b>Bonded Debt Failed:</b>
<b>Unreserved Gen Fund 13-14:</b>	<b>Year(s) Bond Failed:</b>
<b>Median Household Income:</b>	<b>Outstanding Bonded Debt:</b>
<b>Free Reduced Lunch %:</b>	<b>Total Bond Capacity:</b>
<b>Existing Bond Mill Levy:</b>	<b>Bond Capacity Remaining:</b>



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## CHARTER SCHOOL INSTITUTE

February 24<sup>th</sup>, 2016

Grant Committee  
Capital Construction  
1580 Logan Street, Suite 310  
Denver, CO 80230

Re: Ricardo Flores Magon Academy Grant Application

To Whom It May Concern:

The State Charter School Institute is an independent state agency organized under the Colorado Department of Education, charged with authorizing and accrediting public charter schools.

Ricardo Flores Magon Academy is one of the schools currently authorized by CSI. The school is in good standing with CSI, earning an accreditation rating of Improvement in the most recent school year. In addition to satisfying state academic expectations, the school is also currently meeting standards along financial and operational indicators monitored by the Institute.

The school opened in 2007 serving only 90 students, and today serves more than 350 K-8 students across Adams County. The Institute fully advocates for the programs' identified needs and supports its continued growth.

Please call if you any questions or would like any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kristen Stolpa', written over a white rectangular area.

Kristen Stolpa  
Chief Authorizing Officer  
Charter School Institute

• Facilities Impacted by this Grant Application •

**Delta County 50(J) - MS Addition & Campus Sitework - Delta MS - 1964**

**School Name: Delta MS**

Number of Buildings:	3
All or Portion built by WPA:	No
Gross Area (SF):	65,828
Replacement Value:	\$17,190,415
Condition Budget:	\$4,936,028
Total FCI:	28.71%
Energy Budget:	\$0
Suitability Budget:	\$1,477,800
Total RSLI:	15%
Total CFI:	37.3%
Condition Score: (60%)	2.98
Energy Score: (0%)	3.65
Suitability Score: (40%)	4.35
School Score:	3.53



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Delta County 50(J)

**County:** Delta

**Project Title:** MS Addition & Campus Sitework

**Previous BEST Grant(s) Funded:** 3

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |  |  |   |   |
|--|--|---|---|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof                  | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                |
| <input type="checkbox"/> School Replacement  | <input checked="" type="checkbox"/> Fire Alarm | <input type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement    | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                |
| <input checked="" type="checkbox"/> Addition | <input type="checkbox"/> HVAC                  | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain:       |
| <input type="checkbox"/> Security            | <input checked="" type="checkbox"/> ADA        | <input type="checkbox"/> Window Replacement |   |

**General Information About the District / School, and Information About the Affected Facilities:**

Delta County is a small, rural district located 200 miles west of Denver. Delta County School District 50J (DCSD) includes over 1157 sq. miles of primarily mining and agricultural-based populations. Our county includes Delta, Paonia, Hotchkiss, Cedaredge and Crawford. DCSD provides bus transportation, travelling over 2300 miles a day with 46 buses making transportation a key element of our district. Delta County joined with Gunnison, Montrose and Mesa County to service students that geographically are closer to our small towns, highlighting the importance of each community to the western slope. Delta has two elementary schools, one middle school, one high school and one alternative school for high school students, servicing Mesa County students. Hotchkiss Middle School offers a K-8 education and Hotchkiss High School services Montrose County students in addition to Delta County students. Paonia has one elementary school and a 7/12 school, servicing Gunnison County students. Crawford has an elementary school that also serves Montrose County students. Cedaredge has an elementary, middle and high school.

DCSD also sponsors a charter school that we provide space for in each community. Delta County is also home to Delta Montrose Technical College, a public institution governed by the DCSD Board of Education. The primary location for this college is Delta with additional classroom space in the town of Paonia. It is designated by the Colorado State Board for Community Colleges and Occupational Education as the agent for postsecondary vocational training in Western Colorado. The service areas include Delta, Gunnison, Hinsdale, Montrose, Ouray and San Miguel counties.

The geography of Delta County and its five communities creates challenges in our common goals. The Delta community includes 48% of our student populations which allows for more opportunities in that community. Our goal is to balance the needs of all communities and create the best possible solutions for all. With decreasing population in the Paonia and Hotchkiss communities, our biggest challenge is servicing the needs for the Delta area without creating anguish in the other schools. DCSD created and maintains the working document of our Master Facility Plan (MFP.) In 2001 DCSD contracted with Architect, Michael Jacoby to create a district wide facility plan. This MFP (a working document) evaluated the entire district and each facility laying a guide to help us deal with facility deficiencies.

We address our MFP improvements and continue to improve and maintain facilities with our major projects of Garnet Mesa Elementary (addition completed in 2007) and Cedaredge Elementary (completed 2012). Our board continues to commit funding for projects such as our roof schedule, fire alarm replacements, high efficient boiler and hot water heater upgrades, ventilation systems, intercom/phone systems/security systems. DCSD is innovative using our house employees to perform facility mechanical upgrades, carpeting, mechanical controls, and smaller renovations.

Delta Middle School has reached the point where this project must be done. We have committed to community meetings over the past two years seeking support of a bond for this project. Although it is unanimous that the need is there, county officials, leaders of the community and DCSD board feels the local economy cannot support any increase in taxes to our

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

already stressed businesses which commit to 29% of their assessed valuation (AV) and 29% of their personal property (AV). Property owner residents pay 8% of assessed property value. Our largest businesses were the coalmines and the railroad. This past year extensive layoffs in the coalmines has caused lack of support to related businesses of the mine from hydraulics, electricians, janitorial supplies to car dealers.

### Deficiencies Associated with this Project:

Delta Middle School complex is a 6th through 8th grade facility containing 502 students at October count and currently has 509 students attending. The complex utilizes 5 separate buildings on a 16.9 acre site partially shared with the BELA Preschool building. The main building is the primary building used for 7th and 8th grade classroom, elective classrooms and science rooms were constructed in 2004. The gymnasium is in a separate building across a bus drop off road that extends through the property. The music center where we have band and choir classes, is over 400 feet from the main building. The fourth area is the cafeteria, which is again a separate building, where students are required to cross the bus road and a portion of the parking lot for breakfast and lunch. The last area is the building located to the south of the main building where we have the primary rooms for the 6th grade and computer labs. Once again, student must exit this building, travel through the main building, cross the bus loop and parking lot area to migrate to the core classes to elective classes and lunch. Delta County School District is dedicated to each student's safety and academic success. With this building's dedication to unity of students and staff, the issue of outside classroom access is a major safety concern. Students that require small groups or one-on-one assistance must be escorted to the appropriate room for special assistance. This movement requires valuable resource time and personnel. Listed below is an outline of the deficiencies for the projects we are proposing.

The south building selected for demolition is made up of core classrooms for the 6th grade students and computer labs. This 14,850 square foot building was constructed in 1994 as the Junior High for the Delta community. Eighteen years later it was designated for 6th grade students only, due to the growth of the area. The building has been maintained. Although the foam roof has deteriorated, the options of installing a new system is too costly for the condition of the facility, considering all of the building issues. The flat framed roof would require a tapered insulation system – a construction of a parapet wall to hold the insulation on the perimeter and increase roof drains which would require total reconstruction. To drain the water off roof scuppers could create ice and safety issues so a scupper design is not desirable.

Our greatest concern for our administrative staff at the site is the ability to supervise the campus. Although the administration is vigilant in monitoring the campus; with 5 separate buildings, most of the time the only people in the different areas are students and teachers. The pressure to keep the exterior doors of those buildings locked is an impractical reality. Constantly students travel from building to building, so inevitably doors are opened. Doorways are unattended and not supervised. Another main safety issue is the communication through the campus. We have limited phone lines to each building and the intercom and fire alarm for the Gym and Music across the bus drive are not connected to the main middle school building. The system is connected to the Bela Preschool because they are part of that building. The cafeteria is required to be on BELA fire alarm system due to the proximity of the building to BELA.

The foot-traffic before and after school requires all hands on deck to manage the student flow through the campus- whether the student is getting off the bus going for breakfast, or school.

Major facility issues include, non-rated/non sprinkler building, fire alarm, communication and access to main building, safety in design, air quality and ventilation system, electrical distribution and circuits.

Life safety issues are present in the building, non-sprinkler, and corridor is non rated- glass visual windows are above the lockers and non-rated doors are in the facility. Although the fire alarm system in connected to the main building, there is only a pull station at the exterior doors, visual and audible devices are present; no active smoke or detection devices exist in the building. The amount of time takes an administrator to reach this portion of the building in too long.

The main entrance of the building is accessible throughout the day, individual rooms can be locked, but there is no monitoring of the core or hallway other than a camera system that is fed to the office of the main building.

The building was constructed in 1964 (6th grade wing) had very little electrical load requirements. The existing system has only one circuit for 3 classrooms and only 3 outlets per room. The increased use of computers and electronics in the classroom forces staff to use power strips to increase the number of available plugs surges the load of the circuit and causes circuits to trip or overheat. Surface mount wiring is required for upgrade due to the lack of plenum or attic or space above the hard ceiling to the computer lab which is running additional electrical 20 amp circuits to feed the lab, this is limited due to the size of the service and panel size in the building.

The building domestic water distribution systems in place under the concrete slab with galvanized pipe have reduced flow due to hard water scales and building up or rust inside the pipe. This material causes low flow and flush valve and faucets



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

malfunctions. Although the domestic hot water heater has been updated several times and galvanized pipe has been repaired in the boiler room over the years, replacing the pipe would require exposed pipe or cut slab to route new lines throughout the building. The sanitary sewer lines are of equal defect, although the exterior clay tile lines have been almost completely replaced. The deteriorated steel pipe under the slab has issues as well- these deteriorated lines create slow drain times causing waste to not flush. Papers disposed in drains cause snags and this facility requires reaming of the piping system. This building has the typical issues of any other building of its age. Per School Assessment Report filed with CDE items beyond useful life should be replaced: mechanical system, boiler & piping system, ventilation system, exterior windows, exterior doors, partitions, interior doors, floor finish, ceiling finish, domestic water distribution system, plumbing fixtures, domestic water main feed, sanitary waste, rain water drainage, controls, fire protection system, electrical distribution system, lighting branch system, communication system, fixtures and furnishings just to mention a few. Every one of these issues is of great concern.

The building construction is typical for the time. Little consideration was taken during that era for building efficiency, air quality or thoughts to the Americans with Disabilities Act, which of course came into effect in 1990. Although some concessions have been made, the building restrooms are far from compliant. The heating system for this existing building is hot water that is piped along the exterior walls to wall pack units, the fresh air dampers on these units have to be homemade due to the age of the units, the controls used to operate the dampers are obsolete, with many operating on homemade repair parts. The Exterior walls are CMU with brick veneer with one –two 3x5 windows. The aluminum frames transfer heat and are externally inefficient.

Throughout the years several options have been evaluated by engineers and architects. In 2006 architect Ken Hunt reviewed options for connection and upgrade the facility. Options were considered for installing a trussed roof system, but additional structure footing would be required and with the main building issues, in his professional opinion, the building was not a viable candidate for renovation.

The existing cafeteria building is a 1965 constructed 7,818 square foot post and beam building. This building is also slab on grade with the same deficiencies as the 6th grade building. This past year the sewer system completely failed. We bored horizontally under the building and replaced the main line to the sewer system. Through this effort it has been determined that the entire sanitary system needs to be replaced. As you can only imagine in a commercial kitchen setting this will entail removing the entire floor. The domestic water system was originally galvanized and was under slab and came up through the CMU walls to the appropriate locations- CMS walls with little insulation caused extreme issues in the winter months with freezing. In 2002 the water distribution system inside the building was replaced with surface mounted copper lines to feed each fixture. This building has a plenum space that allowed for the water lines to be distributed above the ceiling tiles and only dropping down at the locations required.

The fire alarm system and communication are limited in this space as well. The fire alarm is connected to the BELA Preschool due to its proximity and only pull stations are in this building as well. No fire sprinkler system is present and no rated separation is in the building.

The heater itself is forced air natural gas, this again was replaced in 2002 but the distribution system is metal ductwork that was poured under slab and remains in use today; condensation builds up due to the uninsulated ducting and moisture has deteriorated some of the duct.

The exterior CMU walls of this building provide little insulations and the curtain wall window system that runs the length of the east and west sides of the building have no insulation value.

Although the issues of the building itself are significant, the number one issue is the location, and the proximity to the middle school has placed this building as our priority. Students are required to cross the parking lot and the bus loop to access the cafeteria. With the tremendous increase of free and reduced lunch students and the breakfast program, the concerns have escalated over the past few years. This building has no significant value and the cost of renovation would exceed the value of the asset. Therefore, this building is not a candidate for renovation.

The music rooms that are the furthest point from the main building have no notable building deficiencies. The safety issues are communication with the main building, administrative supervision, and open access. The proximity creates a huge challenge requiring students to travel over 400 feet outside through the parking lot. By providing these rooms in the new addition, students will not have to cross the campus to attend music class. On a side note, our BELA Preschool program will be able to utilize this space for The Backpack Program. The Backpack Program is a unique free, home based preschool program that helps support parents in their role as their child's first and most important teacher by providing backpack boxes every month to use at home with their child. This move will free up a space on the main level of BELA for an additional classroom. Not only would this grant affecting the students of Delta Middle School but also the early childhood program for the entire district.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

The site safety is of significant importance of this application, the parking lot, one way parent drop off and the relocation of the bus loop is all meaningful to the project. (Please review the sketches provided)

### **Proposed Solution to Address the Deficiencies Stated Above:**

The plan submitted has been reviewed by our consultants with extensive research done on the traffic flow and patterns around the Delta Middle School Site. We have had input from our local police department, city officials, district officials, parents, and students. Clearly, the issues of the facility are a potential threat to the entire staff.

The design of the site will create a designated entry point to the campus. The main entrance point is moved so that it is accessed off of 8th Street, which will help the traffic flow of Grand Avenue (a major street that runs north & south). Flow will assist in preventing stopped traffic on a major road. Once entering the site, the road will split creating a single lane one-way entrance to the parking area or continuing through the site in a counter clockwise motion and exiting on 9th Street to the east. This will now move all traffic away from bus traffic. A right-turn-only sign will guide the exit traffic off of the site. This lane is a conversion of the existing bus loop that runs through the site separating the cafeteria from the gym and music room. Students no longer will cross a bus lane to enter from the parking lot or parent drop off area. The new bus loop will be constructed on the west side of the campus. This existing loop is also extended so that the exit of the loop is at a 4 way stop. No longer will traffic or buses travel in front of the gym or through the site. The demolition of the cafeteria will eliminate students from congregating in the parking lot at breakfast and lunch. The courtyard will be created in front of the gymnasium, creating a gathering space that is located in a secure fenced area. This area will have benches and shade structures for students to gather during breaks; parents and teams can also gather during events.

The construction of the classroom and cafeteria wings has the additional rooms constructed on the east side for music. Children will no longer be required to exit and travel over 400 feet outside in an unsecure environment. The addition also provides the solution to the communication problems throughout the campus. The single intercom system will allow for easy contact. The fire alarm system update will make all facilities safer. Documentation of the need for this type of renovation can be found in, "Keeping Your Schools Safe & Secure Practical Guide" by the Center of Education & Employment Law and the "Public School Facility Construction Guidelines" provided in the grant documents.

The installation of the secure entry doors and auto open and remote locking components installed on the 2004 main building and the gymnasium will allow the facility to be locked with a touch of a button. The security monitors on the fire exit doors will allow administration to know if that door is tampered with.

The Construction of the classroom and cafeteria will remove the risk of unsafe water supply caused by the deteriorating galvanized pipes. The inadequate airflow causes fatigue in students due to the carbon monoxide in the air. In 2007, after the construction of Garnet Mesa Elementary School, the scores for the 3rd Grade CSP/TSAP showed an increase in performance by 44% in just that first year. That achievement went up an additional 13% the following year. Increase airflow and comfort in a school makes a difference in academic growth. (See attached Garnet Mesa Elementary School 3rd Grade CSAP DATA).

The proposed addition also looks at the computer testing and computer rooms in the schools of today. The design team for this facility built in 1964 could not have ever imagined the mandates for public education today. The proposed computer labs will be constructed with the standards for today's building (reference Energy Star Facility type K12 Schools) demonstrating that over 20% of our electrical consumption is used in our general outlet. This project will utilize the standards form Energy Star and update the technology equipment that will save energy used by those devices along with lowering the cool requirement due to the development of those devices.

Restrooms and special education rooms are a huge factor in today's school. Over the last few years the SPED number has increased 10% since 2011. The new building will be designed with a severe needs room and special education room; the current facility utilizes a typical classroom to accommodate special education students.

The proposed replacement of the cafeteria will provide many of the same solutions in the facility itself including air quality, sewage clogs and energy saving.

The proposed plan creates a safer environment for the students.

### **How Urgent is this Project?**

The condition of the entire site poses a catastrophic threat. The site itself, through development changes has not been improved. One issue we have found in site development is that limited funding is always used to address specific needs. Adequate funding is rarely available to address all the student safety on the site. Site and building security demands in today's school are critical factors to consider, but the use of multiple building and motor vehicle in and around student's migration path cannot be acceptable. The time to offer our students a safer environment has never been more prevalent



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than today. On the building side the issues are easier to describe. Both buildings, selected for demolition are similar in deficiencies. The life safety systems of both buildings are installed with equipment that is no longer available. The systems are a board or a component away from being inadequate at best the total system needs replaced. The cost to update one system with our long term plan to replace the buildings is not practical or fiscally responsible when you look at the entire building is evaluation. Communication is also a relevant concern for staff and administration; this is also difficult to put a time line on, knowing that the building poses a significant threat to our students and staff. The pipe decay we know is an issue at this site. Last year we replaced the main sewer line that ran to the cafeteria. Through this evaluation we have determined that the entire waste system has expired and immediate actions need to be taken. Both buildings lack ADA compliant restrooms, of course we can cut up the floor, redo the plumbing layout, and make it so it will work, but that is not a solution. The roof coating on the foam system has separated making the maintenance coats applied not able to meet warranty criteria. A new roof is required, but in 2013 we were forced to again coat the roof, which is delaminating today. The boiler system circulation pumps were replaced in 2014, at this time the system was flushed, restrictions and pipe decay were documented. The electrical distribution systems in these buildings are inadequate for the current electrical usage and the outdated breakers do not meet the safety derating of circuits allowing. The importance of this grant today is that if we cannot come up with the funding to replace these outdated buildings we will be forced to renovate the existing buildings with district funding and at the end we will have a functional building with site safety issues still as our top priority.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

Delta County School District 50 Facilities Department has adopted as a baseline the Public School Facility Construction Guidelines as our standard operation procedures for construction. Every project we have completed over the last 7 years has used the guide as basis of design which includes IBC –ASHRAE, and compliance codes required by the State of Colorado. Section 3 Codes Documents and Standards. This facility will be constructed per 2015 IBC. The building will be constructed in a high performance manner with the criteria to meet the LEED v4 standards. All standard codes, plumbing, electrical, fire will be met or exceeded as required by the Colorado Department of Public Safety, including the Rules & Regulations Governing Schools by the Colorado Health Department and local agencies.

#### Section 4

##### 4.1 Sound Structure

Delta County School District is committed to designing this facility for long term goals which includes the sound construction of the facility. The foundations system will be spread footing on over excavated compacted structural fill. The footing will be an ample size to support the CMU walls which will create the long lasting shell of a facility. The Building will be supported with a combination of steel structure and concrete masonry units with the exterior lower portion being a split face to provide depth and texture to the facade. We will incorporate vertical steel panels on the higher portion of the building to bring in some of the architecture from the existing building. The insulation of the building walls will include continuous foam panels and insulated framed walls on the interior side of the exterior walls, this will provide additional insulation plus a raceway for future wiring to be added to the wall cavity and, of course, drywall interior finish.

##### 4.1.2 Roofs

The roofing system will be of low slope TPO 60mil membrane. The white surface will assist in the LEED requirements and provide a long lasting system. The membrane will be installed per firestone specifications and provide a minimum of a ¼ inch slope to be incorporated into the structure. Beneath the membrane is an ISO board that will equal an R52 value of insulation for long term savings. The vertical metal panels used on the project will not have exposed fasteners and will be a standing seam similar to the existing building. The metal will be greater than 24 gage and will be prefinished to meet a 50 year specification.

##### 4.1.3 Electrical

The electrical transformer of the existing building must be relocated and will be replaced with an adequate size transformer a low voltage for outlet use and an additional 480 high voltage transformer for increased efficiency of our mechanical and lighting systems. We will install some new gear in our existing electrical room on the north wall to accommodate the high voltage system; the existing distribution system will be expanded. Two small electrical rooms are constructed into the new space for distribution centers.

##### 4.1.4 Mechanical

The mechanical system selected for this project is a heat pump system with a hybrid hot water loop to maintain the constant 70 degree required by each individual heat pump. A cooling tower will be constructed outside the facility utilizing our climate and evaporative cool to maintain that loop temperature in the summer months. A complex management system is installed

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

on the mechanical system to monitor the heat pumps and provide data on efficacy of the system to maintain a high efficient model. The individual system in the classrooms will allow us to utilize carbon monoxide sensors to monitor the levels in each space and adjust the airflow accordingly. Energy recovery units will allow us to recover exhausted air that leaves the building and transfer the heat or cool back into the fresh air we are putting back into the facility, again allowing for a more efficient building.

### 4.1.5 Plumbing

The plumbing system will provide safe water and comply with Colorado Primary Drinking water regulations and the IPC 2015. Adequate fixture counts will be installed. The Service tap size will be re-routed and increased to accept the new additions and kitchen load. Backflow preventing system will be updated to accommodate the building size.

### 4.1.6 Fire Management

Fire Management, the building alarm and emergency notification system will be updated for the entire facility including the main middle school existing building, conforming to Colorado Division of Fire Prevention & Control CCR1507-30 – to include addressable devices, internal audible and visual alarms and external monitoring system network based. Two additional fire hydrants will be placed on the west and south side of the complex. The new addition will be fire-sprinkler and monitored.

### 4.1.7 Path of Egress

A facility code analysis will be conducted to verify the path of egress meets the standards set by the state.

### 4.1.8 Facility Safety managed hazardous materials

With the replacement of the old wings, the asbestos containing material in the building will be a non-factor. The specification will note and architect will verify on asbestos containing material, led based paints will not be used on the project. The Demolition plan addresses the method of removal. The current building has a chemical hygiene plan and follows the procedure. The existing chemistry labs are in the main building and included in this grant in funding to install a chemical hood system in the chemistry lab. Radon tests are on record for this this facility and additional samples will be taken after completion of the project.

### 4.1.9 Security

9.1.9.1 Video System- The camera system currently used will be updated to an IP protocol networked based system category 6 lines will be used throughout the addition and new construction area this includes the monitoring of interior and exterior. The exterior doors will be monitored and notification will be sent to the administration office if unauthorized exiting occurs.

### 4.1.9.2 Controlled access

The additions solve the multiple entrances problem for the campus limiting the access to one location and the gymnasium will have an automated lock that can be activated from the office. All other doors required for egress purposes will be monitored by the security system. Panic hardware is used as required throughout the project. Heavy duty commercial exterior steel doors are used throughout the project. The interior doors are solid core commercial wood doors with patented keyway systems will be used for locks- intruder door hardware is installed to each room allowing for the room to be locked from the inside. Door frames are metal and hangers embedded in the CMU with grouted frames. We specify heavy duty hinges with bearings and fixed pins.

### 4.1.9.3 Front Door Security

The front entry of the existing facility currently has a vestibule that proceeds directly to the office counter with clear visible sight to office personnel. New hardware and auto open/locking devices will be added to corridor doors allowing the office staff to open or close the doors with a push button, controlling all access to student locations. Checking and badging is controlled at this location.

### 4.1.9.4 Door locks/intrusion detection

Exterior entry doors will have monitored door locking devices that are controlled form the office  
Classroom doors will use intruder locks that are lockable by key from the inside of the room, as adopted by Colorado Division of Fire prevention and Controls.

### 9.1.9.5 Notification System

The existing building and the new additions will be updated with a new intercom/phone system. Phones will be installed in each room allowing for communication throughout the campus. Individual room paging, group paging or all call functions will be used. An additional paging system will be installed for exterior and common space paging that will include separate speakers in each room.

### 4.1.9.6 Secure Site

The site will have adequate LED site lighting for parking areas, walkways and building security. The main entrance located on the north of the building is covered and will go directly to the controlled courtyard at the gym entrance that is fenced and secure.

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### 4.1.10 Health Code /4.1.11 Food Preparation/equipment/4.1.12 Emergency Care

Delta County School District works directly with the Delta County Health Department on the Public Health and Environmental Rules and Regulation Governing Schools and complies to all regulations therein.

### 4.1.13 Site Safety

Physical routes are the top priority of this site design; we have been working with the city of Delta on the traffic plan. The plan separates traffic patterns from parent, bus, pedestrian, and staff.

#### 4.1.13.1 Separate bus, cars pedestrian and bicycle routes

The previous parent drop off zone will be extended to accommodate the required buses. This site route will place bus exit point to a 4 way stop where alternating traffic allows buses to exit the site safely and controlled.

#### 4.1.13.2 Dedicated bus staging

The bus staging/pickup drop off zone will be located on the west side of the campus. This designated bus location does not interfere with parent drop off or staff parking. The zone is extended so that the exit point is located at the 4th point of the 4 way stop allowing for alternating bus exits and consistent traffic flow.

#### 4.1.13.3 Parent Drop off zone- stacking –

Parent zone is a one-way lane for student drop off in a counterclockwise pattern, allowing parents who drop off students direct access to the front entrance without interfering with bus traffic. The lane incorporated part of a previous bus route and directs traffic away from the building and parking areas to a street east of the main campus access road.

#### 4.1.13.5 Sidewalks

New sidewalks are including accessing the site from 8th Street and Grand Avenue. A courtyard in front of the gym is blocked off from traffic creating a place for students to gather. This area is landscaped with natural vegetation to include benches. The service entrance is located on 10th Street south of the main building. The primary service entrance is used to access the kitchen, this entrance is a buzz-in entrance or maintenance staff has access.

#### 4.1.13.6

The sidewalks will be provided parallel to the parent drop off on the right hand side. A fence will separate the lane from the vehicle traffic. This path will terminate at the courtyard where bike racks will be located.

#### 4.1.13.7 Fire Lane

Fire lanes shall conform to Colorado Division of Fire and Preventions and local agency guide.

#### 4.1.13.8 Playgrounds

Playground located on the east side of the site shall conform to ADA Act and applicable code requirements.

### 4.1.14 Designated Emergency shelter

Delta County School District has continued our relations with local disaster plans and has agreement for each site in the district.

## 4.2 Technology

Network needs of the campus. The original building had classroom space that was used for computer rooms. The increase heat load and inadequate ventilation and power make the room difficult to manage. This design incorporates a Media Center designed for the computers and high volumes of data and needs associated with computer rooms. The design has operable walls that allow for smaller testing locations with the open concept that would be adequate for an entire grade level. The building itself is designed for the future. Our technology department works with the design team to prepare for the future; raceways in the core construction will allow for new data lines to be added. Wi-Fi locations are located throughout the building and are in the new additions. We can monitor each device on each WIFI device allowing us to assist in controlling the speed of the Internet. Fiber optic lines are put into each IT room where it is split for the CAT 8 wire. The Media room will be set up for direct cable as well as wireless connections. Each classroom will have cabling for direct wire and wireless as well.

## 4.3 Building Site requirements

Delta County School District uses these guides as key element in our design process-

### 4.31 Gross sf per student

The total gross footage for this site is 139 sf. per student not including the gymnasium which is shared with the BELA Preschool program. With this footage, the space used by the students in grades 6-8 at Delta Middle School is 159 square feet per student. The classroom sizes follow the standards set forth in the document.

## 4.4 Building performance standards

This building will be designed using the High Performance Certification Program – the addition is over 5000 sf.

### 4.4.1 High Performance Certification Program

LEED V4 is the standard we are reviewing for this major renovation project. Our goal is to achieve the highest rating economical possible. At this time this is the approach we are looking at due to our LEED Gold Cedaredge Elementary School

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completed in 2012.

CO-CHPS Delta County School district is reviewing this model of certification as an option.

### 4.4.2 Renewable Energy

Renewable Energy is in the preliminary design for the project with a 10kw site and Solar Thermal 100,000 BTU system to help with our hot water demand in the kitchen.

### 4.4.3 Energy Management

The Energy star guideline will be used on the panning of this project. Energy Modeling will be used to evaluate the systems.

### 4.4.4.3 Efficiency items included in the design

Increase ventilation, ERV, Energy star, Increase continuous wall insulation

Heat island reduction, light pollution reduction, indoor water use, water metering, cooling tower water use, enhanced commissioning, optimize energy performance, renewable energy, enhanced refrigerant management, construction waste management, low emitting materials, construction indoor air quality management plan, thermal comfort, interior lighting, daylight, acoustic performance.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

The Delta County School District has a planned program for the Maintenance and Operation of the school facilities. This comprehensive plan for the maintenance of buildings, grounds, and equipment is designed to provide for the optimum safety and comfort of the occupants. Equally important, this plan is also designed to guarantee maximum efficiency of each building and equipment and to minimize the need for major repairs or replacements.

The characteristics of this maintenance plan are predicated primarily on prevention, which allows for optimal plant capabilities. It also provides for a more deliberate approach to funding the maintenance and operations sections of the budget.

#### Objectives of Maintenance

The primary objective of the maintenance program is to have optimal plant running capability with a vigilant eye on proper conservation of energy and manpower. Corrective maintenance and preventive maintenance during the 40-year life expectancy of the building can be performed to prevent future cost and/or shutdowns. Repairs or replacements are necessary to maintain the buildings, grounds, and fixed equipment in an operable condition. Specifically this can be further broken down as follows:

1. To provide buildings which function at optimal efficiency.
2. To maintain the buildings and grounds and fixed equipment in such a manner as to eliminate or reduce to acceptable levels, fires, accidents, and safety hazards.
3. To provide continuous use of facilities without disruptions to the educational program.
4. To protect public property by planned, scheduled, and repair maintenance.
5. To conserve energy by ensuring that the maximum results are obtained with a minimal expenditure of energy. An award system is in place for schools that conserve electricity.
6. To provide maintenance program which will produce the maximum amount of maintenance for the dollars expended.
7. To be vigilant in all facility inspections.

#### Certification:

Boiler and pressure vessel certification is performed annually by our insurance carrier. The Colorado Pressure Vessel also performs unscheduled, on-site audits to insure that the Delta County School District maintain a safe environment in compliance with major regulatory requirements.

Environmental matters that relate to indoor air quality, water quality, and other environmental safeguards are managed by the Director of School Facilities, specific maintenance workers and when needed, independent testing laboratories. When questions regarding environmental issues are presented, the appropriate maintenance workers and/or appropriate testing laboratories are contacted to perform and to subsequently monitor issues that may emanate from specific schools. Reports and findings are returned to the schools and corrective measures are taken, if so warranted.

Delta County Joint School District annual budget for the Delta Middle Complex

Maintenance: \$16,500

Custodian supplies: \$20,500

Grounds: \$5,900

Inspections: \$1000

Kitchen Maintenance: \$1,900

Delta County Capital Fund is \$300 per student allocated to the District General Capital Construction fund 2015/16 total 4978

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students \$1,493,400. This fund is allocated to major project throughout the district. Included in the attachments are the capital project funded in the past two years: 2015-16: \$1,891,377 and 2014-15: \$1,728,009. As agreed in the documents provided, Delta County School will commit \$100/student out of this fund for this project capital program.

Delta County School District is committed to the maintenance and upkeep of our facilities.

Today's building are constructed differently that they were years ago. In the 1980 and even prior to those building systems were relatively simple. The boiler were atmospheric with very little controls, you heated the water and distributed it throughout the building with a constant water flow and some type of thermostat that controlled the space. Fresh air was, open a window and air quality was looked at as what was outside not the off gasses in the building itself. The lighting system was ballast and a bulb with a switch at the door. These system would last a long time with very little money to keep them running. Times have changed. High efficiency boiler we put in in 2010 which were one of the top PK boilers have an MV board- That has been replace at two times on every one boiler, The boards have change- the technology since 2010 is far more advanced that it was just 6 years ago. These boilers are soon to be obsolete, simply because controls are obsolete. The boiler controls put into a 2012 building at one facility required update this past year. The new software update required a larger JACE a \$10,000 update performed in 2015. Look at the lighting system, years ago we could buy \$13.50 ballast and fix a light- now we purchase a \$143.00 dimmable DOLI ballast, not that I want to bring up the controls to this monster. With daylight sensors, computer operating systems and things like this. Look how often you have to upgrade your computer. Times are changing- Updates are a huge factor in today's buildings. No longer are roofs- the big deal. Making sure you save for these items are relatively easy, we know an EPDM roof is 20-30 years. We can handle that. A heat pump on the other hand are a different story, life cycle analysis predict the heat pump is 24 years. That is if the control system manufactures use continues in this ever-growing market but at a cost of \$12,000 each and we have 43 in one building to meet the energy requirements of today's building this is a big deal school districts are going to be faced with over the next 50 years. We understand this maintaining what you have is even more important today than ever. Our staff is committed, but funding in the future will become ever more of issue.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The cafeteria was constructed in 1965 and the 6th Grade Building was constructed in 1964. Both were constructed as new buildings for the District. At the time of construction, the current 6th grade building was constructed to serve as a Junior High for the Delta area. The Cafeteria was constructed to serve as the lunchroom for both the High School that vacated the BELA preschool building in 1981 and the Junior High building. During the 1960's site security was of little interest, so the distance between buildings was not a factor in the design.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$11,288,058.44	<b>CDE Minimum Match %:</b>	55
<b>Current Applicant Match:</b>	\$3,371,757.72	<b>Actual Match % Provided:</b>	23
<b>Current Project Request:</b>	\$14,659,816.16	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		Capital Reserve Fund
<b>Total of All Phases:</b>	\$14,659,816.16	<b>Escalation %:</b>	5
<b>Affected Sq Ft:</b>	203,828	<b>Contingency %:</b>	20
<b>Affected Pupils:</b>	502	<b>Historical Adverse Effect?</b>	No



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<b>Cost Per Sq Ft:</b>	\$72	<b>Does this Qualify for HPCP?</b>	Yes
<b>Soft Costs Per Sq Ft:</b>	\$14	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$58	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$29,203	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	406		NA

<b>District FTE Count:</b>	4,502	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$399,305,154	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$88,685	<b>Bonded Debt Failed:</b>	\$49,900,000
<b>Unreserved Gen Fund 13-14:</b>	\$4,685,334	<b>Year(s) Bond Failed:</b>	08
<b>Median Household Income:</b>	\$42,424	<b>Outstanding Bonded Debt:</b>	\$15,865,000
<b>Free Reduced Lunch %:</b>	52	<b>Total Bond Capacity:</b>	\$79,861,031
<b>Existing Bond Mill Levy:</b>	4.8	<b>Bond Capacity Remaining:</b>	\$63,996,031

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

For questions 4-11

Only answer the questions which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your school district.

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1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES.

A 55% match on a \$14.6 million project is \$8 million The requested 23% match would result in a \$3.37 million match. If the District had to borrow the additional \$4.63 million it would cost approximately \$380,000 per year on a 20- year COP.

Perhaps the greatest impact on the classroom is that these funds would most likely allow the District to address salary issues for our teachers. During the recession, salaries in the District were frozen for five years. The District was able to give a step increase plus a 1% COLA for the 15-16 school year. Teacher retention has become an issue because the two districts that adjoin us are able to pay three to five thousand dollars more per position. We have been losing quality staff to those districts. We must try to become more competitive with salaries.

The availability of those additional funds could also allow the District to continue to fund updates to our curriculum. In FY 15-16 the District updated our math curriculum. The cost was \$400,000 and it took two years to save the funds. In FY 16-17 we hope to begin saving to update our Language Arts curriculum. The estimated cost is \$500,000. The plan is for Science and Social Studies updates to follow.

The District also has to address technology needs. In addition to computers to meet testing requirements, the District has to address server, switch and Wi-Fi network needs.

The funds would also allow the District to begin to address security issues at our schools if available. A recently performed risk assessment by our insurance underwriter pointed out numerous security weaknesses at our schools that should be addressed sooner rather than later. The list of other possibilities for the funds is lengthy and could



include route buses (our newest route buses are 2004 models), HVAC Systems, rooftop units, parking lot resurface, restroom partitions, carpet (our high schools still have the original carpet from 1981 when they were built), classroom lighting upgrades, furniture replacement needs, library materials, band instruments and more.

2. Please describe why the cost of complying with the match contribution would significantly limit educational opportunities within your school district or BOCES.

The only way for the District to come up with the additional \$4.63 million in match referenced in question one is to borrow the funds. The estimated \$380,000 annual payment for 20 years would limit the District's ability to address the many needs described in question number 1.

The sixth grade wing needs to be replaced. There are not enough funds to do that and to begin to address the other needs within the District without a reduction in the match requirement.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants, or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

The District participates in a quarterly meeting of the local municipalities, the county and the local hospital. This project has been presented to this group seeking any assistance possible. The only offering to date is a letter of support. Delta County as an entity is also feeling the impacts of the recession which was enhanced to the point of depression by the numerous layoffs in the coal mining industry. The City of Delta (where the project is located) has a revenue stream that is limited to sales tax and fees. They do not have a property tax. They do not have the ability to contribute to this project at this time.

The District is a member of the Delta County Economic Development organization. This body was also approached. They researched grant opportunities and found none for schools directly. Their annual budget is around \$100,000, so they are unable to make a significant contribution other than moral support.

The District has also been active in seeking out grants to help offset costs in other areas in order to save funds for this project. Grants include a \$250,000 physical education grant, a GOCO grant for outdoor education, a counselor grant which allows us to hire 8 school counselors starting next year, an early literacy grant, a Colorado Community Resource grant, grants to help build our high school Advanced Placement program and many others.

4. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

We are aware that our current position is in the top 1/3 of the statewide average. We know this number is going to change because of the rapid decline in the coal industry. One of the three coal mines in the district is now closed (Oxbow). A second mine (Bowie) is laying off all employees and idling the mine in July of 2016. The other mine in the District (West Elk) is currently in bankruptcy.

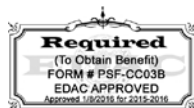
The sharp decline in assessed valuation will not hit for a couple of years due to the structure of the property tax system in Colorado.

5. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

The newest data from the State and Federal Government concerning household income is for the year 2014. We feel that these numbers do not reflect the current and future situation in the District. The recent collapse of the coal mining industry in the District will dramatically impact this number. The mining industry has the highest paying jobs in the area and hundreds of those jobs have disappeared.

6. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

When the coal industry in the area was at its height in the 12-13 school year, the percentage of Free and Reduced lunch eligible students was 36%. As the mine layoffs hit, that number has increased to more than 50%. The Food Service Director state that number is nearing 60% as of March of 2016. We also feel that there are a number of our eligible mining families who have not applied because of pride.



7. Bond Election failures and successes in the last 10 years – The more attempts the school district has had, the lower the match.

The District had a failed bond issue of \$49.9 million in 2008. Since the start of the Great Recession, the School Board has not felt that any additional attempts would pass. The Recession in Delta County is sliding towards a depression with the mine closures and the additional loss of mining support businesses and jobs.

The School District's General Fund mill levy of 22.656 represents 45% of the average property tax levy in the District. According to the state demographer in 2014, 22% of households in Delta County were retirees, 7% (not including retirees) were receiving public assistance and 6.5% of the households were single parents. These demographic numbers have changed today as many young people left the county seeking work or are taking public assistance. It is an extremely difficult environment in which to pass a bond issue. The last successful mill levy elections in the county were a fire district and a recreation district. These elections were over 15 years ago. All other tax increases have failed.

8. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

9. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

The 20% test of assessed valuation results in \$79.8 million of bonding capacity. The District has \$13.1 million in outstanding GO bonds. However, the assessed valuation numbers are skewed. The coal mines and the railroad spur serving the mines currently make up 40% of the assessed valuation in the District. The decline in this industry will begin to dramatically reduce assessed valuation beginning next year. This will result in a smaller tax base to fund potential bond issues. With more of the tax burden shifting to the homeowners and small business owners, a successful bond election becomes even less likely.

10. The school district's unreserved fund balance as it relates to their overall budget.

The unassigned fund balance as reported in the June 30, 2015 audit was \$5,931,862. However, the District has been saving for this project and in January of 2016, the Board committed \$3.5 million of that balance to the match for this project. That leaves \$2,431,862 in unassigned fund balance.

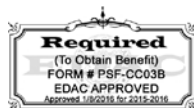
The District transfers \$300 per student to the capital budget annually and some additional transfers for specific needs such as buses. On average capital represents 8% of the overall budget. On a per pupil basis this would mean that Delta Middle School would receive \$150,000 of capital funding.

11. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

We would like to thank you for the opportunity to submit this waiver. Over the last several years the District has faced many challenges with the impacts of the 'negative factor' and our declining enrollment. We remain committed to excellence both in the classroom and in the facilities we provide.

We feel that this is the most favorable time to complete this project. The economic opportunity for completion of this project in the future is reduced by several factors:

1. The projection for state revenues is flat at best due to increased Medicaid costs. This will limit the School Board's ability to use the committed reserves for this project. If it is delayed, the Board may be forced to use the funds to meet other capital needs such as school buses. (Our newest route buses are 2004)
2. We do not see the revival of the coal mining industry in the foreseeable future. The negative impacts will continue to spread through other parts of the local and regional economies.
3. The costs of the project will continue to rise in the future. Our ability to pay those increased costs is not rising.



• Facilities Impacted by this Grant Application •

**Kipp Sunshine Peak Academy - Sunshine Peak Academy Classroom Replacement - 2005**

**School Name: KIPP Sunshine Peak**

Number of Buildings:	2
All or Portion built by WPA:	No
Gross Area (SF):	22,850
Replacement Value:	\$7,186,458
Condition Budget:	\$369,952
Total FCI:	5.15%
Energy Budget:	\$0
Suitability Budget:	\$2,219,900
Total RSLI:	43%
Total CFI:	36.0%
Condition Score: (60%)	3.63
Energy Score: (0%)	2.88
Suitability Score: (40%)	2.11
School Score:	3.02



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Kipp Sunshine Peak Academy

**County:** Denver

**Project Title:** Sunshine Peak Academy Classroom Replacement

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** In our letter dated June 11, 2015 it states, "In terms of specific feedback, the Capital Construction Assistance Board generally agreed with the need and solution of the project and recommended the project to the short-list. The short-list was prioritized and the project fell below the amount of funding available."

## Project Type:

- |  |   |   |  |
|--|---|---|--|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                     |
| <input type="checkbox"/> School Replacement  | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework                 |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                     |
| <input checked="" type="checkbox"/> Addition | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input checked="" type="checkbox"/> Other, please explain: |
| <input checked="" type="checkbox"/> Security | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | Addition is replacement for temporary modular              |

## General Information About the District / School, and Information About the Affected Facilities:

KIPP Colorado's first school, KIPP Sunshine Peak Academy, opened in 2002 to 80 5th graders, with the mission to equip our students with the academic skills and character strengths necessary to succeed in college and the competitive world beyond. KSPA is now serving 393 5th through 8th graders. KIPP Colorado currently has five schools in the DPS system, serving over 1,500 students across all grades.

KSPA is ranked the 6th best middle school in DPS, according to 2015 PARCC scores. Our 8th grade scores were the 5th highest in the district for English language arts and 8th highest for math. Curriculum is highly focused on strong academic habits that will bring and keep students at and over grade level. We use data regularly to adjust lesson plans and invest in teacher professional development and coaching.

Currently 97.5% of KSPA's students are eligible for free/reduced lunch, and 92.1% are English Language Acquisition students. KSPA students are primarily from the surrounding neighborhoods, which historically are home to newly arrived, low-income, and transient families, and hold some of Denver's most low-performing neighborhood schools.

One of KIPP's Five Pillars for success is "Safe & Structured Schools", where students are both physically and emotionally safe to maximize learning. KIPP remains committed to serving the students in Denver's most underserved neighborhoods. Investing in a permanent facility will allow us to remain a high-quality option for the families.

We believe our current KSPA facilities put our students at a significant safety and health risk because of our facility limitations, defects, and needs. KSPA is a school with two unattached buildings. The walkway between the two buildings is completely open and unsecured. (See "KSPA BEST Existing Site" Attachment).

At least 75% of our students walk in an outdoor, unsecured area between the buildings 2-5 times per school day. Our modular building is not equipped with a secure vestibule or buzzed security system. It does not have a sprinkler system, has limited HVAC capacity, limited electrical outlets, and has fully exposed electric and gas service. Although regularly maintained, the building is nearing the end of its useful life.

The age of our modular and limited space raises concerns regarding indoor environmental quality in terms of primitive thermal comfort (students often wear jackets all day), limited daylight and outdoor views, inadequate ventilation, and noise intrusion in all rooms. Our students have classes in the hallways on the floor, and during inclement weather, physical education is held either in the cafeteria or the stairwells of our neighboring high school. The roof on the modular was replaced because of mold and age and we closed school for multiple days because a pipe broke, which flooded the building. These and other inadequacies, combined with location, place our students at a high safety risk.

The current KSPA facility consists of 11,375 sf in the main building and 11,475 sf in the modular building. The main building holds four classrooms, cafeteria/kitchen, administration, and related support spaces. The structure is made of slab on grade concrete floors with load bearing CMU walls and a ceiling/roof structure of open-web wood chord trusses. The modular

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

building hosts twelve classrooms, restrooms, and limited support space. It is a wood framed structure covered with painted metal siding. The foundation system consists of stacked concrete masonry supporting a series of steel support frames from which the structure of each modular section rests upon. The recent flood showed the modular building currently slopes down to the northwest. KIPP Colorado Schools has always maintained the current facilities. KSPA currently has a maintenance plan, we will review the plan with Denver Public Schools, make appropriate revisions to reflect the needs and upkeep of the new space, and share maintenance responsibilities.

### Deficiencies Associated with this Project:

1. Because the school is housed in two separate buildings, class transitions, lunch hour, meetings with a social worker, health screenings, or Special Education support time exposes our students several times a day to the outside environment. KSPA's two buildings are located between two other school buildings in the DPS system (See "KSPA\_Neighborhood" Attachment) in an urban area of southwest Denver. Since inception KSPA has been and will remain committed to serving this community. At the same time, we are also aware that crime, and other social issues are currently an inevitable factor in this area. As a result, we believe that separated buildings no longer serve the safety, security, and health of our students.
2. Related to deficiency item #1, we currently have multiple entry points to each building, none of which are fully secure. We do not have a card key entry system on the campus, and no video entry monitor at the modular building. We are forced to rely on the buildings being locked and unlocked manually. The doors and door frames are damaged and have been difficult and unable to lock at times. Building entries are unprotected from vehicle intrusion. Collectively, this creates security risks for students and staff.
3. The majority of classes at KSPA are held in a modular classroom building that has reached the end of its effective useful life, both in terms of space and physical condition. In 2014, KIPP replaced the roof and repaired significant damage from a broken water pipe. KIPP has not been able to fully assess whether these leaks have caused structural damage to the modular, but we have had to address mold issues in insulation, ceiling tiles, and carpet, and had to replace hallway tiles with carpet.
5. Limited electrical outlets in the modular building have required the use of strip outlets to meet load demand in the classrooms, especially during mandatory testing. While there is a need for these additional outlets, they present tripping hazards and occasionally overload circuits.
6. Electrical and gas service to the modular building is fully exposed and accessible on the west side of the building presenting a safety risk.
8. Classrooms in the modular building are small (700 sq. ft.) overcrowded (24-30 students/room), and lack of storage space creates rooms where students sit extremely close to each other, teachers are challenged moving between desks, and access to needed materials is difficult. As a result, we have low indoor environmental quality, and we are concerned about continuing our current level academic achievement in this environment.
9. Similar to above, the modular building has relatively small windows that no longer lock appropriately, an HVAC system with limited capacity, and generally low ambient electric light levels. As a result, access to fresh air, daylight, proper light levels, and views is extremely limited in these rooms. In addition to impacting student attention and performance, there is a potential for impact on the health of all occupants.
10. The school currently has limited areas for active play. During inclement weather students are not able to play outside and must use the small cafeteria or stairwells at the neighboring high school. Due to the limited space in the school, a portion of the cafeteria has been repurposed with movable partitions for student detention and book storage, further limiting the space available for meals and activities. This limitation also has a direct impact on overall student health, attentiveness, and performance.
11. We have relatively limited restroom facilities for staff and students. This has put a strain on maintenance of the overall facility, particularly the modular building. Overused and unclean restrooms, and fixtures in need of repair can create health issues for occupants.
4. The permanent main building currently does not have a sprinkler system, nor does the modular building. We are concerned about the fire safety in the over-crowded conditions at the school.
7. Despite recent upgrades to the network and communications infrastructure at KIPP there are deficiencies in communications capabilities that could have an impact on safety, security and health in emergencies. These include limited communications redundancy, no voice communication power backup, and limited overall network power backup capability
12. Multiple entry points, lack of vestibules, uncertain building envelope performance, and limited lighting capabilities limit our capability to operate an energy efficient school.

### Proposed Solution to Address the Deficiencies Stated Above:

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

KIPP Colorado has invested heavily in KIPP Sunshine Peak Academy and the adjacent Rishel campus where KIPP Denver Collegiate High School is located, in order to provide adequate facilities for our and DPS schools in this area. We intend to serve the southwest Denver community indefinitely.

After a series of detailed strategy meetings internally, and two lengthy master planning workshops with Denver Public Schools and our architect, KIPP Colorado has determined that the most cost effective and long term solution is to proceed with replacing the current modular classroom building with a permanent facility that connects with the existing main, permanent building. This two story addition will consist of classrooms, storage, staff space, and related service spaces. We believe this solution will optimize student and staff safety, security, and health at the school. It will also be a path to enable student physical activity, and provide a more safe and effective learning environment for our students into the future.

Our team recognizes the physical constraints of the KSPA site and is proposing as efficient a floor plan as possible to meet our anticipated long term needs while also addressing the safety, security and health concerns we have identified. The proposed addition will replace the 12 modular classrooms with 14 classrooms of 840 s.f. each, 1 lab style classroom of 900 s.f., and one special education classroom of 900 s.f. Each classroom will include storage and counter areas and appropriate network technology for future growth. The addition will include additional restroom areas, breakout areas, offices/workrooms, wider corridors to more easily accommodate evacuation, lockers, and student movement, and be fully accessible per ANSI/ADA requirements with required doorways, ramps, and an elevator. Network and communication systems will be upgraded to support a more safe and secure school environment, as well as provide anticipated telecommunications needs now and in the future. In order for the school to remain operational during the estimated year of construction, the master plan allow the existing modular to remain in place during construction. This will avoid unnecessary costs for renting or constructing a temporary classrooms during construction.

We intend to meet the Office of the State Architects HPCP with either a LEED Gold Certified, or CHPS Verified Leader building. Among the strategies to be used include: The schools urban site allows for the ready accommodation of many of the Sustainable Site Credits. We expect to use water efficient fixtures and landscape strategies. The addition will leverage a combination of daylighting, fluorescent/LED lighting, enhanced building envelope, energy efficient HVAC strategies, and be prewired for renewable energy options to optimize energy performance. Window to wall ratios will be consistent with the ASHRAE A.E.D.G. for Schools recommendations. We anticipate using low emitting materials while also optimizing the specification of materials with regional and recycled content. We will enforce construction indoor air quality requirements through specifications, and site observations.

The proposed facility will be fully compliant with the new 2015 International Building Codes now in place with the State of Colorado. The construction type of the addition is expected to be IIB and will be fully sprinklered. We currently anticipate using steel frame construction with continuous exterior insulation and interior battes, and a combination of masonry and metal siding for durability and cost effectiveness. Where appropriate tubular daylight devices and skylights maybe considered in offices and/or breakout learning areas with limited access to daylight. A storefront window system may be used in limited areas such as the entry and adjacent to stairs.

The remaining permanent classroom and administration building configuration will remain largely untouched except for where the addition will come in contact with the west wall and roof areas. Minor renovation is anticipated in the corridor area adjacent to the addition to repair carpet, remove and patch at current exterior doorways, and minor repainting of adjacent surfaces. Minor upgrades to science classrooms, building site protection, HVAC, and water efficiency may be considered in the context of overall building design, program requirements, and consistency with curriculum goals. The overall facility will receive appropriate and needed fire and security system upgrades to be consistent with CDE Public School Construction Guidelines.

The site is relatively flat and we do not anticipate significant modifications to the site beyond what is necessary for the grading and construction of the addition. Our design team's past experience with the site anticipates little to no issue with soil conditions. Water, sewer, and electrical service will be sized appropriately for the new structure. The parking and drop off areas are proposed to be modified for smoother traffic flow with additional parking accommodated on the Rishel campus. Landscaping will be native vegetation and low impact.



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

We will be coordinating further with Denver Public Schools to identify additional outdoor play space behind the new building that will be more secure for our students.

### How Urgent is this Project?

KIPP Colorado and Denver Public Schools has determined that the correction of the deficiencies is an extremely urgent matter. The modular classroom has limited useful life remaining. We currently have invested approximately \$1.2 Million and including purchase and maintenance, and believe the cost effectiveness of repairs to it is diminishing. At the same time, students remain exposed and at risk traveling between buildings in an urban area. With KIPP's finalized master plan, in partnership with DPS, we intend to proceed with Schematic Design of the building in early July 2016, and proceed with Construction Documents, Bidding and Construction soon thereafter (following all required protocols). The targeted opening of the complete facility is August of 2018.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

Upon completion, the combined areas of the school will be 42,454 GSF (30,784 GSF new, and 11,670 GSF existing), resulting 80 GSF/student at a current student count of 380. This would be consistent with a school facility that does not offer a gym, or auditorium. The master plan does consider the possibility for a gymnasium in the future. Auditorium space is shared with the adjacent Rishel Campus where the KIPP Denver Collegiate Academy program is located. Smaller student gatherings occur in the existing cafeteria

#### New Construction:

-Typical classroom (14) at 840 s.f. each: At a preferred 25-28 students / classroom = 30-33 s.f. / student including storage space. The typical existing modular classroom offers only 700 s.f. / classroom and no storage for 25-28 s.f./student. The increased room area and two additional classrooms from the modular will allow for more flexible learning environments, room scheduling to meet curriculum needs, and increased student comfort.

-Lab capable classroom (1) at 900 s.f.: Provides additional flexibility in curriculum scheduling and offerings to better align with 21st century learning objectives. This room is intended to have increased power capabilities for additional computers, printers, 3d printers, media, and other future technology or equipment

-Dedicated Special Ed classroom (1) at 900 s.f. – Includes a restroom, office, and storage, leaving a classroom area of approximately 700 s.f. The school currently does not have a dedicated Special Ed room and is only able to offer limited services to existing students and the community.

-Small Group (4) at 170 s.f.: Currently break out learning occurs in the corridor of the modular or in already limited administration space. These rooms will provide dedicated learning space for one on one and small group learning, as well as private teacher parent/student meetings

-Storage (multiple) - approximately 1000 s.f.: The modular and existing building have very limited interior storage, including a portion of the cafeteria where shelving has been added for book storage. All other storage is currently being accommodated in exterior sheds.

-Staff workroom (1) approximately 690 s.f.: Allows the existing administration area to return to primarily office and student support use. Anticipated to include (2) additional faculty restrooms at 80 s.f. each

#### Existing Building to Remain:

Cafeteria = 2300 sq.ft.

#### Exploratory Learning Classrooms:

-Media: 930 s.f.

-Science (2): 925 s.f. each

-Art: 950 s.f.

Administration = 2100 s.f. (includes offices, reception, nurse's station, restrooms)



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

The capital renewal and maintenance plan for the addition/replacement building at KSPA will be the shared responsibility of KIPP Colorado Schools and Denver Public Schools. Both entities are committed to maintain, upgrade, and replace building systems on a preventative cycle and as they reach the end of their useful life. Since we moved in, KIPP Colorado Schools has been maintaining the current structures, and Denver Public Schools have been masters at facility development, maintenance and replacement for multiple decades. The combined depth of capacity and experience of these two organizations will allow us to appropriately plan and implement an applicable capital renewal and maintenance plan and schedule.

KIPP Sunshine Peak Academy currently has a Maintenance plan, but because of the capacity of the addition, we anticipate we will review the current plan in the context of the new addition, and make appropriate revisions to reflect the needs and upkeep of the new space.

### Maintenance Plan Creation:

From construction project documents, a detailed Asset Management Calendar will be made outlining the building system assets, contact information, warranties, preventative maintenance required, and end of life cycle expectancy. The Maintenance plan will follow that of our current facility maintenance plan.

The Maintenance Plan exists in the form of table or calendar, outlining the following; dates of maintenance needed or expected, the system and warranty to be addressed (for example: security system with warranty expiring 2018), the activity to be completed (for example: security system audit, internal painting, fire equipment check and maintenance, etc.), the frequency (annually, semi-annually, monthly, etc .) and the record of the result of the maintenance (including current state, repair or upgrade made, expected needs for the future).

Through the Facilities Planning Division and the Maintenance shops, facility assets such as boilers, chillers, carpet, asphalt, etc. are inspected, rated and given a condition index. This index will reflect the current condition of the asset, the remaining life cycle and estimated cost for replacement. This information will be stored in the asset database (Tririga) and can be used to manage historical information such as maintenance and repair work performed, opportunities for repair and maintenance and other life cycle cost requirements based on depreciation, inflation, etc.

A few examples of maintenance intervals include:

- Change filter every 3 months
- Check damper every 2 months
- Paint interior surfaces every 10 years or as funds allow
- Lubricate air handler bearings quarterly

An example of inspection schedules include:

- Check filter condition monthly
- Check and clean area in front of intakes every month
- Check thermostat operation/calibration quarterly or at inspection date

Currently, we do have maintenance/operations staff on sight, and also utilize Denver Public School's First Call Department and Facility Maintenance departments for additional support. Operations quality control inspectors inspect DPS buildings on a bi-monthly basis to ensure proper safety, health and cleanliness standards are being followed by the staff. Each building is rated and receives a building condition index (BCI) based on the buildings overall cleanliness and other criteria.

### Capital Renewal Budget and Operational Maintenance Budget:

Per the requirement of the BEST Grant application, KIPP (in partnership with DPS funds) will create and keep a capital reserve fund, at the level required, \$100 per pupil per annum. This will build annually to replace and repair building systems and equipment as needed. The Maintenance Plan will allow us to budget for specific needs of the building throughout the years on an annual basis, and plan for the collection of additional contingency funds as needed.

As part of our current operations, KIPP Colorado Schools already budgets for Land and Equipment needs, Operational

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Maintenance, Technology, and Facility Contingency Funding. As we have shown by saving for and budgeting for some significant upgrades needed so far on our temporary modular building, we believe we have a strong understanding of what is needed through budget planning to support and upkeep a permanent facility. Denver Public Schools currently budgets for and upkeeps over one hundred facilities.

### Expenditure Process:

As part of the annual fiscal year budget process of KIPP Colorado Schools and KIPP Sunshine Peak Academy, KIPP's Director of Regional Operations, KSPA Director of School Operations, and Facilities Manager (from Denver Public Schools and/or KIPP), will submit a list of prioritized projects that are eligible for funding in the coming fiscal year(s). Eligible projects will be funded either from an annual amount of money allocated in the annual operational budget, OR be targeted for completion through the use of the capital reserve fund (see Annual Project Planning Process below). Targeted projects will primarily be outside of normal maintenance (such as listed on the Maintenance Schedule).

### Annual Project Planning Process:

There will be an annual planning process where projects can be submitted for renewal, upgrade or maintenance consideration. The projects must address a renewal or deferred maintenance need in order to be considered. Emergency projects will be considered throughout the year. Projects that can be considered include infrastructure improvements (such as installation of fire suppression equipment, new roofing, heating and cooling conditioning system upgrades, new electrical systems, etc.,) that may extend the life of the facility and protect the capital investments of the state. There will be a committee to review submittals, including representatives from KIPP and Denver Public Schools.

Requests will contain a project description, justification, scope, and a detailed estimate, which needs to cover the cost of purchased services plus materials.

Projects related to safety and security, and student health and wellbeing will get priority.

Based on the allotted amount in the capital and deferred maintenance reserve, funding determination will be made on how much is to be used for the identified project and how much is kept in reserves for emergencies or deferred projects.

The capital reserve account shall never go below \$100 per pupil times the number of pupils in any fiscal year, to be held as a minimum for emergency projects.

Projects that are requested by the school but not eligible for either general Denver Public School funds or the capital reserve fund may be supported by Denver Public Schools but paid for by private funds raised by KIPP Colorado Schools.

In addition, the owner of the building will depreciate the building per GASB accounting protocols and audit and 990 requirements.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The application for KIPP Sunshine Peak Academy is for replacement of an existing modular public school building in order to create a more secure, safe, and healthy environment for students. Currently, KIPP Sunshine Peak Academy is housed in two separate buildings on the same site. The first is a permanent structure, built by Denver Public Schools in 2004-2005 as new construction. This building has four (4) classrooms, a cafeteria, restrooms, and administration space. Due to limited bond resources available from DPS at the time, this is the only permanent structure on the campus. In order to accommodate the remaining classrooms that were required for the school, the initial master plan included two additional, smaller, separate buildings. At the time of construction and in order to meet an immediate need to open the school on time, it was determined that KIPP Colorado (not Denver Public Schools) would purchase a single, temporary modular building consisting of twelve classrooms and related service spaces (See "KSPA BEST Existing Site" attachment). This modular was purchased new in 2004, and held an expected 10 - 15 year life span. The school has been extremely successful academically, but unfortunately this has meant that the heavy usage of the modular has had a negative impact on the long-term life of the building, and it has reached the end of its effective useful life. Because the modular's purchase created a campus with two separate structures, students need to transfer between the structures multiple times per day, creating a situation where the school had to normalize their unsecure and unsafe environment.

A review of the mechanical and electrical systems in the modular building indicated that while the mechanical system was

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

generally functional, temperature control and adequate ventilation was an issue. In addition, lighting levels by the lensed, recessed fluorescent troffers were dim and offered only a single switched level of control. Small windows provide limited opportunity for daylighting. The main building systems were in good condition with only minor upgrades recommended. The main building allows for better classroom daylighting and electric lighting is provided by direct/indirect pendant mounted fluorescent fixtures.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

KSPA has been part of the Southwest Denver community since 2002. In 2005, KIPP purchased a modular building for \$1,001,991, for which we made our final payment this year (2016). This modular was purchased as a permanent home for this school, not as expansion space. We have spent approximately \$200,000 on updates and repairs to the modular in order to maintain the building since we purchased it. This included an extensive roof repair in 2014. In addition to this, in the Fall of 2014, a pipe broke and flooded 75% of the modular. Our insurance company paid out approximately \$95,000 in clean – up and repairs.

In addition to investments in the modular, we also demonstrated our commitment to the students of Southwest Denver through our investment in the DPS-owned Rishel facility that is immediately adjacent to south of the KSPA campus. Our high school, KIPP Denver Collegiate, invested \$131,400 in order to create a CHAASA regulation football and soccer field, to be shared in use by the high school and KSPA middle school. These fields are frequently used by KSPA students as we have extremely areas for outdoor activity at the middle school. While we do not own the land, we felt this investment was worth the return in providing middle and high school students access to fields that are enjoyed at other schools across the district.

**FY15-16 Charter School Capital Construction Allocation from the State:** \$101,582.00

<b>Current Grant Request:</b>	\$4,976,281.00	<b>CDE Minimum Match %:</b>	49
<b>Current Applicant Match:</b>	\$4,976,281.00	<b>Actual Match % Provided:</b>	50
<b>Current Project Request:</b>	\$9,952,562.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		2012 Bond Proceeds
<b>Total of All Phases:</b>	\$9,952,562.00	<b>Escalation %:</b>	7
<b>Affected Sq Ft:</b>	42,454	<b>Contingency %:</b>	8.28
<b>Affected Pupils:</b>	393	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$234	<b>Does this Qualify for HPCP?</b>	Yes
<b>Soft Costs Per Sq Ft:</b>	\$55	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$180	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$25,325	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	108		The applicant is a Charter School: The KSPA Campus currently has two separate buildings, one permanent four classroom building owned by Denver Public Schools and one temporary modular building owned by KIPP Colorado Schools that was purchased as the permanent facility for this school. The proposed security upgrade/ modular replacement will connect the existing permanent facility with the new addition/replacement and will belong to/revert to Denver Public Schools.

**District FTE Count:**

**Bonded Debt Approved:**

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Assessed Valuation:**

**Year(s) Bond Approved:**

**PPAV:**

**Bonded Debt Failed:**

**Unreserved Gen Fund 13-14:**

**Year(s) Bond Failed:**

**Median Household Income:**

**Outstanding Bonded Debt:**

**Free Reduced Lunch %:**

**Total Bond Capacity:**

**Existing Bond Mill Levy:**

**Bond Capacity Remaining:**

February 3, 2016

To Whom It May Concern:

Denver Public Schools' Portfolio Management Team ("PMT") is the authorizer of all Charter Schools in the District. This includes the approval of new schools, continuous monitoring of performance and compliance, as well as contract renewal processes.

DPS has been working with KIPP Colorado Schools since its founding in 2002. We have authorized five schools operating in the KIPP Network and they are our among our highest performing schools in the district, and have met and maintained all covenants in their charter contract. Throughout their history of operation, KIPP Colorado schools have been in compliance with all Federal, state, and District requirements.

DPS has been made aware of KIPP Colorado School's intent to apply to the BEST program in order to gain resources to resolve the safety and security issues of the current facility housing KIPP Sunshine Peak Academy, and leverage both the resources available from the District and the charter school's own resources.

Denver Public Schools and the Portfolio Management Team endorses and fully supports KIPP Sunshine Peak Academy's application to the Colorado Department of Education's BEST Grant Program.

Please feel free to contact me at any time with further questions or needs from the district.

Sincerely,



Maya Lagana  
Director of Quality Assurance and Accountability  
Portfolio Management Team, Denver Public Schools  
[Maya\\_Lagana@dpsk12.org](mailto:Maya_Lagana@dpsk12.org); 720-423-2588

• Facilities Impacted by this Grant Application •

**Skyview Academy - Complete Fire Sprinkler System -- 1996**

*No Statewide Facility Assessment Information Available*



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Skyview Academy

**County:** Douglas

**Project Title:** Complete Fire Sprinkler System

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** This project was part of our submission last year with the 15-16 Best Grant year. The reason for the non-award was stated in the letter as more details needed on the vacancy period of the building and renovations. Details were also needed on the due diligence of the scope and budget.

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework                 |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input checked="" type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | Fire sprinkler system replacement                          |

## General Information About the District / School, and Information About the Affected Facilities:

SkyView Academy (SVA) is a public charter school located in Highlands Ranch, CO and authorized by the Douglas County School District under a 5-year contract due for renewal in 2017. The school opened in August of 2010 and currently serves 1337 students and 150 staff members. SkyView Academy offers a research-based, content-rich program using the Core Knowledge Sequence in grades preschool-8, followed by an integrated Classical Curriculum in grades 9-12. Students work together across grade levels on service projects in the community, and character education is woven into everyday life at SVA. SkyView is a strong, viable school that is thriving in the public school community of Douglas County.

### Academic Program

The core foundation of SkyView Academy's program is centered on the idea that knowledge builds upon knowledge. The depth and breadth of a student's knowledge will be a key indicator of his/her ability to comprehend reading, think critically, and solve problems. School leaders ensure the development and implementation of the academic curriculum is in consistent alignment with the mission and vision of the school.

### Athletics and Activities

SkyView Academy's Athletic Program mission is to develop, enhance, and preserve the educational and character values, and leadership opportunities of interscholastic athletics. The school offers the following CHSSA 3A Metro League Sports for Middle and High School: Boys/Girls Soccer, Boys/Girls Basketball, Volleyball, Baseball, Track & Field, Cross Country and Boys/Girls Golf.

### Student Achievement

#### SVA 2014-2015 PARCC Results

PARCC testing was completed in 3rd through 11th grade at SVA in 2014-2015. This is the first year for the PARCC state test. For elementary, grades 3 and 4 were above state and district numbers, while 5th was same as DCSD. For the middle school, grade 7 was above state and district numbers, grade 6 was lower than district and grade 8 was lower than state and district. For all high school grades, 9, 10 and 11, they scored higher than state and district in all subject areas.



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

## SVA High School ACT Results

ACT defines college readiness with a benchmark score indicating a 50% chance of obtaining a B or higher in the corresponding credit-bearing college course. The total number of SVA 11th Graders tested in 2015 was 48, which is a minimal sample size, and SVA still out-performed the district and state of Colorado.

## General Facility Characteristics and Project History

The building was originally constructed in 1996 as a commercial use building for Home Depot. After multiple years of being vacant, SkyView was able to acquire the facility for use as a charter school. The 13.74 acre site contains one school building, a turf field, an outdoor playground and parking for staff and students. The school building is 150,000 square feet.

The designer hired for the renovation of the building was SlaterPaull Architects. All standard engineering and code compliance requirements were reviewed and approved and the final design was implemented. The renovations included adding classrooms, gyms, cafeterias, sound barriers, new windows, bathrooms and exterior entrances/storefronts.

## Deficiencies Associated with this Project:

This BEST Grant application is submitted to address deficiencies in the SkyView Academy (SVA) facility fire sprinkler system.

In the original renovation of the project, in the 2009-10 school year, the fire sprinkler system was addressed by the appropriate engineers. The system would typically be expected to last 50 years or more, if maintained. The fire sprinkler system did not operate continually during the time of building vacancy, but it was determined initially that the system could be used with a few repairs allowing the school to operate.

While the system might have appeared to be in good working condition at first sight, during the construction period of the 2nd phase, leaks began to appear in the system. A consultant/contractor, Frontier Fire Protection, was brought on site to review and troubleshoot the system. The system sat unused for multiple years, without water, which also allowed oxygen in the pipes and lead to accelerated corrosion and pinholes.

The first major leak was discovered over a break, in our second year of operation, in 2010-2011. For 6 hours water flooded a Kindergarten classroom and the front office area. The system needed to be shut down and drained to be worked on. The repairs were made to this section only. Each time the system is shut down to be fixed, students/staff are not allowed to be in the building unless all adults are on a fire watch. This is not a typical or reasonable responsibility for any staff member who is in charge of the education and safety of many students at one time. When the first section of the system was fixed, the pipes are filled with 90 lbs. of water pressure. The pipe section that was not fixed yet saw rust increase and pinholes grow. The next major succession of leaks totaled seven, and occurred over a 2 week period. These leaks to date have caused over \$28k in repairs, damage to equipment and classroom furniture, and an additional \$10k has been spent on restoration services to dry out the damaged rooms.

These leaks are not only causing fire protection issues (when a system shutdown occurs), but also result in drywall, carpet and electronic repairs in classrooms. When a leak happens in a classroom, student learning is disrupted and they are displaced to a makeshift classroom until the repairs can be completed. Leaks must be handled properly on the flooring and in the walls of the classrooms to inhibit mold or mildew from growing. Some hallway and classroom floors are polished concrete and become very unsafe when water is present.

During the 2nd phase, the project team was proactive in making all possible changes in scope to free up both extra funds and more time in the schedule. The construction team actively worked to replace one-third of the Fire Sprinkler system on the north side of the building where the need was the highest with most of the leaks occurring in this area. This work can only be done during non-school hours since the fire system is completely turned off and the building is under fire watch. An additional one-third of the system was replaced in the summer of 2015 over the gym floors and entry. One-third of the system remains in need of replacement, which is the most labor intensive area due to the elementary side having dropped ceilings. These ceilings need to be removed to access the pipes.

In summary, the fire sprinkler system issues at SkyView present challenging health issues, educational delays, and potentially

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

harmful safety concerns. The operational and financial hardship that the school has endured and if not corrected, will continue to endure, has resulted in short-term fixes that do not address the problems for the long-term success of the students, families, and staff at SVA. Please see the photographs on the disc included with the printed packet that document such described leaks. The photos detail leaks on the ceiling tiles, the condition of the rust from leaks on our interior ceiling.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The solution to fix the deficiency with the fire sprinkler pipes is to replace the remaining one-third of the system. Repairing each pinhole is not cost effective. Also, repairs now are on a reactive basis and result in additional costs to repair damaged walls, floors, and electronic systems. Our greatest concern is a leak to the system that requires an immediate shut down. If an emergency would happen during this shut down, the system would not be able to assist in putting a fire out. The fire sprinkler system must also remain on to operate the school for student's safety at all times. In the event of a leaking pipe, the system must be shut off to fix the piping therefore resulting in interruption of our educational program and increasing costs, hard and soft, for immediate repair. We are asking for this replacement to maintain the educational integrity of our program without continued interruption and for the safety of all children and adults on our campus.

### **How Urgent is this Project?**

SkyView Academy's fire sprinkler system is a very urgent item. This system is a complete unknown and should a pipe leak occur the school would have to suspend classes until it could be resolved. Not many charter schools can survive such an event due to no access to alternative spaces for relocating students and staff. SkyView Academy must address the fire sprinkler system as soon as possible and remove this risk altogether in order to protect the integrity of our program and health and wellness of our students and staff.

The ongoing cost to continuously repair the fire sprinkler system is a financial strain on the school's operating budget. It follows, that the total cost for the fire sprinkler replacement is a massive expense to SVA's operating budget. Charter schools must fund all capital needs with per pupil revenue, so when repair and maintenance needs begin to demand more than the recommended amount of debt service and capital expenses, the education of the students in our classrooms will suffer. SkyView Academy takes the responsibility of delivering our mission and vision to our large student body and strive for excellence in all aspects including facility safety.

The timeline for the projects will be to start right after school is dismissed at the end of May 2016. The contractors need the maximum amount of summertime to complete these projects. Fransen Pittman will be on site starting in June to monitor the fire sprinkler project. The required completion of the projects is July 15, 2016, before teachers and students return for the next school year.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

The fire sprinkler system project conforms to the Public Schools Construction Guidelines, adopted on 12/5/2014, per the following sections below:

Article 4.1 Health and safety issues, including security needs and all applicable health, safety and environmental codes and standards as required by state and federal law. Public school facility accessibility.

-4.1.6 Fire Management-Replace a leaking automatic fire sprinkler system with all new piping. This is a current overhead system that is in need of pipe replacement. Conformity of the system will be followed via the Colorado Division of Fire Protection and Control.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Our maintenance program is managed by the Operations Manager with support from a Building Engineer and Head Custodian with oversight by our Executive Director and Business Manager. Currently our maintenance program includes scheduled inspections of the fire sprinkler system once a year. The inspection includes a detailed review of the control valves, wet and dry systems, alarms, sprinkler heads and sprinkler piping. This is done by an outside firm, specializing in this line of work. This maintenance program for the fire sprinkler will continue after all pipes are replaced and brand new. It is our intent to not have these issues repeat themselves and maintain the safe upkeep and operation of these systems with no shutdown periods as seen in the past.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

SkyView maintains an annual budget amount for Property Improvements and Repairs and Maintenance. These budgets increase at a rate of 10% each year. These items are also 2% of the SkyView's overall budget. In the event of larger maintenance items, SkyView is required by our Trustees to hold a Repair and Replacement fund with the Trustee of our Bond Issue. This fund is currently being funded at .5% of the operating expenses each year. Our expectation is that by 2018, we will have reached the 2% threshold, ultimately growing this reserve fund to approximately \$200,000 for repairs and maintenance. In the years after the requirement has been met, SkyView will continue to reserve funds in the Repair and Replacement account. It would be expected that the .5%, if not more, is added each year.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Please note that no state assessment has been completed for the SkyView Academy (SVA) facility located at 6161 Business Center Drive in Highlands Ranch, CO 80130.

The SkyView Academy facility had been vacant for over 5 years when purchased by the Douglas County School District (DCSD) on behalf of SVA in 2010. It is SVA's understanding that the school district conducted standard due diligence on all facility conditions as part of the facility purchase. SkyView Academy paid a monthly lease to the DCSD for use of the facility from 2010-2012.

This lease arrangement was possible due to the DCSD agreeing to use their Certificates of Participation (COPs) to finance the transaction on behalf of SVA as a new charter school. The first phase of renovations were completed in 2010 so the facility could open and serve grades PK-5 in its first year. A Facility Master plan with detailed analysis of the building was completed by SlaterPaull Architects and is attached to the application packet.

Upon charter contract approval from the DCSD for a high school expansion in 2011, SVA pursued independent financing and purchased the entire facility from the district in 2012. All subsequent renovations and sole ownership of the facility were then held by the charter school. This final phase of renovation was complete in April 2013.

Overall the school building is in fair condition and being put to use by the 1500 students and staff that occupy it for up to 18 hours each day. However, there are areas of concern that could impact the long-term health and safety of those occupying the building. Thus, SkyView Academy is pursuing a BEST grant to support the replacement of one-third of the fire sprinkler system. The proposed project is detailed more in the Integrated Program Plan Data.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

The original building purchased for SkyView Academy was previously a warehouse used to store inventory for a large box business. The building had been vacant for approximately 5 years and was priced at the high end of comparable properties in the local area. The Founding team of SkyView Academy inquired about the facility early in 2005, and although it was too expensive at the time, we maintained a watchful eye on it for the next few years since it was one of the only properties in Highlands Ranch that could be feasible for our school. In 2009, with no other options available, the school's founders decided to try to buy only a portion of the space. Plans were then in progress for purchasing only half of the square-footage so the school could open as planned serving grades PK-5. Interestingly, once the national economic downturn occurred in the fall of 2009, the price was drastically reduced and the whole building became much more affordable. This allowed the founding team to purchase the property early in 2010 and begin making a long-term plan to build a bigger school that could ultimately serve grades PK-12.

The long-term plan for building SkyView Academy included several phases of renovations that would need to take place over the first 6 years of operation. A phased approach was necessary due to the capital financing limitations that charter schools face. The early phases included building the elementary side of the building which included creating classrooms, office areas, playgrounds and a cafeteria to serve students in grades PK-5. In later phases, the middle and high school side was completed, adding classrooms, office areas, gyms and locker rooms, and outdoor fields. These improvements were sufficient to make the

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

school suitable for students; however, a few portions of the overall project had to be tabled due to limited funds.

Engineers were able to predict that the roof was in good shape, but nearing the end of its useful life in approximately 3-5 years. It was determined that this high-priced replacement could be postponed until more funds were available. This was a difficult decision to make due to the unknown costs of chasing leaks, however it was decided to budget for this fix annually and continue with operation of our successful and growing school. Engineers also determined during the remodel phases that the fire sprinkler system had pinholes and leaks. It was determined that the system piping needed to be replaced. Fortunately, in 2014, the leaders at SkyView were able to refinance the existing capital debt and include additional funds in the new loan to partially support these remaining projects. To date, these funds have been used to replace the entire roof and two-thirds of the fire sprinkler system. The school would like to use BEST grant funds, along with the required school funding match, to complete the remaining work on the last third of the fire sprinklers.

**FY15-16 Charter School Capital Construction Allocation from the State:** \$309,529.00

<b>Current Grant Request:</b>	\$106,742.00	<b>CDE Minimum Match %:</b>	60
<b>Current Applicant Match:</b>	\$160,113.00	<b>Actual Match % Provided:</b>	60
<b>Current Project Request:</b>	\$266,855.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	2014 Bond Refinancing and Loan	
<b>Total of All Phases:</b>	\$266,855.00	<b>Escalation %:</b>	0
<b>Affected Sq Ft:</b>	50,000	<b>Contingency %:</b>	10
<b>Affected Pupils:</b>	1,239	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$5	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$0	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$5	<b>Who owns the Facility?</b>	3rd Party
<b>Cost Per Pupil:</b>	\$215	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	40	Per the current Bond Lease Agreement for the facility, if SkyView Academy (SVA) were to default financially, all rights to the building would turn over to the bondholders. They could then take action to sell the property or find a different charter school to operate in the same building. Per the Charter contract with Douglas County School District (DCSD), if the school were to cease operation, DCSD could continue to operate the school under the same educational program until the end of the year, or move to reassign students to different schools.	

<b>District FTE Count:</b>	<b>Bonded Debt Approved:</b>
<b>Assessed Valuation:</b>	<b>Year(s) Bond Approved:</b>
<b>PPAV:</b>	<b>Bonded Debt Failed:</b>
<b>Unreserved Gen Fund 13-14:</b>	<b>Year(s) Bond Failed:</b>
<b>Median Household Income:</b>	<b>Outstanding Bonded Debt:</b>
<b>Free Reduced Lunch %:</b>	<b>Total Bond Capacity:</b>

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

Existing Bond Mill Levy:

Bond Capacity Remaining:



Dr. Elizabeth Celandia-Fagen

February 5, 2016

Scott Newell, Director  
Division of Capital Construction  
1580 Logan Street, Suite 310  
Denver, CO 80203

Re: BEST Grant Program Application

Dear Mr. Newell and Members of the Capital Construction Assistance Board:  
Lyndon Burnett (Chair), David Tadlock, Karl Berg, Kathy Gebhardt, Ken Haptonstall, Denise Pearson, Tim Reed, Scott Stevens, and Cyndi Wright:

The Douglas County School District (DCSD) submits this letter in support of the BEST grant application from SkyView Academy, a Douglas County School District charter school.

SkyView is one of DCSD's many high-performing schools, offering a full K-12 unique educational choice not available elsewhere in the District, with its emphasis on a Classical education model. While SkyView families are proud of the successes of their students' potential, the quality of SkyView's facilities are in need of attention.

Currently the fire sprinkler system at SkyView is deficient and presents a significant safety concern for students, staff and all SkyView community members who visit the school. The BEST grant program will provide SkyView with an opportunity to educate its students in a safe and healthy environment by correcting the deficiencies in the fire sprinkler systems. Given a safe and enriching environment, SkyView will continue to provide an excellent education opportunity for DCSD families that have made it their choice.

SkyView does not occupy a DCSD building, nor are DCSD bond funds available to SkyView for building and physical plant upgrades.

I urge you to support SkyView's application.

Sincerely,

Elizabeth Celandia-Fagen, Ed. D.  
Superintendent



• **Facilities Impacted by this Grant Application** •

**Eagle County RE 50 - Safety and Security Upgrades at Multiple Facilities - Avon ES - 1996**

**School Name: Avon ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	67,780
Replacement Value:	\$19,145,969
Condition Budget:	\$7,215,131
Total FCI:	37.68%
Energy Budget:	\$0
Suitability Budget:	\$1,303,300
Total RSLI:	15%
Total CFI:	44.5%
Condition Score: (60%)	3.71
Energy Score: (0%)	0.78
Suitability Score: (40%)	4.51
School Score:	4.03



**Eagle County RE 50 - Safety and Security Upgrades at Multiple Facilities - Brush Creek ES - 2001**

**School Name: Brush Creek ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	65,143
Replacement Value:	\$17,445,333
Condition Budget:	\$2,827,566
Total FCI:	16.21%
Energy Budget:	\$22,800
Suitability Budget:	\$1,089,400
Total RSLI:	23%
Total CFI:	22.6%
Condition Score: (60%)	3.91
Energy Score: (0%)	2.71
Suitability Score: (40%)	4.60
School Score:	4.19



**Eagle County RE 50 - Safety and Security Upgrades at Multiple Facilities - Gypsum ES - 1991**

**School Name: Gypsum ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	55,000
Replacement Value:	\$15,458,909
Condition Budget:	\$3,169,779
Total FCI:	20.50%
Energy Budget:	\$19,250
Suitability Budget:	\$1,623,100
Total RSLI:	22%
Total CFI:	31.1%
Condition Score: (60%)	3.69
Energy Score: (0%)	1.59
Suitability Score: (40%)	4.37
School Score:	3.96





• Facilities Impacted by this Grant Application •

**Eagle County RE 50 - Safety and Security Upgrades at Multiple Facilities - Red Hill ES - 2001**

**School Name: Red Hill ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	62,943
Replacement Value:	\$17,779,651
Condition Budget:	\$2,797,960
Total FCI:	15.74%
Energy Budget:	\$22,030
Suitability Budget:	\$1,580,400
Total RSLI:	25%
Total CFI:	24.7%
Condition Score: (60%)	3.97
Energy Score: (0%)	2.50
Suitability Score: (40%)	4.38
School Score:	4.14



**Eagle County RE 50 - Safety and Security Upgrades at Multiple Facilities - Berry Creek MS - 1996**

**School Name: Berry Creek MS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	80,552
Replacement Value:	\$25,667,140
Condition Budget:	\$11,020,603
Total FCI:	42.94%
Energy Budget:	\$28,193
Suitability Budget:	\$1,285,600
Total RSLI:	14%
Total CFI:	48.1%
Condition Score: (60%)	3.77
Energy Score: (0%)	2.05
Suitability Score: (40%)	4.36
School Score:	4.01



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Eagle County RE 50

**County:** Eagle

**Project Title:** Safety and Security Upgrades at Multiple Facilities

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement  | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition            | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input checked="" type="checkbox"/> Security | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Serving Pre-K through 12th grade students, Eagle County Schools (ECS) is an innovative district engaging nearly 6,800 students. Our vision is to prepare global-ready graduates, who will be successful in their careers or college experience and contribute to their communities in positive and effective ways. We teach the children of Eagle County to have creative and active minds, compassion for others, enthusiasm for lifelong learning, and the courage to act on their dreams. We care for our students and offer a safe environment for learning and living.

Leading the way in efforts to revolutionize educator support systems, teacher leadership opportunities, individual accountability, and compensation practices, Eagle County Schools built ground-breaking systems and achieved success in areas related to educator effectiveness nearly a decade before such practices became mainstay components of current state and national education reform efforts. The District benchmarks international top performing schools to model practices that lead to success for all students and focuses efforts on an instructional core of educators, learners, and standards. All actions, initiatives, and efforts are viewed through this lens.

Our student population is diverse in both demographics and economic background. With 34.6% English Language Learners compared with the state average of 14.4%, we are also uniquely positioned to evolve into a dual language district with bilingual graduates supporting our vision of international competitiveness. While geographically positioned near affluent communities like Vail and Beaver Creek, 42.2% of our students qualify for free and reduced lunch. Our schools and students are supported by active PTAs, local non-profit foundations, youth services-focused organizations, and a variety of private-public partnerships and individual philanthropists.

ECS has award-winning schools which have been recognized by the State of Colorado, the U.S. Department of Education, the Bill & Melinda Gates Foundation, and U.S. News & World Report. Eagle Valley High School ranked in the top 10% of high schools across the nation for career and college readiness. The District has had three Principals of the Year in Colorado, one Superintendent of the Year, and one English Language Director of the Year. Our schools have been recognized as National Blue Ribbon Schools, John Irwin Schools of Excellence, and with the Governor's Distinguished Improvement award from the Colorado Department of Education.

Avon, Brush Creek, Gypsum, and Red Hill Elementary Schools, and Berry Creek Middle School

Avon Elementary is a National Blue Ribbon School, the highest honor bestowed on public schools by the U.S. Department of Education. The school experienced a huge demographic shift with the influx of Spanish speaking students and families and developed innovative and robust relationships and programs that tackled barriers to learning for all of their students.

Brush Creek Elementary is a Colorado John Irwin School of Excellence, demonstrating excellent academic achievement that

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

exceeds expectations established by the Colorado Department of Education.

Gypsum Elementary is led by a Colorado National Distinguished Elementary School Principal of the Year award winner, and President-Elect of the Colorado Association of School Executives. It has received the National Distinguished Title 1 School award for closing the achievement gap.

Red Hill Elementary offers a variety of programs including Gifted and Talented, English as a Second Language, Special Education, Art, Counseling, Physical Education, Technology, Music, and Response to Intervention (RtI.)

Berry Creek Middle prepare each student to contribute in the broadest sense to the betterment of the school community as well as to the community-at-large.

### **Deficiencies Associated with this Project:**

These schools currently have differing levels of secure access/restriction controls at entrances. Entry concerns range from a complete lack of visual abilities from office/security staff allowing open avenues accessing school spaces to measures that only address 'crowd control' by directing the public to the office once they are already inside the building. Each site has procedures to support management of visitors to the schools, yet these plans are based upon visitor compliance and not upon monitoring and access control by school staff.

The vestibule security project will increase the ability to keep an aggregate 1,860 students safer, thus accomplishing the promise of the district to the students, families and community to maintain a safe and functional learning environment.

"Effective access control requires that entry to and from a facility be regulated. A single point of entry allows for such monitoring. Efforts to mitigate forced entry via the primary entrance are marginalized if secondary points of entry are unsecure or easily defeated" (Campus Safety, '11 Components of a Secure School Front Entrance').

All five schools were constructed prior to the recent strategies used for safe and secure schools, thus all schools have uncontrolled entries in which persons can enter the main school building without any restrictions to entry. As described earlier, the lack of visibility from the main offices into the main corridor provide limited control of persons entering the building.

In addition, there are many doors at the perimeter of the schools which are uncontrolled. The doors have the ability to be locked, but without any surveillance it is difficult to determine if a door is propped open or otherwise not securely closed.

### **Proposed Solution to Address the Deficiencies Stated Above:**

"The primary purposes of a secured main entrance, in the simplest of terms, are prevention and mitigation. A secure entrance can prevent unauthorized entry by presenting a more positive security image. When prevention fails, the entrance should mitigate an intruder's ability to enter the school. This should create a delay that provides staff time to call 9-1-1 and implement intruder response plans" (Campus Safety, '11 Components of a Secure School Front Entrance').

The solutions proposed by Eagle County Schools align with Campus Safety recommendations of capital improvements, staff training (monitoring arrival/dismissals and situational awareness skills), and visitor communications (strong visitor management program and publicize your efforts).

The capital improvement areas that will be impacted by the BEST Grant support, if awarded, include: single point of entry, use of a vestibule/double entry system, electronic access control, video intercoms for visitor screening, door hardware, and a panic button in office.

School entries will be designed to allow a visitor to gain entrance only through an initial set of unlocked doors and then be stopped a set of locked doors. Once inside the secured vestibule, the person rings a bell to notify administration staff of their request to enter the building. Staff has two choices: 1) if the person at the door is recognized by staff, the staff member can remotely release the door lock and the person proceeds to the office area and 2) if the person is not recognized by staff, the staff member will review the person's identification through a pass through located in the door. The person can be allowed or

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

denied entrance to the building.

Staff will also have the ability to push an emergency button which will notify local authorities of an actual or anticipated issue on site. If allowed inside the office area, the person will sign in before receiving an identification tag and any additional directions from the staff that would continue to support visitor management and safety of students and staff.

Gypsum Elementary and Avon Elementary will add a door through an existing front entrance wall. Berry Creek Elementary will add new vestibule set of doors in hollow metal frames.

New signage will be added to clearly identify process to gain entry and which doors enter. A new storefront vestibule with reconfiguration of existing double doors into two single doors will be built at Red Hill Elementary and Brush Creek Elementary.

Keyless door control access is needed at Gypsum Elementary, Avon Elementary, and Berry Creek Middle. Keyless entry systems will be added at the front door and at least three other doors in each school. This system controls the numbers of keys issued to each school to support appropriate staff having access to entry to the building. The keyless cards can be controlled and inactivated, as needed. This system will be utilized only on specific doors, which will limit the number of doors used as entry into the building and track those entering building.

A door detection system will be added to monitor which doors are open and closed. If a door is open, the system will notify the staff which door is unsecured and what steps will be taken to secure that entry point. Gypsum Elementary and Avon Elementary will add a door through existing wall.

Cameras will add security cameras at front entry for monitoring of doors. There will be a full time split screen at the front desk for constant monitoring abilities. All sites will receive two new camera systems, one inside looking at door one outside.

ECS will adhere with all relevant sections of the American Disability Act.

### **How Urgent is this Project?**

As a public education system, we have a responsibility to support students from every walk of life to remove as many barriers to learning as possible. Eagle County Schools does this through making sure our buildings and grounds are safe and places of pride for our students, educators, and community. Our schools must be places where students have every protection we can offer from the horrific school violence incidents of recent years. All of our buildings must be places where every student is safe to learn, and we must make investments and take proactive steps to make them secure.

In efforts to support prevention and mitigation, these secure vestibules are an immediate need. With the lack of a secure school front entrance at all the identified schools, the time frame for addressing this deficiency is immediate.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

The Vestibule security project will conform to the Public School Facility Construction Guidelines sections 4.1, 4.1.7, and 4.1.9 as follows:

4.1 Health and Safety Issues and 4.1.9 Security – We are addressing these needs with the additional of a secured and controlled vestibule, door access system, door detection system and surveillance system.

4.1.7 Paths of Egress- Maintaining existing egress paths out of building.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Eagle County School District will continue to support the capital budget with the transfer of \$2,000,000 to the Capital Reserve Fund annually. Dollars will be set aside to maintain security cameras, keyless entry, and lighting for each of the buildings. Many of the capital needs will be addressed upon voter approval of the November 2016 Bond, reducing the outstanding need and allowing this annual allocation to more effectively address needs and maintain our facilities on an annual basis. The District is also planning on going to the voters for a mill levy override which will include dollars on an annual basis to support

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

deferred maintenance on all our buildings.

If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:

NA

FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$201,100.97	<b>CDE Minimum Match %:</b>	77
<b>Current Applicant Match:</b>	\$673,251.07	<b>Actual Match % Provided:</b>	77
<b>Current Project Request:</b>	\$874,352.04	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	Yes
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		2016 Bond Election
<b>Total of All Phases:</b>	\$874,352.04	<b>Escalation %:</b>	8
<b>Affected Sq Ft:</b>	331,388	<b>Contingency %:</b>	20
<b>Affected Pupils:</b>	1,774	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$3	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$0	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$2	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$493	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	187		NA
<b>District FTE Count:</b>	6,331	<b>Bonded Debt Approved:</b>	\$128,370,000
<b>Assessed Valuation:</b>	\$2,734,683,670	<b>Year(s) Bond Approved:</b>	06
<b>PPAV:</b>	\$431,951	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$9,195,740	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$73,678	<b>Outstanding Bonded Debt:</b>	\$138,995,000
<b>Free Reduced Lunch %:</b>	41	<b>Total Bond Capacity:</b>	\$546,936,734
<b>Existing Bond Mill Levy:</b>	5.961	<b>Bond Capacity Remaining:</b>	\$407,941,734



**• Facilities Impacted by this Grant Application •****Eagle County RE 50 - PK-8 Roof Replacement - Homestake Peak School of Exped. Learning - 1975****School Name: Homestake Peak School of Expeditionary**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	76,266
Replacement Value:	\$26,077,014
Condition Budget:	\$14,168,435
Total FCI:	54.33%
Energy Budget:	\$0
Suitability Budget:	\$0
Total RSLI:	6%
Total CFI:	54.3%
Condition Score: (60%)	3.05
Energy Score: (0%)	1.25
Suitability Score: (40%)	N/A
School Score:	1.83



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Eagle County RE 50

**County:** Eagle

**Project Title:** PK-8 Roof Replacement

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Serving Pre-K through 12th grade students, Eagle County Schools (ECS) is an innovative district engaging nearly 6,800 students. Our vision is to prepare global-ready graduates, who will be successful in their careers or college experience and contribute to their communities in positive and effective ways. We teach the children of Eagle County to have creative and active minds, compassion for others, enthusiasm for lifelong learning, and the courage to act on their dreams. We care for our students and offer a safe environment for learning and living.

Leading the way in efforts to revolutionize educator support systems, teacher leadership opportunities, individual accountability, and compensation practices, Eagle County Schools built ground-breaking systems and achieved success in areas related to educator effectiveness nearly a decade before such practices became mainstay components of current state and national education reform efforts. The District benchmarks international top performing schools to model practices that lead to success for all students and focuses efforts on an instructional core of educators, learners, and standards. All actions, initiatives, and efforts are viewed through this lens.

Our student population is diverse in both demographics and economic background. With 34.6% English Language Learners compared with the state average of 14.4%, we are also uniquely positioned to evolve into a dual language district with bilingual graduates supporting our vision of international competitiveness. While geographically positioned near affluent communities like Vail and Beaver Creek, 42.2% of our students qualify for free and reduced lunch. Our schools and students are supported by active PTAs, local non-profit foundations, youth services-focused organizations, and a variety of private-public partnerships and individual philanthropists.

ECS has award-winning schools which have been recognized by the State of Colorado, the U.S. Department of Education, the Bill & Melinda Gates Foundation, and U.S. News & World Report. Eagle Valley High School ranked in the top 10% of high schools across the nation for career and college readiness. The District has had three Principals of the Year in Colorado, one Superintendent of the Year, and one English Language Director of the Year. Our schools have been recognized as National Blue Ribbon Schools, John Irwin Schools of Excellence, and with the Governor's Distinguished Improvement award from the Colorado Department of Education.

Homestake Peak is an Expeditionary Learning Pre-K through 8th grade school where learning is active, challenging, meaningful, public, and collaborative. Teachers, students, and parents all work together as a synchronized crew to support students in achieving more than they think possible. Expeditionary Learning is a proven, research-based program that empowers young people with confidence and enthusiasm for learning and applying their knowledge to life. The students investigate real community problems with their peers to develop creative, actionable solutions. Making positive changes to real-world issues make the learning relevant and increases their motivation. They demonstrate their knowledge through presentations, exhibits, participating in critiques, and data analysis. This fosters collaboration and improves work quality



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

across the board, while building perseverance, excellence, accountability and kindness.

## Deficiencies Associated with this Project:

At 21-25 years old, the membrane and shingle roofing at Homestake Peak School has reached the end of its useful life. Our geographic area features severe weather conditions including heavy snow, ice buildup, and freeze-thaw cycles which drastically reduce expected roof lifespans. In addition, different sections of roofing vary in age, creating leaks where these sections abut. Maintenance of leaks exist in all parts of the structure. ECS has taken steps to mitigate wear by steadfastly inspecting and properly maintaining roof structures, directing repair jobs over 30 times in the last three years alone.

Eagle Schools is seeking a BEST grant because we require assistance to fund a roof replacement project at this facility. The district has persevered years of budget cuts during the Great Recession that went well beyond just "belt-tightening." Pay freezes, furloughs, higher benefit costs, layoffs, reductions, and even elimination of important services for students all became the norm.

## Proposed Solution to Address the Deficiencies Stated Above:

The solution proposed to address the deficiency listed is a complete replacement of the roof, including both EPDM membrane and asphalt shingle sections, and all other associated work: rock ballast, insulation, flashing, walkway pads, vertical surfaces and sidewalls, debris disposal, etc. The project includes all sections of roof in order to provide a single warranty moving forward and to provide roof condition uniformity. Proposals and work will adhere to CDE Division of Capital Construction Roof-Specific Policies and Public School Facility Construction Guidelines. Please refer to the grant attachments for further details.

## How Urgent is this Project?

Roof replacement for this facility was identified as a Priority 1 (immediate needs) project in the 2016 Facilities Master Plan. Without immediate replacement, Homestake Peak School is at risk for roof failure: loss of and damage to shingles, membrane punctures or tears, sealant failure, adhesive and seam failure, and water intrusion which can cause additional damage to interior spaces and property.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

ECS will comply with CDE Public School Facility Guidelines Section 4.1.2 Roofs by contracting with a qualified contractor approved by the roofing manufacturer to install the specified steep- and low-slope weather-tight roof systems that drain water positively off the roof and discharging off and away from the building. Further, ECS certifies we will comply with all steep- and low-slope roofing specifications as outlined in sections 4.1.2.1 and 4.1.2.2 of the Guidelines

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

Eagle County School District will continue to support the capital budget with the transfer of \$2,000,000 to the Capital Reserve Fund annually. Dollars will be set aside to maintain security cameras, keyless entry, and lighting for each of the buildings. Many of the capital needs will be addressed upon voter approval of the November 2016 Bond, reducing the outstanding need and allowing this annual allocation to more effectively address needs and maintain our facilities on an annual basis. The District is also planning on go to the voters for a mill levy override which will include dollars on an annual basis to support deferred maintenance on all our buildings.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

NA

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

## FY15-16 Charter School Capital Construction Allocation from the State:

Current Grant Request: \$327,246.92

CDE Minimum Match %:

77

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Current Applicant Match:</b>	\$1,095,565.78	<b>Actual Match % Provided:</b>	77
<b>Current Project Request:</b>	\$1,422,812.70	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	Yes
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	2016 Bond Election	
<b>Total of All Phases:</b>	\$1,422,812.70	<b>Escalation %:</b>	8
<b>Affected Sq Ft:</b>	100,000	<b>Contingency %:</b>	18
<b>Affected Pupils:</b>	525	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$14	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$13	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$2,710	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	190	NA	

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<b>District FTE Count:</b>	6,331	<b>Bonded Debt Approved:</b>	\$128,370,000
<b>Assessed Valuation:</b>	\$2,734,683,670	<b>Year(s) Bond Approved:</b>	06
<b>PPAV:</b>	\$431,951	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$9,195,740	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$73,678	<b>Outstanding Bonded Debt:</b>	\$138,995,000
<b>Free Reduced Lunch %:</b>	41	<b>Total Bond Capacity:</b>	\$546,936,734
<b>Existing Bond Mill Levy:</b>	5.961	<b>Bond Capacity Remaining:</b>	\$407,941,734

• Facilities Impacted by this Grant Application •

**Atlas Preparatory School - Atlas HS Boiler Replacement - Atlas HS - 1984**

*No Statewide Facility Assessment Information Available*



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Atlas Preparatory School

**County:** El Paso

**Project Title:** Atlas HS Boiler Replacement

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |  |   |   |
|---|--|---|---|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof                          | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm                    | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input checked="" type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC                          | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                           | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Atlas Preparatory School opened with its first class of fifth graders in 2009. Since then, Atlas has annually added another class of students and in 2017 will graduate its first class of scholars. Currently, Atlas serves over 800 students in the 5th through 11th grade that are 91% free and reduced lunch, 18% African-American, 14% Caucasian and 68% Hispanic. Atlas aims to retain these low-income students through graduation and provide a rigorous academic program and quality enrichment opportunities. Our institution embraces self-fulfillment through education, character, and community so that, one day, thousands of our city's bright young minds can grow up to pursue their best self.

Over the years, as the student body has grown, so have the facilities to serve students. In 2009, we started with one 28,980 sq ft building. Since then, Atlas has acquired two additional facilities. A 24,751 sq ft building directly behind the original property was purchased and renovated in January 2012, and lastly, the 68,182 sq ft high school building was acquired and renovations began in December 2012.

Acquiring previously owned buildings and renovating them has proven to be an economically advantageous strategy for Atlas. However, we have faced challenges surrounding the HVAC systems and existing equipment. When acquired, all systems were deemed capable and adequate in terms of functioning for the facilities. Over the years, we are finding that though properly maintained, components of our HVAC system are in need of replacement due to age. We have employed two full-time Facilities Managers and contracted quality services through a local company for maintaining our high school HVAC system. Keeping up with the failing HVAC system has demanded a great deal of attention from our staff, as well as incurred costs for paying for repairs and short term fixes.

## Deficiencies Associated with this Project:

The current boilers are original to the high school building and were installed in 1984. Given the age of the boilers, they are beginning to show signs of failing and need for replacement. Heat exchangers are plugging up and valves are failing. With anticipated repair costs and inconsistent performance, it has been determined that it would be advantageous to replace both boilers from an economic and functionality standpoint. Additionally, current copper finned pose a safety risk to occupants of the building because when the heat exchangers fail there is potential for carbon monoxide leaking. Lastly, when operating both boilers, the max temperature they fire at is 160°F, which is 15°F below the required 185°F to adequately heat the entire facility. Therefore, we have been forced to operate one boiler at a time, which is not sufficient to heat a 68,182 sq ft building. This has resulted in an inconsistent heat temperatures through the building, particularly during the colder and hotter months of the year.

For the first year of owning the property, the boilers performed at sufficient standards for the school's needs. Atlas students and faculty only occupied 16,845 sq ft on the lower, northern wing of the building. However, our first major issue due to boiler inefficiencies occurred on December 31, 2014 during our winter break. Both boilers failed, resulting in the temperature

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

of the pent house, where they are located, to drop to below freezing temperatures. Consequently, one of the valves connected to the boiler burst, causing more than 50,000 gallons of water to pour down throughout the entire facility. Fortunately, only the lower wing was occupied and upstairs was still in a pre-renovation state. Therefore, water damage was minimal on the first floor. In an effort to avoid a future occurrence, Atlas invested in space heaters to ensure a consistent temperature of the pent house and piping.

In early February 2016, Colorado Springs faced an unusually cold weather front that resulted in below freezing temperatures and an accumulation of more than 20 inches of snow. The school remained closed for 3 days. On February 4, school resumed. Due to boiler heating inefficiencies, we returned to a building with classrooms ranging in temperatures from 35°F to 75°F. The classroom at 35°F had a coil pipe burst due to the pipe freezing and then thawing suddenly, resulting in physical, mechanical and HVAC damages.

Multiple engineering, mechanical and HVAC consults have determined that our boilers are at the point of replacement. Atlas made a significant investment in an upgraded controls Siemens controls systems during the remodel process, which will serve as a well-functioning system when new boilers are installed. As a school, we have made significant efforts to maintain the current system and to create temporary solutions, but we recognize that we must now commit to a long term solution. Therefore, Atlas is pursuing a BEST Grant to assist with the purchase of two replacement boilers that will help ensure a safe, consistently heated learning environment for all students and staff.

### **Proposed Solution to Address the Deficiencies Stated Above:**

If awarded the grant, Atlas' will proceed with the boiler replacement project in July 2016. Atlas will conduct a search for HVAC service providers, as well as for a crane and rigging to assist the demolition, removal and disposal of the existing boilers from the pent house, roof top location.

Then, two Raypack M/N H7-1104 with 87% efficiency hot water boilers would be installed. The HVAC service provider will also install new piping, fittings, and valves at closest point of isolation to existing piping for new boiler installation- the boilers will be piped in a primary secondary configuration.

In order to support the new boiler system and ensure proper efficiency, new grundfos pumps for system and circulation M/N65-150 will be installed, as well as a new 3" butterfly valves and flanges. Additionally, new fiberglass insulation, temperature and pressures gauges, an air separator, ASME expansion tank and flue for the new equipment will be installed in the pent house.

Following the installation, HPE will reconnect electrical service to the units, install an ASME CSC-1 required EPO switch for emergency power off, perform a site cleanup and provide permit and inspection services.

### **How Urgent is this Project?**

Inconsistent heating and cooling temperatures, system failures, ruptured pipes, water damage and other safety concerns have indicated that replacing our boilers is high priority and an urgent matter for Atlas. Therefore, our timeline is to replace the boilers this upcoming July. We believe we can sustain our operations for the remainder of this winter with our current system, however, getting through another winter with a failing boiler system would be challenging and potentially dangerous. Thus, it imperative that the boilers are replaced in the Fall of 2016.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

The boiler replacement project will conform to the Public School Facility Construction guidelines by ensuring compliance in the following categories.

- Mechanical systems. A safe and efficient mechanical system that provides proper ventilation, proper sound levels and maintains the building temperature and relative humidity. The mechanical system shall be designed, maintained and installed utilizing current State and Federal building codes, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.
- 4.1.4.1 - Healthy building indoor air quality (IAQ) through the use of the mechanical heating, ventilation and air conditioning



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

(HVAC) systems or operable windows and by reducing air infiltration and water penetration with a tight building envelope. Adopted 09/02/2015

- 4.1.4.2 - Mechanical systems shall comply with: ASHRAE Standard 62.1-2013 Ventilation for Acceptable Indoor Air Quality, ASHRAE 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings, and ASHRAE Standard 189.1-2014 Standard for the Design of High Performance Green Buildings.

Additionally, the boilers we are selecting for replacement will be at 87% efficiency and thus will lead to lower operational costs for heating and cooling over the next 15 years. These boilers were specifically selected after an extensive engineering assessment and report were completed and it was determined that 87% efficiency is optimal for the buildings needs. The new boilers will not be an Energy Star labeled equipment that is 90% efficiency due to the realization that the additional cost (approximately \$22,000) would take 18 years to recover and not result in recognizable efficiency savings for Atlas.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The replacement boilers will have a quarterly maintenance plan for inspections, servicing and monitoring. The maintenance plan includes an annual and semi-annual maintenance checks, along with two minor inspections during the year. During the annual check, the boilers would be turned off and water drained in order to clean the heat exchangers, assess seals and gaskets, and make any necessary adjustments or repairs.

Currently, Atlas has a preventative maintenance contract with a local HVAC service provider that is budgeted for annually and includes monthly facility wide checks of variable air valves, vents, filters and the entire HVAC system. The replacement boiler maintenance would be included in the budgeted costs for major facilities expenses, as well as any future anticipated costs.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The property was previously used for another business and not for a public school facility. The property was in an acceptable condition, and we did the proper due diligence to determine there were not any significant health or safety issues. The facility needed to be cosmetically renovated to properly accommodate for classroom, office, and cafeteria spaces. We initially leased the high school facility in December 2012 and began renovations immediately. Atlas chose to do a remodel, rather than new build because the property's location was ideal and the price was very affordable. The facility is less than half a mile from our current middle school location, and it was for sale at approximately one-third of market value due to the previous government contractor going out of business.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

The high school facility was initially leased in December 2012 and we began renovations on the first floor, north wing of the building in January 2013. Over 15,000 feet was renovated to create five classrooms, a small counseling center, a computer lab, restrooms, a front office and cafeteria. The renovations were completed in July 2013 and accommodated 120 9th grade students.

In January 2014, renovations to the remaining 15,000 sq ft of the first floor, south wing began. The renovation allowed for the creation of 7 additional classrooms, a larger counseling center, more restrooms, an atrium, teacher offices and second computer lab. The first floor was completed in July 2014 and a total of 215 students in 9th and 10th grade were enrolled. In November 2014, renovations to the entire 30,000 sq ft second floor began. The project was completed in July 2015 and entailed the creation of 19 classrooms, 9 staff and faculty office spaces, a larger cafeteria, restrooms, two computer labs and chemistry lab. At present, 289 students occupy the facility. Atlas anticipates over 400 high school students and 32 staff members will occupy the building by 2017.

Unfortunately, these renovations are not document in the Statewide Facility Assessment database. Atlas contacted Dustin Guerin at the CDE regarding these concerns and it was communicated that the system is undergoing significant changes and therefore, at this time, updating our information is not possible.

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

FY15-16 Charter School Capital Construction Allocation from the State: \$210,402.00

<b>Current Grant Request:</b>	\$103,375.48	<b>CDE Minimum Match %:</b>	39
<b>Current Applicant Match:</b>	\$66,092.52	<b>Actual Match % Provided:</b>	39
<b>Current Project Request:</b>	\$169,468.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	Major Renovations Fund and Grants	
<b>Total of All Phases:</b>	\$169,468.00	<b>Escalation %:</b>	4
<b>Affected Sq Ft:</b>	63,850	<b>Contingency %:</b>	5
<b>Affected Pupils:</b>	287	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$3	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$0	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$3	<b>Who owns the Facility?</b>	Charter School
<b>Cost Per Pupil:</b>	\$590	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	222	In March 2015, Atlas entered the bond market and issued a 30 year bond through BB&T Capital Markets that will mature in 2045. This financing method was needed due to Atlas' limited ability as a charter school to access local tax revenue for facilities and to ensure Atlas will be an enduring institution that will continue to serve the surrounding community. Therefore, Atlas is committed to these properties indefinitely. However, if Atlas were to relocate, we would sell our current properties. If it were to cease to exist, the properties would serve as collateral on our bonds, so they would be liquidated/sold and the proceeds would be distributed to investors.	

<b>District FTE Count:</b>	<b>Bonded Debt Approved:</b>
<b>Assessed Valuation:</b>	<b>Year(s) Bond Approved:</b>
<b>PPAV:</b>	<b>Bonded Debt Failed:</b>
<b>Unreserved Gen Fund 13-14:</b>	<b>Year(s) Bond Failed:</b>
<b>Median Household Income:</b>	<b>Outstanding Bonded Debt:</b>
<b>Free Reduced Lunch %:</b>	<b>Total Bond Capacity:</b>
<b>Existing Bond Mill Levy:</b>	<b>Bond Capacity Remaining:</b>





SCHOOL DISTRICT TWO  
**HARRISON**

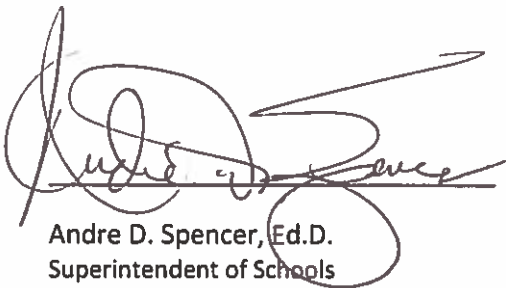
*Character Through Diversity,  
Challenge & Accomplishment*

Andre D. Spencer, Ed.D.  
Superintendent of Schools

February 24, 2016

Colorado Department of Education

Harrison School District Two does support the BEST Grant for  
Atlas Preparatory School.



Andre D. Spencer, Ed.D.  
Superintendent of Schools  
Harrison School District 2

• Facilities Impacted by this Grant Application •

**Atlas Preparatory School - Atlas Prep Middle School Roof - Atlas MS - 1984**

**School Name: Atlas Prep School**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	28,780
Replacement Value:	\$2,356,217
Condition Budget:	\$185,724
Total FCI:	7.88%
Energy Budget:	\$0
Suitability Budget:	\$2,394,300
Total RSLI:	62%
Total CFI:	109%
Condition Score: (60%)	3.28
Energy Score: (0%)	0.63
Suitability Score: (40%)	3.23
School Score:	3.26



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Atlas Preparatory School

**County:** El Paso

**Project Title:** Atlas Prep Middle School Roof

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Atlas Preparatory School opened with its first class of fifth graders in 2009. Since then, Atlas has annually added another class of students and in 2017 will graduate its first class of scholars. Currently, Atlas serves over 800 students in the 5th through 11th grade that are 91% free and reduced lunch, 18% African-American, 14% Caucasian and 68% Hispanic. Atlas aims to retain these low-income students through graduation and provide a rigorous academic program and quality enrichment opportunities, which will sharpen their ability to think, understand and communicate. Our institution embraces self-fulfillment through education, character, and community so that, one day, thousands of our city's bright young minds can grow up to pursue their best self.

Over the years, as the student body has grown, so have the facilities to serve students. In 2009, we started with one 28,980 sq ft building. Since then, Atlas has acquired two additional facilities. A 24,751 sq ft building directly behind the original property (South Middle School building) was purchased and renovated in January 2012, and lastly, the 68,182 sq ft high school building was acquired and renovations began in December 2012.

## Deficiencies Associated with this Project:

The South Middle School building is a pre-manufactured metal building with a low slope corrugated metal roof. The roof has been an ongoing maintenance issue and there are multiple leaks reported. About two years ago the school hired a roofer to strip in several seams on the roof which cost over a thousand dollars. The repairs worked for a short time but it did not take long for the leaks to reappear. As structural standing seam metal roofs age, the seals in the seams of the roof panels dry out and fail which results in ongoing leaks which are nearly impossible to remedy with maintenance alone. It is recommended to install a new roof over the existing metal roof.

## Proposed Solution to Address the Deficiencies Stated Above:

Install a new roof over the existing corrugated metal roof. The work will include the following:

1. Remove all abandoned equipment and patch the openings.
2. Install 4" tall 16 gauge Z metal perpendicular to the slope fastened into the existing purlins every 24".
3. Infill between the Z metal with 3 1/2" polyisocyanurate insulation, cut around the flutes of the metal deck. Install 1/2" plywood deck to Z metal and fully adhere 60 mil EPDM.
4. Install new edge sheet metal and parapet caps.
5. Replace the existing gutter and downspout system.

The International Building Code, The State of Colorado and The Colorado Department of Education Guidelines will be adhered to in the design of the new roofing system.

**How Urgent is this Project?**

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

This project is urgent as the school has exhausted all of their maintenance options for this roof and the roof continues to leak which is a disruption to the learning environment. Based on the BEST Grant cycle timeline and weather conditions, the most realistic time frame for a full replacement is the summer of 2017.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

The design for the new roofing system will conform to the Public Schools Construction Guidelines.

4.1.2 Roofs- The reroofing design will conform to this section for low-sloped roof systems. A fully adhered EPDM roof is proposed and positive drainage is already built into the roof structure.

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

At the project's completion, Atlas' Facility personnel will be trained by the roofing contractor to perform simple roof repairs, large roof repairs will be conducted by a competent roofing contractor. The roof will be methodically inspected on a yearly basis to determine deficiencies that need to be repaired. Atlas' Facility personnel will access the roof to remove debris from gutters and downspouts as well as and other areas on the roof. This will be performed at least two times a year.

The proposed roofing system should perform for about twenty years before the next replacement occurs. The estimated cost to reroof the school at that time will be about \$650,000 which amounts to \$32,500 a year from now until then. In order to prepare for this future capital expenditure, Atlas annually contributes \$55,000 into a capital reserve maintenance fund and allocates \$100,000 to a major renovations expense category in the annual budget. These funds grow over the years in preparation for anticipated capital expenses and major renovations.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The property was previously used for another business and not for a public school facility. Therefore, the property was in an acceptable condition, but needed to be cosmetically renovated to properly accommodate for classroom, office and cafeteria spaces. We purchased the South Middle School property in 2011 and began renovations immediately. It became a functioning facility in July 2012. Atlas chose to do a remodel, rather than new build because the property's location was immediately behind our original middle school facility and the price was very affordable.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

The South Middle School property was purchased in Fall 2011. It was originally 6 independent store front units. Over the course of several months, the entire interior of the building was gutted, restructured and renovated in order to create 12 classrooms, 2 computer labs, 13 office spaces, 4 sets of bathrooms, a counseling center, staff lounge and a cafeteria space. The building now has the capacity to serve up to 527 students throughout the course of the year. Since the initial remodel, we have not done any major renovations to the building. We have, however, paid a local roofing company to apply tar at certain locations on the roof to mitigate some of the holes and leaking issues.

Unfortunately, these renovations are not document in the Statewide Facility Assessment database. Atlas contacted Dustin Guerin at the CDE regarding these concerns and it was communicated that the system is undergoing significant changes and therefore, at this time, updating our information is not possible.

**FY15-16 Charter School Capital Construction Allocation from the State:** \$210,402.00

<b>Current Grant Request:</b>	\$277,137.48	<b>CDE Minimum Match %:</b>	39
<b>Current Applicant Match:</b>	\$177,186.25	<b>Actual Match % Provided:</b>	39
<b>Current Project Request:</b>	\$454,323.73	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Previous Matches:</b>	\$0.00
<b>Future Grant Requests:</b>	\$0.00
<b>Total of All Phases:</b>	\$454,323.73
<b>Affected Sq Ft:</b>	26,000
<b>Affected Pupils:</b>	527
<b>Cost Per Sq Ft:</b>	\$17
<b>Soft Costs Per Sq Ft:</b>	\$1
<b>Hard Costs Per Sq Ft:</b>	\$16
<b>Cost Per Pupil:</b>	\$862
<b>Sq Ft Per Pupil:</b>	49

**Source of Match Detail:**

Major Renovations Fund and Grants

**Escalation %:** 3

**Contingency %:** 8

**Historical Adverse Effect?** No

**Does this Qualify for HPCP?** No

**Is a Master Plan Complete?** No

**Who owns the Facility?** Charter School

**Who will the Facility Revert to if the School Ceases to Exist:**

In March 2015, Atlas entered the bond market and issued a 30 year bond through BB&T Capital Markets that will mature in 2045. This financing method was pursued to ensure Atlas will be an enduring institution that will continue to serve the surrounding community for many years to come. Therefore, Atlas is committed to these properties indefinitely. However, if Atlas were to relocate, we would sell our current properties. If Atlas were to cease to exist, the properties would serve as collateral on our bonds, so they would be liquidated/sold and the proceeds would be distributed to investors.

**District FTE Count:**

**Assessed Valuation:**

**PPAV:**

**Unreserved Gen Fund 13-14:**

**Median Household Income:**

**Free Reduced Lunch %:**

**Existing Bond Mill Levy:**

**Bonded Debt Approved:**

**Year(s) Bond Approved:**

**Bonded Debt Failed:**

**Year(s) Bond Failed:**

**Outstanding Bonded Debt:**

**Total Bond Capacity:**

**Bond Capacity Remaining:**



SCHOOL DISTRICT TWO  
**HARRISON**

*Character Through Diversity,  
Challenge & Accomplishment*

**Andre D. Spencer, Ed.D.  
Superintendent of Schools**

**February 24, 2016**

**Colorado Department of Education**

**Harrison School District Two does support the BEST Grant for  
Atlas Preparatory School.**

**Andre D. Spencer, Ed.D.  
Superintendent of Schools  
Harrison School District 2**

• Facilities Impacted by this Grant Application •

**Colorado School For the Deaf and the Blind  
Gymnasium Locker Room Safety Upgrades - Hubert Work Gym - 1983**

**School Name: CSDB**

Number of Buildings:	9
All or Portion built by WPA:	No
Gross Area (SF):	204,663
Replacement Value:	\$76,580,698
Condition Budget:	\$53,527,458
Total FCI:	69.90%
Energy Budget:	\$71,632
Suitability Budget:	\$7,700,000
Total RSLI:	10%
Total CFI:	80.0%
Condition Score: (60%)	3.11
Energy Score: (0%)	1.67
Suitability Score: (40%)	4.25
School Score:	3.56





# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Colorado School For The Deaf and the Blind

**County:** El Paso

**Project Title:** Gymnasium Locker Room Safety Upgrades

**Previous BEST Grant(s) Funded:** 3

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security              | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

The Colorado School for the Deaf and the Blind (CSDB) is a state-funded school within the Colorado Department of Education. The school was established for the purpose of providing comprehensive educational services for children, birth to age 21, who are blind/visually impaired and/or deaf/hard of hearing. Services are provided directly to students enrolled at the school, and outreach programs serve students, staff, and families in communities throughout Colorado. The Gymnasium provides for physical education, occupational therapy, physical therapy, life fitness skills and competitive athletics for all of our students. The locker room area needs to be renovated to provide a more safe and appropriate changing and showering facility for these programs. CSDB has a full-time maintenance team consisting of maintenance mechanics, custodial staff, and grounds crew. This team provides support for all systems in and around the Gymnasium building.

## Deficiencies Associated with this Project:

CSDB continues to monitor best practices in school, campus security and student safety. This project will resolve serious safety concerns, as well as resolve some programmatic concerns. The Gymnasium locker rooms have not been remodeled since 1983. Current best practice includes more privacy for students showering rather than group or gang shower, more private dressing environments, better ventilation, and appropriate supervision capabilities. Surfaces throughout locker rooms, including floors, walls and ceilings, shower and toileting areas, should be able to be thoroughly cleaned and disinfected. ADA standards have been updated since the remodel. This area does not currently comply.

## Proposed Solution to Address the Deficiencies Stated Above:

This project will redesign student locker rooms to resolve the identified issues. Shower areas will be updated to provide showers with adjacent changing areas to replace the group showers and remotely located changing areas. The surfaces and equipment will be updated/replaced to allow positive disinfecting, without damaging surfaces or equipment. The existing heating and ventilation system consists of a simple exhaust fan and steam radiant heat. This does not meet current code, or general safety practices for proper air movement. The steam radiators present a contact burn risk, a safety concern in changing areas. This project includes a separate shower area for staff (i.e. referees, visiting coaches) to improve safety and privacy. This project will remodel the locker room area to resolve all of the above identified issues.

## How Urgent is this Project?

Any time we do not fund a safety and student security project, the risk is not immediate but in the form of mitigating danger. In addition to the safety concerns related to privacy, the health risks will continue to exist if this is not funded. CSDB is committed to maintaining a safe campus for students and staff. These conditions exist today. They will continue to exist, until funding is available to resolve them.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

This project will conform to the Colorado State Architects list of approved building codes. We include the Public School Facility Guidelines in our process of code review. We utilize a third party code review process that ensures that the drawings

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

are in compliance and then appropriate state inspectors as well as third party inspectors and owners representative to monitor contractors compliance with the drawings and codes. Specific areas of the Public School Facility Guidelines that will be highlighted in this project include many sections of article four. CSDB believes that our process will support and ensure compliance with the Public School Facility Guidelines.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

The school does not have the same budgeting system as a typical school district. A capital renewal budget does not exist in the same manner. The school must rely upon state funding for capital renewal. CSDB has a full time maintenance team consisting of maintenance mechanics , custodial staff , and grounds crew. This team provides support for the campus and will provide appropriate support and maintenance for this renovated area.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The Hubert Work Gymnasium was constructed in 1919 for the school and has been in continuous use since construction. Some renovations have occurred over time. The building is very serviceable, it does need renovations to better meet student needs. This project is an example of one area of need.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$1,391,615.91	<b>CDE Minimum Match %:</b>	59
<b>Current Applicant Match:</b>	\$0.00	<b>Actual Match % Provided:</b>	0
<b>Current Project Request:</b>	\$1,391,615.91	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		No match provided
<b>Total of All Phases:</b>	\$1,391,615.91	<b>Escalation %:</b>	1
<b>Affected Sq Ft:</b>	4,870	<b>Contingency %:</b>	13.5
<b>Affected Pupils:</b>	206	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$286	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$56	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$230	<b>Who owns the Facility?</b>	CSFDB
<b>Cost Per Pupil:</b>	\$6,755	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	24		The Colorado School for the Deaf and the Blind, established in 1874, is a State agency. In the unlikely scenario where the school moved or ceased to exist, the property and buildings would be under the management of the State Architects Office.

**District FTE Count:**

**Bonded Debt Approved:**

**Assessed Valuation:**

**Year(s) Bond Approved:**

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**PPAV:**

**Unreserved Gen Fund 13-14:**

**Median Household Income:**

**Free Reduced Lunch %:**

**Existing Bond Mill Levy:**

**Bonded Debt Failed:**

**Year(s) Bond Failed:**

**Outstanding Bonded Debt:**

**Total Bond Capacity:**

**Bond Capacity Remaining:**

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching monies requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

For questions 4-11

Only answer the questions which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your school district.

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES.

Due to the unique differences in the way CSDB is funded compared to a typical school district, CSDB will be unable to complete this project without a waiver being granted. CSDB is a state agency, and unlike a regular school district or charter school our funds are delivered from the state of Colorado general funds. The school receives general fund dollars for operating and salary expenses. Funding for construction is available through the state Capital Construction and Controlled Maintenance program. We do not have the same funding structure that school districts have, we do not collect taxes based on bonds or Mil levy, and we are unable to issue Certificates of Participation.

Through waiving the matching funds the project can be realized. Students at CSDB will have a safe, appropriate and clean locker and shower room. Student privacy will be established that encourages not only comfort and protects the self-esteem of our students, it will provide personal safety for all of our students. If a waiver is not granted the issues identified that affect students will not be resolved. Issues already stated such as privacy and safety. Additionally concerns related to accessibility, proper ventilation, surfaces that can be cleaned and disinfected will not be realized without the waiver and the grant. Granting the waiver and funding the project will resolve each of these issues and thereby enhance the educational experience at CSDB for our students who participate in physical education classes, on athletic teams and those who use the facility to achieve personal wellness goals.

2. Please describe why the cost of complying with the match contribution would significantly limit educational opportunities within your school district or BOCES.

CSDB does not have funds that can be used for matching funds. CSDB is a state agency, and unlike a regular school district or charter school our funds are delivered from the state of Colorado general funds. The school receives general fund dollars for operating and salary expenses. We do not have the same funding structure that school districts have, we do not collect taxes based on bonds or Mil levy, and we are unable to issue Certificates of Participation. As described in the answer for question one our students utilize this facility in a variety of ways, physical education classes, athletic teams, and individual health and wellness programs. The waiver and funding the grant is the only way to complete this project and successfully improve this environment for CSDB students.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants, or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

CSDB has requested this project through State funding and has not been successful in receiving state funds.

4. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

CSDB serves students throughout Colorado our average is on par with the state average.

5. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

CSDB serves students throughout Colorado we do not track this data officially.

6. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

CSDB is currently at 65% free and reduced for our on campus students.

7. Bond Election failures and successes in the last 10 years – The more attempts the school district has had, the lower the match.

CSDB does not have the same funding structure that school districts have, we do not collect taxes based on bonds or Mil levy, and we are unable to issue Certificates of Participation.

8. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

CSDB does not have the same funding structure that school districts have, we do not collect taxes based on bonds or Mil levy, and we are unable to issue Certificates of Participation.

9. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

As a State agency CSDB does not have a bond capacity.

10. The school district's unreserved fund balance as it relates to their overall budget.

CSDB does not maintain an unreserved balance our funds are delivered from the state of Colorado general funds. The school receives general fund dollars for operating and salary expenses. Each year unspent funds revert to the state general fund.

11. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

CSDB is unlike a regular school district or charter school CSDB receives funds from the state of Colorado general funds. These are for operating and salary expenses. Construction funds are not in these line items. CSDB is unable to provide matching funds for a project of this nature.

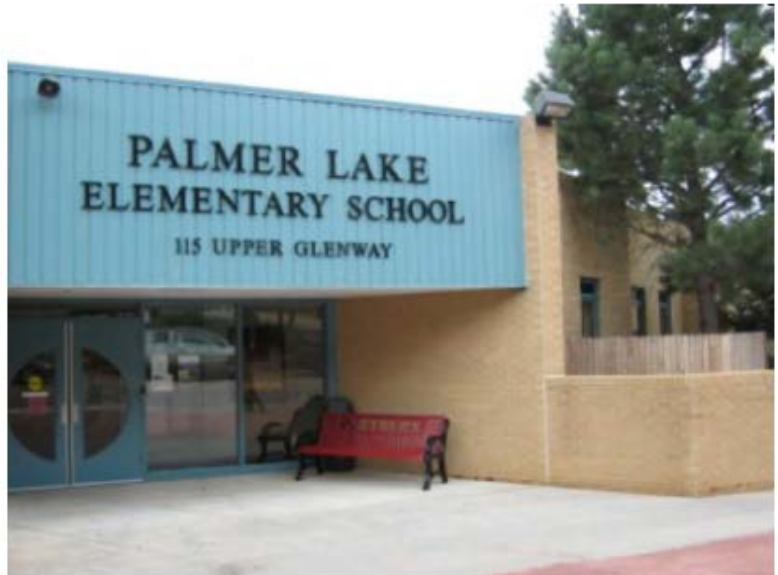


• Facilities Impacted by this Grant Application •

**Lewis-Palmer 38 - PLES Abatement/ Roof Replacement - Palmer Lake ES - 1934**

**School Name: Palmer Lake ES**

Number of Buildings:	1
All or Portion built by WPA:	Yes
Gross Area (SF):	47,314
Replacement Value:	\$12,405,888
Condition Budget:	\$7,232,959
Total FCI:	58.30%
Energy Budget:	\$16,560
Suitability Budget:	\$6,117,800
Total RSLI:	10%
Total CFI:	108%
Condition Score: (60%)	2.68
Energy Score: (0%)	2.29
Suitability Score: (40%)	3.67
School Score:	3.07



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Lewis-Palmer 38

**County:** El Paso

**Project Title:** PLES Abatement/ Roof Replacement

**Previous BEST Grant(s) Funded:** 3

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |  |   |
|---|---|--|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                      | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings                | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement            |   |

## General Information About the District / School, and Information About the Affected Facilities:

Lewis-Palmer School District 38 (LPSD38) is requesting BEST Capital Construction Assistance for asbestos abatement and roof replacement for Palmer Lake Elementary School (PLES). A portion of the PLES building has exposed asbestos needing to be abated as soon as possible. The roof has five sections of varying materials. Four of five have reached or exceeded life expectancy, and need to be removed and replaced to ensure the safety of the building, and protect the health and safety of the students and staff.

PLES, originally constructed in 1934, is the only school in the town of Palmer Lake. Additions were constructed in 1948, 1966, and 1986. There are currently 301 students enrolled for the 2015–16 academic year. The building houses grades Kindergarten through sixth. PLES is the only structure in the town of Palmer Lake large enough to accommodate the student population and community gatherings. Current enrollment is stable and shows a projected increase. PLES will remain a viable and usable school within the town of Palmer Lake indefinitely. This facility is part of the long-term master plan for LPSD38.

PLES houses a Moderate Needs Program, and a Title I Program for the community's at-risk families. It has the highest percentage of free and reduced lunch students within LPSD38. Student enrollment includes a significant number of English Language Learners (ELL) students. Special education students account for 14.8 percent of the student population. Counseling services as well as Gifted and Talented Programming are also offered.

The school building serves as an anchor within the community. It used for gatherings and events including an annual Thanksgiving Lunch serving more than 200 area senior citizens. The annual Santa Breakfast for all area children, their families, and community members is held at PLES.

PLES hosts an after-school homework and tutoring program for at-risk students and those experiencing academic challenges. Enrichment courses are offered before and after school throughout the year. The building is in use from 6:30am to 5:30pm for student programming most of the year. The facility is used during evening and weekend non-school hours, by entities such as the YMCA, the Little Log Church, and several other community groups.

Located on the Palmer Divide, PLES has extreme weather conditions. The building is susceptible to intense temperature fluctuations, high winds, rain, excessive runoff, and above-average snowfall. The high altitude (7,300+ feet), and being located at the base of the Rampart Range are also factors. These combined factors contribute to our failing roof. The condition of the roof in turn critically affects the asbestos problem.

LPSD38 utilizes School Dude computer software to rank and prioritize health and safety projects. The PLES asbestos abatement and roof replacement are ranked as high-need projects. The total cost of asbestos abatement and roof replacement for PLES is prohibitive for LPSD38 as we are funding other health and safety-related projects. Debt capacity and spendable reserves are as such that we cannot currently fund this asbestos abatement and roof replacement.



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

LPSD38 has asked for local funding four times in the last ten years. All ballot questions have failed. LPSD38 unassigned reserves are at \$6 million. Of this, \$3.25 million is in reserve for catastrophic contingency, required by the BOE. LPSD38 has \$1.1 million due based on actuarially determined liabilities for post-employment healthcare benefits and early retirement incentive payments. These amounts are due within the next three to five years. The BOE has determined to hold funds as per the Colorado Futures Study, which indicates continued state budgets, and to offset off-balance sheet liabilities.

PLES is a highly valuable facility within LPSD38, and will remain open and viable for the foreseeable future.

### Deficiencies Associated with this Project:

Overall Deficiency: Asbestos Abatement is specific to Section B of the roof replacement area (see Section B below). The area requiring roof replacement constitutes 99.7 percent of the total roof area, or four out of five roof sections as detailed below. Each of those sections is a different roofing material.

Section A - Kindergarten and Fourth Grades, SPED and ELL Resource Program, Educational Supply Room/Breezeway, Teacher Workroom, Staff Conference Room/SPED Staffing Room, Moderate Needs Room, Art Program, Music Program, Room, and Restrooms

Roofing system on this section is a fully-adhered modified membrane roof with an asphalt granule top coat; approximately twenty-three years old; passed its life expectancy. Both the modified membrane and asphalt top coat are compromised and are actively leaking. No warranties remain.

#### Exterior Deficiency

The severe climate has caused drying and cracking of the modified membrane as well as a loss of elasticity and extreme shrinkage. The membrane has significant debonding and adhesive loss, which cause the membrane to buckle and shift. Cracks, holes and open seams are evident throughout this section.

The membrane pulls and gapes around holes, cracks and seams allowing water and debris to migrate under the membrane.

The asphalt granules, which are designed to protect the modified membrane have worn off leaving the modified membrane openly exposed to extreme weather and daily wear and tear.

Minimal air circulation under the membrane makes evaporation improbable.

Many areas of the section have been temporarily patched, however, patches form ridges causing water to pool exacerbating the problem and causing additional roof damage. The repairs are no longer sufficient and the amount of water seeping into the building is increasing with each storm and season.

Trapped water remains stagnant allowing for bacteria growth, mildewing, and possible mold. With no way to run off or evaporate, the stagnant water eventually seeps into holes and cracks that lead directly into the building. This is a significant health concern for staff and students.

LPSD Facilities and Maintenance along with an outside consultant conclude that this section of the roof needs to be replaced immediately in order to protect staff and students from health and safety hazards. All parties are in agreement that should leaking continue, with no replacement plan, the facility will ultimately be at risk.

#### Interior Deficiency

Kindergarten hallway and an entrance/exit are exposed repeatedly to wet conditions and leaks.

In the fourth grade and ELL/SPED classrooms leaks have been reported along the southeast section above windows; exterior repairs have been made, yet leaks continue to worsen.

Water seeps through the roof and down walls into the educational supply room on to built-in cabinetry and carpeting. Water also leaks into exit breezeway and hallway.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

### Section B - INCLUDES ASBESTOS ABATEMENT AND ROOF REPLACEMENT

Kindergarten, First through Third Grades, Title 1 Program, Nurse's Office and Health Clinic, Speech/Language Program, Portion of Gymnasium, Media Center/Library, Mini-Theatre, Counseling Office, Staff Lounge, Front Office, GT Program, Performing Arts Programs, and Building Instructional Coach

This is the section of the building requiring asbestos abatement. Largest square footage area of roof; eight-year-old FOAM COATING over twenty-five-year-old modified membrane; foam coating was used as temporary fix over failing modified membrane; this section of the roof is actively leaking. The leaking roof causes saturation of the previously painted asbestos panels. The paint is bubbling and peeling off in sheets exposing asbestos.

#### Exterior Deficiency

Foam coating has worn off over the section leaving the foam exposed to severe weather conditions and significant moisture during precipitation.

The exposed foam acts as a sponge and soaks up any moisture present.

There are many holes throughout the foam roof area which when depressed allow water to bubble up from underneath the foam. Essentially, a significant amount of water is trapped in the foam. There is no way for the water to exit the foam and no way to remove the water without total removal of the foam. During rainy or snowy weather even more water enters the foam and as a result, greater amounts water leak down into the building.

This roof section poses a health risk for the students and staff in the building, as well as the facility itself.

Areas of mildew were apparent on the surface of the foam roof, which indicates the significant potential for mildew and/or mold to enter the building.

Birds, squirrels and other animals dig and peck at the foam enlarging already existing holes, and creating new ones.

The foam application process itself forms divots and large depressions where water pools for long periods of time. Pooling water soaks into wholes and cracks. With such a large area of the foam coating gone and the actual foam exposed, the entire roof section is at risk of becoming saturated.

Core samples taken by a roofing consultant indicate that a significant portion of the section is already saturated.

LPSD is unable to keep up with necessary patching. Patches are no longer effective enough to protect the interior of the building.

LPSD Facilities and Maintenance along with an outside consultant conclude that this section of the roof needs to be replaced immediately in order to protect staff and students from health and safety hazards. All parties are in agreement that should leaking continue, with no replacement plan, the facility will ultimately be at risk.

#### Interior Deficiency

##### ASBESTOS

The exposed asbestos is in Section B; the area includes: Title 1 Program, Nurse's Office and Health Clinic, Speech/Language Program, Instructional Coach Office, and Teacher Workroom. Area shares a wall with the front and main entrance.

Beneath the foam roof, the friable asbestos panels, which were previously encapsulated are now chipping, bubbling, and peeling as a result of excessive moisture from the leaking roof, followed by a drying cycle. The paints gets wet, it bubbles, it dries, it chips, it peels, and releases particulates.

There are several areas within this section where the paint is peeling off in sheets, exposing asbestos. Some areas are as large as eighteen square inches.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

This is a serious health and safety issue for this facility. Currently the ceiling tiles are the only barrier between the asbestos and the interior of this section of the building.

Saturation as well as repairs may dislodge pieces of asbestos posing further health and safety risks. Catastrophic conditions such as roof failure could dislodge large pieces of asbestos resulting in facility closure.

### ROOF

In the gymnasium there is a one-hundred and twenty square foot area which consistently leaks. Water enters and leaks onto electrical equipment, and down the walls onto the floor. Leaks have increased and worsened in past five years; majority of leaks are on southeast area; new leaks have appeared in last two years in west corner. The gymnasium used by entire student population.

All first and second grade rooms report leaks. Multiple repairs have been made, and tiles have been replaced repeatedly. Problems continue to worsen; repairs are only temporary.

Water leaks around venting in the staff lounge.

Leaking water contains dust and foam particulates as well as debris from ceiling tiles and paint that can be inhaled. Particulates can also be transferred via hands and clothing.

### Section C - Cafeteria, Portion of Gymnasium

Twenty-three-year-old 60 ml EPDM fully-adhered membrane roof; roof section is beyond useful life; this section of the roof is actively leaking.

### Exterior Deficiency

Chronic leaks are a result of the age of the EPDM membrane and its breakdown. The membrane is dried out and cracked due to exposure to severe climate and age. High altitude, bright sun, and freeze/thaw cycles have damaged the membrane. The membrane has shrunk significantly and is pulled tight around the perimeter of this roof section.

The membrane billows and vibrates in the wind as the membrane is no longer adhered to the roof surface. The membrane is buckled and puckered with open seams and holes where water enters.

The open seams have been repaired with temporary silicone patches, however, the membrane continues to pull and split. Water under the membrane is trapped, becomes stagnant, and migrates into the building.

Degradation of the membrane continues and leaks worsen as each season passes.

Temporary repairs are no longer effective.

LPSD Facilities and Maintenance along with an outside consultant conclude that this section of the roof needs to be replaced immediately in order to protect staff and students from health and safety hazards. All parties are in agreement that should leaking continue, with no replacement plan, the facility will ultimately be at risk.

### Interior Deficiency

Roof failure has resulted in water entering the cafeteria along the entire perimeter of eastern and southern walls. Every student in the building uses the cafeteria. This is a significant health concern as dirty dripping water enters a food service area. The risk for harmful bacteria, mildew and potential mold are of great concern. The cafeteria also houses reading groups and the before- and after-school care program. Repetitive repairs are becoming more frequent and less effective.

Water has run down over electrical systems and educational supplies.

During school hours, saturated tiles have given way dropping water and debris onto the floor and surrounding areas.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Additionally, water enters over the cafeteria/hallway entrance, paint has bubbled and tiles become saturated requiring removal. Electrical exit signs have been removed due to water entering the electrical box from the roof.

The gymnasium spans across Sections B and C. Dirty, dripping water leaks onto this portion of the gymnasium floor where it is used by students for exercise and activities.

### Section D

Sloped metal roof approximately twenty-years-old with useful lifespan of thirty to forty years; life expectancy will not be reached for approximately ten years.

Replacement is not recommended at this time.

### Section E - Fourth through Sixth Grades, Technology Lab, Math Instruction Room, Server Room, Mechanical Room

Twenty-year-old Dura-Last membrane roof is at the end of its useful life; four out of seven classrooms along with technology lab have active leaks.

#### Exterior Deficiency

This roof section is significantly impacted by decomposure and UV degradation. The membrane is extremely dry, brittle, and chalky with cracks throughout.

There are a large number of spiral fractures across the surface. Spiral fractures allow water to penetrate the membrane. In a sample section of the roof there are more than ten fractures in a ten square foot area. Core samples determine the roof section is saturated down to the plywood base. Water has penetrated membrane, foam, and insulation. When depressed water bubbles up from underneath, demonstrating trapped water.

Screws and fastening systems are protruding up through the membrane, which cause holes and openings from underneath.

The membrane is pulling away from the side of the building and roof flashing. There are large areas of water pooling across this roof section, with areas of mildew apparent. Following precipitation, water sits and seeps into holes, spiral fractures and cracks. Residual water pools further weakening the membrane.

Silicone caulking has been used to temporarily patch small holes. Repairs are increasingly inefficient and cost-prohibitive in terms of material and manpower in the form of contract labor.

LPSD Facilities and Maintenance along with an outside consultant conclude that this section of the roof needs to be replaced immediately in order to protect staff and students from health and safety hazards. All parties are in agreement that should leaking continue, with no replacement plan, the facility will ultimately be at risk.

#### Interior Deficiency

Water enters along south perimeter of all fifth and sixth grade classrooms. Tiles are repeatedly saturated and replaced. Leaks remain consistent.

Water enters and drips down the wall on north and east perimeters into the technology lab. This lab is used by the entire student population. It houses approximately forty hardwired computers as well as the main server and a other built-in equipment, which is not easily relocated. There would be significant replacement costs for this equipment should it be damaged.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The recommended and desired solution for the asbestos is as follows:

Removal and subsequent replacement of all duct work, piping and electrical.

Demolition and removal of all asbestos per required guidelines.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Carpet removal and subsequent replacement.

Removal and subsequent replacement of all built-in furniture and cabinetry.

Demolition and removal of ceiling with subsequent replacement.

New paint throughout.

For health and safety purposes, this work will require the building to be closed and sectioned off accordingly.

The recommended and desired solution for the roof is as follows:

Remove flashing and cant strips. Tear off and discard existing roofing and insulation down to the deck, including demolition and disposal of all roof-related materials and debris for Sections A, B, C and E.

Inspection of existing decking and related substrates for respective sections; should areas of deterioration be observed with existing decking, addition to the contract may be required.

Mechanically fasten specified insulation to all roof sections.

Replace with multi-layer built-up roof systems according to specifications including the following: Install roof jacks, drain flashings, parapet cap with hook, 24-gauge water heads and downspouts, install 24-gauge gravel stop, install 24-gauge gutters and downspouts, install 24-gauge edge material into gutter, install 24-gauge counter-flashing at walls, install 24-gauge slip flashing at curbs, install 24-gauge pitch pans, install 24-gauge roof jacks, install 24-gauge scuppers, install 24-gauge curb caps at condensers.

Metal exposed will be galvanized or treated.

Flood coat newly-completed roof membrane assemblies per specifications (hot asphalt).

Install any additional protective coating and ballasting.

A designated project manager will oversee from inception to completion.

LPSD will receive manufacturer's twenty-year labor and materials warranty, as well as a two-year contractor's warranty.

### **How Urgent is this Project?**

Asbestos Urgency:

LPDS38 Facilities and Maintenance and an independent consultant both recommend immediate abatement of the damaged friable asbestos surfacing.

LPDS38 has this flagged as a high priority project to completed as soon as possible.

Any roofing repair or replacement would likely dislodge asbestos, causing a catastrophic incident. Asbestos mitigation needs to be completed prior to any roof repair or replacement.

Any duct, piping or plumbing work necessary within this section would disturb the exposed asbestos.

Should this problem not be corrected as soon as possible a catastrophic incident could result in building closure and/or very serious health issues related to asbestos exposure.

Roof Replacement Urgency:

The roof replacement project is listed as high priority within LPDS38.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

The area of the roof with active leaks constitutes 99.7 percent of the total roof area.

Roof failure is causing damage to insulation, roof base, ceiling tiles, electrical outlets, drywall, paint, and carpeting.

Should replacement not happen in the very near future, leaks and holes will increase and worsen, resulting in more water entering the building.

All sections will continue to be impacted by extreme weather and UV degradation. Dryness and brittleness will continue and worsen. Water will continue to damage insulation, ceiling tiles, paint, and carpeting. Water leaks will eventually weaken and compromise the structure. Electrical systems will continue to be impacted.

Staff and students are in the presence of saturated ceiling materials, stagnant water, dripping water, wet walls and carpeting, and unhealthy humidity levels in classrooms across multiple grade levels, gymnasium, cafeteria, and technology lab.

These conditions are breeding grounds for bacteria and mold, potentially causing health issues including asthma, coughing, allergies, nasal irritation and other respiratory problems.

Failing and decomposing tiles are unsafe and release particles. These particles get on clothes and skin and may be inhaled. Paint and drywall particles can travel on clothing surfaces and in the air. Wet conditions cause an unhealthy environment.

Should the structure be damaged, there is no facility within the town of Palmer Lake to accommodate the elementary student population. If failure occurs, LPSD38 would not be able to pay for emergency roof replacement, which would result in facility closure.

The manpower involved in keeping up with repairs is ineffective and cost prohibitive. Repairs are outside the scope of LPSD38 Facilities and Maintenance staff, necessitating the use of outside contractors and increasing repair costs.

Currently LPSD38 is unable to budget for a roof replacement. Without grant funding the project will go unfunded and the expensive and ineffective repair cycle will perpetuate. Continued roof failure will worsen exacerbating the health and safety problems within the building. Until roof replacement is completed the daily health of those in the building will be compromised.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

Asbestos Abatement:

Section 4.1.8, Facilities with safely managed hazardous materials, will conform at PLES once the exposed-disturbed friable asbestos, that is breaking down in the ceiling and easily disturbed due to the on-going leaking roof issues, is replaced.

Roof Replacement:

Conformance to Article 4 of the Capital Construction Assistance Public School Facility Guidelines will be intact with a new roof system since 99.7% of the roof is being replaced. Section 4.1.2.1.1 – 4-ply build-up roof proposed replacement system will conform to the guidelines.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

LPSD38 will maintain the new roof at PLES. The roof will be visually inspected every six months and as needed following major storms, high winds, or unusual weather episodes. Labor and maintenance cost will be entered into the LPSD38 maintenance tracking software system (School Dude) to ensure sufficient, funds, staff, appropriate scheduling and warranty compliance.

The LPSD38 maintenance tracking software program automatically generates work orders for scheduled maintenance, warranty requirements, and any repairs on the roof. LPSD38 is responsible for all scheduled maintenance. Approved vendors or technicians will perform repairs and maintenance outside of the scope of LPSD38 facilities and maintenance department.

Warranties and manufacturer's recommendations will dictate changes or additions to the maintenance and repair schedule

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

and will be incorporated into our system and performed as needed.

All projected costs are entered into the maintenance tracking software system to ensure sufficient funding to maintain the roof. The life of the new built-up roof system is approximately twenty years. The roof will be maintained throughout the life cycle or until the roof needs to be replaced. Funds for a new roof system will be built into the budget and funds will be allocated as needed and deemed appropriate by LPSD38.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

1934 new construction, condition at time of construction: good.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$227,461.52	<b>CDE Minimum Match %:</b>	65
<b>Current Applicant Match:</b>	\$422,428.55	<b>Actual Match % Provided:</b>	65
<b>Current Project Request:</b>	\$649,890.07	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	General Fund	
<b>Total of All Phases:</b>	\$649,890.07	<b>Escalation %:</b>	5
<b>Affected Sq Ft:</b>	28,417	<b>Contingency %:</b>	8
<b>Affected Pupils:</b>	303	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$23	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$2	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$21	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$2,145	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	94	NA	

<b>District FTE Count:</b>	5,892	<b>Bonded Debt Approved:</b>	\$57,000,000
<b>Assessed Valuation:</b>	\$457,567,400	<b>Year(s) Bond Approved:</b>	06
<b>PPAV:</b>	\$77,659	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$7,952,750	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$108,151	<b>Outstanding Bonded Debt:</b>	\$71,045,000
<b>Free Reduced Lunch %:</b>	9	<b>Total Bond Capacity:</b>	\$91,513,480
<b>Existing Bond Mill Levy:</b>	17.083	<b>Bond Capacity Remaining:</b>	\$20,468,480



• Facilities Impacted by this Grant Application •

**The Classical Academy Charter - TCA Central ES Renovation and Addition - 1965**

**School Name: The Classical Academy Central Campus**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	35,753
Replacement Value:	\$8,728,851
Condition Budget:	\$6,357,995
Total FCI:	72.84%
Energy Budget:	\$12,514
Suitability Budget:	\$2,575,200
Total RSLI:	7%
Total CFI:	102%
Condition Score: (60%)	3.05
Energy Score: (0%)	1.14
Suitability Score: (40%)	4.09
School Score:	3.47



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** The Classical Academy Charter

**County:** El Paso

**Project Title:** TCA Central ES Renovation and Addition

**Previous BEST Grant(s) Funded:** 1

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** The CCAB had two main concerns relating to our previous submission: 1) the urgency of the health and security items; and 2) not enough budget details.

## Project Type:

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof                          | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                |
| <input type="checkbox"/> School Replacement    | <input checked="" type="checkbox"/> Fire Alarm         | <input checked="" type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation | <input checked="" type="checkbox"/> Boiler Replacement | <input checked="" type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                |
| <input checked="" type="checkbox"/> Addition   | <input checked="" type="checkbox"/> HVAC               | <input checked="" type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain:       |
| <input checked="" type="checkbox"/> Security   | <input checked="" type="checkbox"/> ADA                | <input checked="" type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

The Classical Academy is a charter school in Academy School District 20 located in the northern part of Colorado Springs. In 1997, nine founding families launched TCA with 400 students and a skeleton staff. Over the past 18 years, TCA has grown to become the largest K-12 charter school in Colorado. TCA, with an operational budget of \$28M, currently enrolls over 3700 students on 3 campuses encompassing 3 elementary schools, 1 junior high school, 2 high schools, and a home school program. An additional 6,000 children are on the waiting list. TCA alone is larger than 75% of the public school districts in Colorado.

Parents look to TCA as a skilled and passionate partner in the educational journey of their school-age children – a journey toward becoming thoughtful, virtuous, and wise individuals. Our curriculum is based on “Core Knowledge” and the teachings of Charlotte Mason, which lay the foundation for a Socratic liberal arts-based high school experience. Within this values-centered learning community, TCA's dedicated faculty cultivates the natural curiosity of learners through a stimulating, classically inspired curriculum. We are a relational learning community committed to the following endeavors:

- Growing the whole person by developing habits of mind, body, and spirit
- Passionately pursuing wisdom, virtue, and compassion
- Valuing the K-12 experience by providing opportunities for students to experience the “seasons” of education
- Engaging with rich academic content and the world of ideas in a way that invites relationship and encourages student voice
- Guiding students' learning experience to engage their minds through thoughtful questioning

Parents are invited to share their resources – time, talent, and treasure – to strengthen and sustain this extraordinary school. Typically parents volunteer over 35,000 hours annually.

Last school year, 2014-2015, TCA's Elementary (K-6), Junior High (7-8), High School (9-12), and College Pathways Program (7-12) received the John Irwin School of Excellence Award given by the Colorado Department of Education (CDE). This award is given to the top 8% of Colorado public schools. Also last year, Colorado School Grades, a coalition of 18 community organizations whose mission is to grade Colorado schools to provide community members with school performance information, rated TCA High School #9 of 345 high schools in the state, TCA College Pathways #1 of 345 high schools, TCA Junior High #84 of 505 schools, and TCA College Pathways Junior High #101 of 505 schools. Finally, TCA Elementary ranked #252 out of 1101 elementary schools in the state of Colorado. In 2012, the TCA High School was rated #1 of all Colorado public high schools. The TCA High School and College Pathways Program also received The Governor's Distinguished Improvement Award for demonstrating exceptional student growth.

Additionally, TCA received national recognition last year. Newsweek released the 2015 national rankings of high schools. Out of over 16,000 high schools considered, TCA's High School and College Pathways were ranked as only 2 of 8 high schools in

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

the state of Colorado in the Top 500 high schools in the country. TCA's High School and College Pathways ranked as the #298 and #340 schools, respectively, in the country, and placed #3 and #4 within the state of Colorado. Finally, the 2015 US News & World Report, Best High Schools report, ranked TCA's High School as #602 in the nation (out of 21,000 high schools considered) and #16 in the state of Colorado. College Pathways was named a Bronze Award recipient (the highest award a school could receive without an IB or AP program).

These awards underscore the strength of TCA's K-12 program – a program that provides a consistently excellent foundation for life-long learning. While student academic performance results are indicators of excellence, TCA's core values provide additional measures that emphasize the growth of the whole person—mind, body, and spirit.

### Deficiencies Associated with this Project:

#### Setting and Framework:

Before we begin our discussion into the deficiencies, solutions, and urgency associated with our grant, we want to give you a couple day-to-day scenarios that students at TCA's Central Elementary encounter and one less common, but more worrying, scenario.

Imagine you're one of the 240 students housed in one of Central Elementary's modulares. There are no restrooms in the modular, so every time you need to use the bathroom you have to trek to the main building and back again. Throughout the day, you make this trip, on average, five times – not just for restroom use, but for trips to the library, gym, cafeteria, specials, front office, etc. You do this regardless of rain, snow or cold; unless, of course, if the weather is too severe (e.g. lightning or hail), then you have to stay in your modular, even if you have to use the bathroom really bad. Aside from navigating the elements, once you leave the modular, you're no longer in a controlled, secure environment. Most of the time you're with your teacher or a tutor; but, occasionally (like on bathroom trips), you're on your own and are susceptible to outside threats, including bad people intent on doing harm to the school.

If you happen to be one of the 60% of our students in the brick and mortar part of the school, you face a second scenario. When you arrive each day, you enter a classroom without air conditioning and fickle heat control. You struggle to keep focus while your teacher opens or closes doors and windows in the daily dance of trying to get a temperature conducive to a healthy learning environment. Of course you know that if it gets too hot, they'll just cancel school. You like having the door to the outside open on hot days, but you also realize that anyone, including one of those bad people, could just walk in at any time without getting buzzed in at the front office.

The third scenario, a fire, impacts everyone regardless of location. We practice evacuating the main building and modulares every month during the fire drill. But earlier this year we had to evacuate for a real fire. An exhaust fan in one of the bathrooms shorted and caught fire. Smoke filled the hallways and we all got out just fine. The fire quickly subsided on its own and no one was hurt, but had the fire been worse, absent a sprinkler system, the whole building could've been destroyed or someone could've gotten hurt.

Much of what is described above will be repeated throughout the application, but in more detail and background. As you, the grant Board, read the application, keep these scenarios in mind to help understand our concerns for the safety, security, and health of our students and staff and the urgency we feel that makes this the right time to correct the deficiencies we encounter on a daily basis.

#### Deficiencies:

The facility's existing deficiencies directly affect the health and safety of TCA's students and staff. These deficiencies are interrelated and fall into two principal areas: 1) enhancing safety and security in a building with 31 exterior classroom doors and 12 classrooms in modulares; and, 2) improving student health and learning through enacting basic quality-of-life measures (e.g. installing air conditioning and improved heating and ventilation, fire suppression, ADA restroom access) while mitigating the risks and consequences of operational system/component failures.

Our safety and security concerns stem primarily from our dependence upon modular classrooms. Charter schools must

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purchase their own land and buildings rather than receiving them from the district or state. As such, most charters initially procure facilities that meet their minimum requirements, with the expectation that they will modify/adapt the facility as funds become available. Consequently, many charter schools may not complete their master plan for 10-20 years (or more). TCA is no different. As mentioned previously, we knew when we purchased the school that the existing space would not suit our program needs and student population (which has remained constant over the years). Additional classrooms were necessary for several grade levels as well as special classes. In restructuring the site, TCA acquired six modular units to house our 4th, 5th, and 6th grade students (40% of our students). The physical separation between the modulators and the main building results in a number of safety and security issues. Students traverse 25-75 yards one-way from their modular to the main school entrance for lunch, PE, specials, and library visits. This is done, on average, five times a day, exposing them to poor weather (e.g. rain, snow, cold, ice), increased risk of injury (snow and ice removal is more challenging), and elevated security risks. Additional visits to the front office or bathroom (none of the modulators have restroom facilities) amplify the security risks as students are not escorted for these trips and teachers/staff have no line-of-sight supervision. In severe weather situations (e.g. lightning or hail), students are restricted to the modulators, regardless of impact on academic schedules or bathroom urgency.

Separately, the physical layout and mechanical systems of the building present additional security and safety challenges. The school has no air conditioning. This is not unusual for a building constructed in the 1960s. To provide increased airflow and cooling, every classroom has a door that opens to the outside and windows that open and close. On warm days, staff members are forced to open the doors and turn on portable fans to provide students with an environment conducive to learning. Even then, the heat often affects students' health and, subsequently, their learning. (Note: in instances of extreme temperatures, the school has actually closed on occasion.) While the open doors aid in the health and comfort of staff and students, they create unsecured access points not just to individual classrooms, but to the entire facility.

Lastly in the safety arena, the site suffers from a transportation challenge. When the school was built, there was very little commercial or residential development in the surrounding area – something that has changed significantly over the last 50 years. Additionally, as a former district elementary school, the property was developed with busing in mind. Consequently, there is restricted vehicular access and parking on site. TCA, however has no busing. Every morning and every afternoon, nearly 600 children get dropped off and picked up. As there is not adequate queuing space on campus, cars spill over into the surrounding neighborhoods and businesses. Not only does this create ill will with the community, but it presents a safety hazard for students and parents as they negotiate the maze of vehicles and road crossings and severely limits fire and medical emergency response capability.

In regards to the impact of the school's operational systems deficiencies on student health and learning, we've already discussed the problems associated with the lack of air conditioning on warm days. Ironically, we have heating issues as well. On cold days, our three aging (and occasionally leaking) boilers struggle to keep up with demand, once again, impacting student health and learning. This deficiency, perhaps, has the most obvious impact on students and staff, but is not the only operational system concern at TCA. Before we purchased the property, we commissioned a due diligence study in July 2003 by H + L Architecture to examine the needs of the building. The findings outlined repairs/replacements that were recommended, over a ten-year period, to ensure a continued safe school environment. TCA has addressed many of these issues (having committed over \$850,000 to the effort) in the last 12 years. Additionally, we've received capital construction grants to repair major deficiencies associated with sections of the school's roof in 2006 and transferring our water and septic system to city systems in 2007. Nevertheless, there are still myriad areas of renewal or replacement from the 2003 due diligence report that need to be addressed today (which were reconfirmed in a facility assessment conducted in January 2013 by GE Johnson and in the CDE's latest School Assessment Report). In referencing the School Assessment Report, the school has a FCI of 72.84%, putting us in the "crisis" category by general industry standards. This FCI is based on the school's estimated replacement value of \$8.7M and a condition budget that exceeds \$6.3M (of which 75% is based upon systems and components that are "beyond useful life" or "deficient," necessitating replacement or renew within the next 2-5 years). We attribute the longevity and functionality of the current systems and infrastructure to the diligent maintenance and service programs TCA's enacted, as well as that of ASD20 before us.

Finally, while the school technically maintains compliance with all local and federal codes, many current requirements under ADA (e.g. accessible restroom facilities) and fire suppression (e.g. sprinkler systems) regulations are waived due to "existing non-conforming" disclaimers. Fully 25% of the \$6.3M condition budget is deficits which do not meet current code or

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guidelines, perpetuating a health and safety risk to our students that many schools don't have.

### Proposed Solution to Address the Deficiencies Stated Above:

TCA's solution is twofold – to renovate the existing structure and to construct an addition. Both components dovetail together in addressing the health and safety concerns. The design focus has been on cost effectiveness while meeting the needs of the students and staff.

The renovation of the existing 35,753 sq. ft. building retains the building layout and provides upgrades necessary to safely and efficiently continue using the learning areas. At a contractor-guaranteed maximum price (GMP) of \$1,823,923, the existing school will receive a complete makeover. The main components of this project entail completely revamping the HVAC system (to include adding air conditioning and removing the boilers and associated asbestos), adding a fire sprinkler system, replacing all single-pane windows with energy-efficient, dual pane glass, reconfiguring the plumbing and restrooms to become ADA compliant, and refurbishing classroom sinks, counters, and cabinetry. Additionally, all exterior classroom doors will be removed. (Note: in total, the school will go from 41 entry points to 7 combined between the old building and the new addition.) Asbestos, which exists in the floor tile and mastic under the current carpet and in the boiler pipes and pipe tunnels will be remediated. This list doesn't cover every component and system that will be replaced or renewed. In totality, the renovation will address nearly 78% of the CDE site and building condition budget deficiencies – at less than 29% of the estimated cost.

The addition is a 24,662 sq. ft. two-story building costing a contractor-guaranteed maximum price of \$4,252,730. It will include 15 classrooms, administrative offices, staff planning rooms, a secured main entrance, ADA accessible restrooms, a health room, a conference room, and associated custodial, mechanical, and IT facilities. As with the renovation, construction and long-term maintenance costs are key factors. Consequently, the addition will utilize energy-efficient LED lighting, remotely monitored/controlled rooftop HVAC system, and multiple low maintenance features (e.g. polished concrete hallways, low-flow flush-valve toilets, stucco exterior). Voice, data, intercom, and security monitoring will be integrated into a single, unified network between the old building and new addition. Lastly, the school's current transformer and distribution system (which is operating at 95% capacity) will be replaced to handle the expanded electrical load of the addition and expanded HVAC system.

Together, the renovation and addition resolve the vast majority (approximately 85%) of the condition budget deficiencies. In addition, the CDE School Assessment Report identified nearly \$2.6M in educational suitability deficiencies. Our project addresses every one of these deficiencies except the lack of an auditorium/performing arts facility. Concurrently, the safety and security issues are addressed. With the removal of the modulares, no students are left outside a secure building environment. The removal of the classroom exterior doors decreases the possibility of access by intruders. The new building is physically connected to the existing structure via two corridor links, providing a secure compound with limited/secure access points to the building. A new security vestibule provides a controllable visitor management system. Lastly, a two-lane road constructed around the perimeter of the property allows carpool vehicles to queue on site rather than on neighboring city streets. This allows all kids to be dropped off and picked up on school grounds and limits pedestrian road crossings.

As previously mentioned, the costs for the two portions of the project are guaranteed by the general contractor. These costs, however, do not include the additional costs for architectural fees and owner costs that are outside of the contract (e.g. permitting, engineering fees, utility fees, FFE, etc.). These costs total \$740,129.43, bringing the total cost of the project to \$6,816,782.43. Note that the total project cost includes an additional 5% for contingency events, but no set-aside for escalation. As the vast majority of the costs are contractually guaranteed by the contractor (i.e. a GMP) or by fixed fees (e.g. architectural costs, engineering fees, permits, utility tap fees), we do not envision significant cost growth. Scope growth has been constrained throughout the schematic design and development plan phases.

By going down the path of recapitalizing the Central Campus, we:

- 1) Improve the safety and security of the campus
- 2) Get rid of our six modulares
- 3) Improve the health and safety of staff and students through quality-of-life improvements and renovated operational systems
- 4) Resolve the bulk of the condition budget and educational suitability discrepancies, significantly lowering our FCI



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- 5) Add nearly 25,000 sq. ft. of new educational space
- 6) Minimize disruption to staff and students
- 7) Avoid the costs of 100% new construction and, possibly, the costs of procuring a new site

In conclusion, all this is accomplished at 76% of the combined condition and suitability budgets.

### How Urgent is this Project?

The safety and security of our students and staff is our highest priority. We know occurrences of school violence have become routine across Colorado and our nation. TCA has instituted myriad security measures to mitigate our risk (e.g. controlled access doors, security cameras, visitor management software). Nevertheless, the integral design of the buildings and site lends itself to safety and security concerns. Though, nationwide, modulars have yet to be targeted by perpetrators, their inherent nature makes them easy targets, as do students transiting the open space between them and the main facility. From a safety standpoint, the multiple daily treks between the modulars and main facility in all types of weather make slips, trips, and falls a common occurrence. The operational systems are getting to the stage where small incidents become major concerns. For instance, this year, an exhaust fan in a restroom failed and caught fire. The school was quickly evacuated and, fortunately, there was little damage. Had the situation been worse, though, the lack of fire suppression (i.e. sprinkler lines) could have resulted in extensive damage, large repair costs, and, most importantly, injury or loss of life. Lastly, our carpool situation is an accident waiting to happen. As parents are forced to queue and/or park on the road in front of the school or on neighborhood streets, kids navigate the maze of cars and crossing traffic in order to load and unload. As mentioned previously, this congestion also severely limits fire/medical emergency access to the school.

The health of our students and staff and sustainability of their learning and work environments is also critical to TCA's success and mission execution. The school itself is a solid, sturdy structure with a 100-year service life, but its systems are old and unreliable, even while TCA has managed to repair and maintain them for the past 12 years. By the CDE School Assessment Report, many of these systems/components have exceeded their useful life (by numerous years) and are identified as "necessary" for replacement or renewal within the next 2-5 years. (Note: it's worth highlighting that the School Assessment Report "contains condition and adequacy data collected during the fiscal year 2009 Statewide Financial Assistance Priority Assessment." While the Assessment Report is updated annually, it is reasonable to assume that the 2-5 year "necessary" replacement/renewal window for many deficient items is measured from 2009 rather than 2016. If that is the case, we are past that time frame for these items.) The urgency, then, is the steady increase in repairing and maintaining our systems and the likelihood that a significant failure could impact student safety, health, and learning.

Finally, there is some element of urgency in the area of our "existing, non-conforming" non-compliant code/guidelines deficiencies. As mentioned previously, fully 25% of the school's condition budget falls into this category. Every day the school continues to operate in its current configuration is another day the school is at risk of some misfortune or student/staff mishap.

So, ultimately the timeframe for fixing our deficiencies is "as soon as possible" as the argument comes down to trying to be proactive, and make sound, prudent decisions, rather than reactive, and continue "hoping for the best." In doing so, TCA has decided the time has come for an "extreme home makeover" to improve the safety and health of our students and staff. By recapitalizing the property, we expect to be educating "exemplary citizens" at the Central Campus for, at least, another 50 years.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

Our project conforms to the vast majority of the sections found in the Public School Facility Construction Guidelines. All applicable items have been listed below. All new construction and renovations will be performed in accordance with every local, state, and federal code and statutory requirement. Additionally, our construction project manager/executive is a LEED-certified professional and, in accordance with the High Performance Certification Program, we will look for a minimum of LEED certified and a goal of LEED Gold. Our current LEED checklist is attached to the grant package.

4.1 Health and safety issues, including security needs and all applicable health, safety and environmental codes and standards as required by state and federal law. Public school facility accessibility.

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- 4.1.1 Sound building structures. Each building should be constructed and maintained with sound structural foundation, floor, wall and roof systems.
- 4.1.1.1 - All building structures shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30 and ANSI S12.60, Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools.
- 4.1.2 Roofs. A weather-tight roof that drains water positively off the roof and discharges the water off and away from the building. All roofs shall be installed by a qualified contractor who is approved by the roofing manufacturer to install the specified roof system and shall receive the specified warranty upon completion of the roof. The National Roofing Contractors Association divides roofing into two generic classifications: low-slope roofing and steep-slope roofing. Low-slope roofing includes water impermeable, or weatherproof types of roof membranes installed on slopes of less than or equal to 3:12 (fourteen degrees). Steep slope roofing includes water-shedding types of roof coverings installed on slopes exceeding 3:12 (fourteen degrees).
- 4.1.2.1 - Low slope roofing systems:
- 4.1.2.1.2- Ethylene Propylene Diene Monomer - minimum 60 mil EPDM membrane, with a ballasted or adhered system.
- 4.1.2.1.4- Thermal Polyolefin - minimum 60 mil membrane adhered or mechanically attached systems.
- 4.1.2.1.5- Polymer-modified bitumen sheet membrane - Styrene-Butadiene-Styrene (SBS) membranes only, to be used only as a component of a built-up system noted above.
- 4.1.3 Electrical and distribution systems. Safe and secure electrical service and distribution systems designed and installed to meet the National Fire Protection Association 70: National Electrical Code (2014), and ASHRAE 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings.
- 4.1.3.1 – Energy use intensity should not exceed the U.S. Department of Energy (DOE) building benchmarks, and shall conform to ASHRAE Standard Benchmark Energy Utilization Index (October 2009).
- 4.1.3.2 - Emergency lighting shall operate when normal lighting systems fail in locations and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.
- 4.1.4 Mechanical systems. A safe and efficient mechanical system that provides proper ventilation, proper sound levels and maintains the building temperature and relative humidity. The mechanical system shall be designed, maintained and installed utilizing current State and Federal building codes, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.
- 4.1.4.1 - Healthy building indoor air quality (IAQ) through the use of the mechanical heating, ventilation and air conditioning (HVAC) systems or operable windows and by reducing air infiltration and water penetration with a tight building envelope.
- 4.1.4.2 - Mechanical systems shall comply with: ASHRAE Standard 62.1-2013 Ventilation for Acceptable Indoor Air Quality, ASHRAE 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings, and ASHRAE Standard 189.1-2014 Standard for the Design of High-Performance Green Buildings.
- 4.1.5 Plumbing. A potable water source and supply system that complies with the Colorado Primary Drinking Water Regulations, 5 CCR 1003-1, the Environmental Protection Agency's Safe Water Drinking Act, and the International Code Council's 2015 International Plumbing Code.
- 4.1.6 Fire management. Building fire alarm and emergency notification systems in all school facilities shall be designed in accordance with state requirements. Exceptions include unoccupied very small single story buildings, sheds and temporary facilities where code required systems are not mandatory and the occupancy does not warrant a system. All fire management systems shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-



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4.1.6.1 - Types of fire alarm notifications systems.

4.1.6.1.1– Internal audible and visual alarms.

4.1.6.1.2– External alarm monitoring and dispatch via internet / modem, telephone, radio, or cellular monitoring systems.

4.1.6.2 - Types of fire suppression systems.

4.1.6.2.1- Fire hydrants.

4.1.7 Paths of egress. A continuous and unobstructed path of egress from any point in the school that provides accessible routes to an area of refuge, a horizontal exit, or public way. A facility code analysis shall be conducted to determine all code requirements.

4.1.8 Facilities with safely managed hazardous materials. Potential hazardous materials in building components, which are identified in the Asbestos Hazard Emergency Response Act (AHERA) report, may include: asbestos, radon, lead, lamps and devices containing mercury. Additional hazardous materials may include: science chemicals, cleaning chemicals, blood-borne pathogens, acid neutralization tank for science departments, and bulk fuel storage (UST/AST) management that may be stored by the occupant.

4.1.8.1 - Public schools shall comply with all AHERA criteria and develop, maintain, and update an asbestos management plan, to be kept on record at the school district. This should include a building survey of the exterior of the building, and identification of all friable, non-friable, and trace asbestos materials. Reference regulation Number 8, Control of Hazardous Air Pollutants, 5 CCR 1001-10.

4.1.8.2 - All new facilities and additions shall conduct radon testing following completion of construction within nineteen months after occupancy as required by Colorado Department of Public Health and Environment, 6 CCR 1010-6.

4.1.9 Security. The degree of resistance to, or protection from, harm. It applies to any vulnerable and valuable asset; such as a person, building or dwelling. Security provides "a form of protection where a separation is created between the assets and the threat." These separations are generically called "controls," and sometimes include changes to the asset or the threat. These separations and degrees of resistance can be achieved through several models and techniques.

4.1.9.1 - Video Management Systems (VMS).

4.1.9.1.1- Cameras. Cameras are typically used to implement a video management system. In new construction, these should be internet protocol (IP) cameras on Power over Ethernet (PoE) cabling infrastructure, high definition over coax cameras, or analog cameras. Cameras should support motion activation, pan-tilt-zoom functionality, and standard video compression.

4.1.9.1.2- Closed circuit or IP video recorders. A central video management system should be capable of monitoring live feeds from multiple cameras from a central location, recording to digital media. Acceptable recorders include: network video recorder (NVR), high-definition composite video interface (HD-CVI), digital video recorder (DVR).

4.1.9.1.3- All video management systems should be integrated into their local first responder's alert notification system.

4.1.9.2 - Controlled access.

4.1.9.2.1- Manual.

4.1.9.2.1.1 - The number of entryways into the building or onto the campus should be limited. New construction shall be

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designed to restrict normal entrance to only one or two locations, with no recessed doorways, provided that sufficient entryways are available for fire department access and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

4.1.9.2.1.2 - All exterior doors shall be locking and equipped with panic bars to open readily from the egress side. Panic bars should utilize flush push bar hardware to prevent chaining doors shut.

4.1.9.2.1.3 - Doors should be constructed of steel, aluminum alloy, or solid-core hardwood. If necessary, glass doors should be fully framed and equipped with burglar-resistant tempered glass. Translucent glass should be avoided in all cases.

4.1.9.2.1.4 - Exit doors with panic push-bars should be "Access Control Doors" per the codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30, to prevent easy access by criminals and vandals, or in a lock-down / lock-out situation.

4.1.9.2.1.5 - Heavy-duty metal or solid-core wooden doors should be used at entrances in areas containing expensive items. These areas include classrooms, storerooms, and custodians' rooms. Interior doorway doors should also be heavy-duty metal or solid-core wooden doors.

4.1.9.2.1.6 - Door hinges should have non-removable pins.

4.1.9.2.1.7 - Door frames should be constructed of pry-proof material.

4.1.9.2.1.8 - Armored strike plates shall be securely fastened to the door frame in direct alignment to receive the latch easily.

4.1.9.2.2- Automated. Acceptable automated controlled access includes: automatic identification card/badge readers.

4.1.9.2.2.1 - Faculty, staff, and administration. School personnel may be issued additional tools for authenticating their identity in order to maintain efficient access to school facilities.

4.1.9.3 - Front door security

4.1.9.3.1- Building vestibules. Where appropriate, buildings shall employ double entry door designs that provide a secured area for visitors to authenticate and gain clearance. Known as "man traps", security vestibules solve several common security issues such as students opening doors for visitors, visitors bypassing check-in points, direct access to the interior from attackers, piggy-back entrances, and propped doors.

4.1.9.3.2- Video entrance systems. Building designs shall allow for school personnel to be able to monitor incoming visitors from a safe location out of reach, or line of site from incoming visitors who have not yet been authenticated or cleared for entry. These entry points shall use remote video and access control technology to conduct multi-factor authentication of incoming visitors (e.g. visual verification and ID, PIN/password and ID, or biometric and other form of visual identification).

4.1.9.3.2.1 - Video entrance systems shall use IP technology to allow access control to be conducted by school personnel from multiple locations, so that multiple personnel can provide coverage for screening incoming visitors, eliminating entry system override or "door propping".

4.1.9.3.2.2 - Video entrance systems shall be integrated with school communication, alarm, or school database systems to allow personnel to screen visitors.

4.1.9.3.3- Line of sight. The front entrance should be designed to maximize the line of sight distance for school occupants to detect an intruder from each relevant perimeter (e.g. classroom to hallway, office or guard station to entryway, or entryway to exterior fence access, or exterior fence access to property perimeter).

4.1.9.4 - Door lock / intrusion detection. Doors should have sufficient data cabling to a central interim distribution frame (IDF)

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or master distribution frame (MDF) to support access control/door release mechanisms, door sensors, IP Authentication sensors, and/or IP surveillance cameras as well as power cabling sufficient to support such hardware.

4.1.9.4.1- Interior classroom doors shall have locking hardware for lock downs, which does not interfere with automatic closing and latching functions required by the fire code and may have door sidelights, or door vision glass that allow line of sight into the corridors during emergencies, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

4.1.9.5 - Event alerting and notification (EAN) system. An EAN system that utilizes an intercom / phone system with communication devices located in all classrooms and throughout the school to provide efficient inter-school communications, and communication with local fire, police, and medical agencies during emergency situations.

4.1.9.6 - Secure sites should include the following:

4.1.9.6.1- Locations to avoid.

4.1.9.6.2- Location of utilities.

4.1.9.6.3- Roof access.

4.1.9.6.4- Lighted walkways.

4.1.9.6.5- Secured playgrounds.

4.1.9.6.6- Bollards at main entrances and shop areas with overhead doors.

4.1.9.6.7- Signage.

4.1.10 Health code standards. Schools, including labs, shops, vocational and other areas with hazardous substances shall conform to the Department Of Public Health and Environment Rules and Regulations Governing Schools: 6 CCR 1010-6.

4.1.12 Emergency care room. A separate emergency care room shall be provided. This room shall have a dedicated bathroom, and shall comply with the Department Of Public Health and Environment Rules and Regulations Governing Schools 6 CCR 1010-6.

4.1.13 A site that safely separates pedestrian and vehicular traffic and is laid out with the following guidelines:

4.1.13.1 - Physical routes for basic modes (busses, cars, pedestrians, and bicycles) of traffic should be separated as much as possible from each other. If schools are located on busy streets and/or high traffic intersections, coordinate with the applicable municipality or county to provide for adequate signage, traffic lights, and crosswalk signals to assist school traffic in entering the regular traffic flow.

4.1.13.3 - Provide an adequate driveway zone for stacking cars on site for parent drop-off/pick-up zones. Drop-off area design should not require backward movement by vehicles, and be one-way in a counterclockwise direction where students are loaded and unloaded directly to the curb/sidewalk. Students should not have to load or unload where they have to cross a vehicle path before entering the building. It is recommended all loading areas have "No Parking" signs posted.

4.1.13.4 - Provide well-maintained sidewalks and a designated safe path leading to the school entrance(s).

4.1.13.5 - Building service loading areas and docks should be independent from other traffic and pedestrian crosswalks. If possible, loading areas shall be located away from school pedestrian entries.

4.1.13.6 - Facilities should provide bicycle access and storage.

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- 4.1.13.7 - Fire lanes shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.
- 4.1.13.8 - Playgrounds shall comply with the Americans with Disabilities Act and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.
- 4.1.14 Severe weather preparedness.
- 4.1.14.1 - Designated emergency shelters shall be constructed as category IV buildings and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.
- 4.2 Technology, including but not limited to telecommunications and internet connectivity technology and technology for individual student learning and classroom instruction.
- 4.2.1 Educational facilities for individual student learning, classroom instruction, online instruction and associated technologies, connected to the Colorado institutions of higher education distant learning networks “Internet” and “Internet two.”
- 4.2.2 Educational facilities with standards based wired and wireless network connectivity.
- 4.2.3 Security and associated filtering and intrusion control for internal voice, video and data networks.
- 4.2.4 External internet service provider (ISP) connection and internal wide area network (WAN) connections meeting or exceeding recommended guidelines of the state education technology education directors association (SETDA) broadband imperative, and devices meeting or exceeding recommended specifications according to the most current version of technology guidelines for the partnership for assessment of readiness for college and careers (PARCC) assessments.
- 4.2.5 Provide school administrative offices with web-based activity access.
- 4.2.6 Administrative software individual educational programs (IEP), individual learning programs (ILP), and personal learning plans (PLP).
- 4.2.7 Emergency power backup, redundant a/c for voice, video and data systems.
- 4.2.9 Building shall be constructed with long-term sustainable technology infrastructure. Facilities should be built with sufficient data cabling and/or conduit and power infrastructure to allow for maximum flexibility as technological systems are upgraded and replaced in the future. A plan for technology lifecycle review intervals should be put in place for review at 2-4 year intervals.
- 4.2.10 Data center and non-data centers.
- 4.2.10.1 - Uninterruptible power center (UPS). IDF and MDF locations should be wired with 30 Amp or 40 Amp power circuits to support sufficient backup power systems to maintain secure systems operation during a power outage, or intentional school attack.
- 4.2.10.1.1 - Data center and non-data centers should be backed up by a generator.
- 4.2.11 Connectivity standards.
- 4.2.11.1 - Wireless. Data cabling shall be planned to support appropriately spaced multiple-antenna wireless networking infrastructure allowing for a centrally located antenna every 2500 to 5000 square feet (or preferably performing a professional site survey/ resonance analysis). Support for 802.11b/g/n, 802.11ac, and/or newer protocols are recommended.

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## 4.2.11.2 - Wired.

4.2.11.2.1 - Cabling. All new runs of copper data cable should be augmented category 6 cable or newer standards. Any data jack should be backed by two cable runs.

4.2.11.2.2 - Intermediate distribution frame (IDF) or Main distribution frame (MDF). Data closets shall be connected by conduit and fiber optic cable to allow for maximum data performance and upgradeability.

4.2.11.2.3 - IDF or MDF to classroom. Classrooms should have a data jack on the wall at the front and back of the room as well as data cable to the door for access control and a data jack on the ceiling near the front of the room for projection and/or smart board equipment as well as security/PA/clock devices.

4.2.11.2.4 - IDF to office, and library or technology/media centers. Any areas designed for independent work or study should have a dedicated data jack with two copper cable runs each.

4.2.11.2.5 - IDF to common areas, auditorium, and cafeteria. Common areas should contain one data jack per forty feet of linear wall space and such jacks shall be distributed at reasonably equal spacing throughout the room.

4.3 Building site requirements. Functionality of existing and planned public school facilities for core educational programs, particularly those educational programs for which the State Board has adopted state model content standards. Capacity of existing and planned public school facilities, taking into consideration potential expansion of services for the benefit of students such as full-day kindergarten and preschool- and school-based health services and programs.

4.3.1 Traditional education model, S.T.E.M. & Montessori / Expeditionary education models.

4.3.1.1 - Minimum occupancy requirements for schools: all listed requirements met or exceeded.

4.3.2 Other rooms.

4.3.2.2 - Special education classrooms. Special Education classrooms and facilities meeting or exceeding the accessibility and adaptive needs of the current and reasonably anticipated student population, in accordance with Section 504 and Title II of the Americans with Disabilities Act, the Exceptional Children's Educational Act, and Individuals with Disabilities Education Act.

4.4 Building performance standards and guidelines for green building and energy efficiency.

Section 24-30-1305.5 C.R.S., requires all new facilities, additions, and renovation projects funded with 25% or more of state funds to conform with the High Performance Certification Program (HPCP) policy adopted by the Office of the State Architect (OSA) if:

- The new facility, addition, or renovation project contains 5,000 or more building square feet; and
- The project includes an HVAC system; and
- If increased initial cost resulting from HPCP can be recouped by decreased operational costs within 15 years, and
- In the case of a renovation project, the cost of the renovation exceeds 25% of the current value of the property.

4.4.1 High Performance Certification Programs.

4.4.1.1 - Leadership in Energy and Environmental Design (LEED) for schools. Reference LEED 2009 for Schools New Construction and Major Renovations.

4.4.1.1.1- LEED is an internationally recognized certification system that measures a building using several metrics, including: energy savings, water efficiency, sustainable land use, improved air quality, and stewardship of natural resources.

4.4.1.1.2- Points are awarded on a 100-point scale, and credits are weighted to reflect their potential environmental impacts. Different levels of certification are granted based on the total number of earned points. The four progressive levels of

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

certification from lowest to highest are: certified, silver, gold and platinum.

4.4.1.2 - Colorado Collaborative for High Performance Schools (CO-CHPS).

4.4.1.2.1- The CO-CHPS Criteria is a benchmarking system that defines the attributes of a high performance school. The criteria addresses site and materials selection, energy and water efficiency, indoor environmental quality, innovation, performance, and integrated delivery, and provide high performance school strategies that can be used by schools and districts and their design teams for new campuses, buildings and major modernizations.

4.4.1.2.2- The CO-CHPS Criteria for New Construction and Major Modernizations (2009) requires the project achieves a 25% reduction in total energy cost savings compared to ASHRAE 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings, set an ENERGY STAR goal of at least 75, and use the resulting site Energy Use Intensity (EUI) as a performance target and utilize the Flex Energy design tool.

4.4.3 Energy management plan.

4.4.3.1 - Energy programs assist with creating a culture of energy efficiency within a school. Reference Energy Star Guidelines for Energy Management to help develop a plan.

4.4.4 Other energy efficient options.

4.4.4.1 - ENERGY STAR Labeled HVAC / mechanical systems.

4.4.4.2 - Windows, doors, and skylights (collectively known as fenestration).

4.4.4.3 - Building Envelope.

4.4.4.3.1- The interface between the interior of the building and the outdoor environment, including the walls, roof, and foundation – serves as a thermal barrier and plays an important role in determining the amount of energy necessary to maintain a comfortable indoor environment relative to the outside environment.

4.4.4.3.2- Roof. Roof design and materials can reduce the amount of air conditioning required in hot climates by increasing the amount of solar heat that is reflected, rather than absorbed, by the roof. For example, roofs that qualify for ENERGY STAR® are estimated to reduce the demand for peak cooling by 10 to 15 percent.

4.4.4.3.3- Insulation is important throughout the building envelope.

4.4.4.4 - Lighting.

4.4.4.4.1- Light emitting diodes (LEDs), compact fluorescents (CFLs) and fluorescent lighting should be considered over traditional incandescent lighting.

4.4.4.5 - Commissioning, retro commissioning and re-commissioning.

4.4.4.5.1- Commissioning ensures that a new building operates initially as the owner intended and that building staff are prepared to operate and maintain its systems and equipment.

4.4.4.5.2- Retro commissioning is the application of the commissioning process to existing buildings.

4.4.4.6 - Measurement and verification. Measurement and verification (M&V) is the term given to the process for quantifying savings delivered by an Energy Conservation Measure (ECM), as well as the sub-sector of the energy industry involved with this practice. M & V demonstrates how much energy the ECM has avoided using, rather than the total cost saved.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

4.4.4.7 - Landscaping.

4.5 The historic significance of existing public school facilities and their potential to meet current programming needs by rehabilitating such facilities.

4.5.1 Buildings that are 50 years or older at the time of application may be subject to the State Register Act 24-80.1-101 to 108 in determining if the affected properties have historical significance.

4.5.1.1 - Historical significance means having importance in the history, architecture, archaeology, or culture of this state or any political subdivision thereof or of the United States, as determined by the state historical society.

4.5.2 When determining if a facility should be replaced, the cost to rehabilitate versus the cost to replace should be evaluated.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

TCA contributes more than \$200,000 per year to a capital reserve/renewal fund to cover contingencies and scheduled/projected capital repair/replacement projects affecting our three campuses. The fund is not co-mingled with TCA's operating budget, but is held separately by the TCA Building Corporation. Note: for 2015, the contribution was \$230,000. Currently, there is a reserve of \$791,182 in this fund. Funds are allocated from the school's PPR funding as well as annual capital campaigns and advancement drives. This fund is the primary source of monies for maintaining and renewing major facility systems within their projected life cycles.

From a maintenance plan perspective, we look at preventative, ongoing, and projected maintenance requirements. Each of TCA's three campuses has a building manager who is supported in daily activities and projects by both organic and contracted custodial staff. For specialized work/trade requirements outside of the expertise and/or licensing of our staff, we allocate over \$700,000 annually to cover required state and local maintenance requirements and contracting services. We maintain a cadre of local contractors to help provide periodic inspections and maintenance on equipment that requires specialized attention. Some of the services include the following:

- 1)ADT: fire and security monitoring
- 2)Allero: surveillance video
- 3)Best Way: trash/refuge removal
- 4)Dept. of Public Health and Environment: stormwater management
- 5)Educational Networks: web hosting
- 6)Environmental Testing Co: modular moisture inspection and management
- 7)F & B: sprinkler/lawn/snow removal maintenance
- 8)Haynes Mechanical Systems: HVAC maintenance
- 9)JR Engineering: general engineering services
- 10)MARC: gym floor refinishing
- 11)MSJ: contracted custodial services
- 12)Occupational Health Technologies: asbestos/radon testing and management
- 13)OHT/ETC/RE: environmental testing
- 14)Schindler Elevator: maintenance
- 15)Security Central: fire and security monitoring
- 16)Simplex-Grinnell: fire alarm/sprinklers/fire hydrants/backflow inspections
- 17)Academy Pest Control: pest management
- 18)CommunicaOne: telephone and systems repair
- 19)Avery Paving: asphalt repair
- 20)City Glass Company: door and window repair
- 21)Colorado Springs Hazmat/Fire Inspection Permitting: annual inspections
- 22)Fish: window washing
- 23)Floor Connection: carpet repair and tile replacement
- 24)Ryba Electric: electrical repairs
- 25)Mathias Door Company: door repairs



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

26)Value Plumbing: plumbing repairs

27)Academy Turf: annual athletic field maintenance

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

See below.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

TCA purchased the Central Elementary Campus (formerly Mountain View Elementary School) in 2004 from Academy School District 20 (ASD20) for \$1.5M. This facility was constructed in four phases over the time period of 1965-1970. At the time of purchase, the site and facilities did not meet our exact needs – it was about 40% too small for our student population and program requirements. District 20 was using the school as a K-5 elementary whereas our school was (and is) K-6. Additionally, programmatic curricula changes have grown significantly over the last half century. “Specials” (i.e. music, foreign language, computers, art, etc.) didn’t generally exist outside the classroom in the 1960s when the building was constructed. Therefore, there was no space designed for these programs. To solve this programmatic space limitation and our larger enrollment, we installed six modular units that housed classrooms for our 4th, 5th, and 6th grade students.

Pursuant to the stipulations of the sale, the facility was to be used for educational purposes for 10 years. At the end of that time, TCA would evaluate whether to sell the property and construct a new facility at a different site (or same site) or recapitalize the facility to meet current needs. In November 2014, the TCA Board voted to renovate/expand the campus with proceeds derived from the sale of a school-owned land parcel and from refinancing 2003 bonds. The Board felt, based on architectural and construction trade counsel/due diligence studies and CDE’s School Assessment Report, the school’s foundational structure and 100-year service life was suitable for our needs. Given TCA’s financial limitations, it would be in the best interests of the TCA community to renovate/expand the facility to address safety/security issues and student health/learning concerns.

Prior to the purchase, TCA contracted with H & L Architecture in July 2003 to conduct a due diligence analysis of the building and site. The report stated the building, while 40 years old at the time, was in excellent shape from a structural standpoint, but had many other deficiencies and needed repairs in various systems, due mainly to age. Additionally, the report asserted the usable life-cycle of the facility could be extended through mechanical and electrical systems upgrades, expansions, or replacements. The report listed several areas of particular concern (e.g. HVAC, electrical, roofing, fire safety, etc.) that needed attention within 10 years following the purchase. These areas are the same areas that were identified in 2009’s Statewide Financial Assistance Priority Assessment and revised in the CDE’s School Assessment Report dated Jan 4, 2016 and categorized as “necessary” for replacement or renewal in the next 2-5 years due to “beyond useful life” or “inadequate.”

Since acquiring the Central Elementary Campus in 2004, TCA has made numerous capital improvements to the facility. We have received two capital construction grants to help the school remain suitable for students. The first grant, in 2006 for \$178,998, repaired a portion of the roof while the second grant, in 2007 for \$105,045, converted the septic system and well to the city’s water and sewage system. Our student population has remained relatively constant over the years and we have not had to increase the number of our modular classrooms. While this has ensured adequate space for our students, it has also resulted in added security concerns that are inherent in modulares. Two of the modulares are owned outright by TCA, while the other four are leased. Over the course of the last 12 years, over \$768,000 in lease costs have been incurred for these buildings.

Lastly, since occupying the campus in 2004, TCA has invested over \$850,000 in repairs to our heating system (three different boiler systems), electrical systems, security systems (cameras, keyless doors, Raptor visitor management software, etc.), and various other maintenance needs of the school.

**FY15-16 Charter School Capital Construction Allocation from the State:** \$770,837.00

**Current Grant Request:** \$3,079,045.86

**CDE Minimum Match %:**

56

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Current Applicant Match:</b>	\$3,918,785.63	<b>Actual Match % Provided:</b>	56
<b>Current Project Request:</b>	\$6,997,831.49	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	Capital Project Fund	
<b>Total of All Phases:</b>	\$6,997,831.49	<b>Escalation %:</b>	0
<b>Affected Sq Ft:</b>	60,472	<b>Contingency %:</b>	8
<b>Affected Pupils:</b>	598	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$116	<b>Does this Qualify for HPCP?</b>	Yes
<b>Soft Costs Per Sq Ft:</b>	\$12	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$103	<b>Who owns the Facility?</b>	Charter School
<b>Cost Per Pupil:</b>	\$11,702	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	101	TCA owns all of its lands (three parcels) and buildings (three campus buildings). The lands and buildings would be offered to the district to purchase or would be sold to another organization should the district decline to purchase.	

<b>District FTE Count:</b>	<b>Bonded Debt Approved:</b>
<b>Assessed Valuation:</b>	<b>Year(s) Bond Approved:</b>
<b>PPAV:</b>	<b>Bonded Debt Failed:</b>
<b>Unreserved Gen Fund 13-14:</b>	<b>Year(s) Bond Failed:</b>
<b>Median Household Income:</b>	<b>Outstanding Bonded Debt:</b>
<b>Free Reduced Lunch %:</b>	<b>Total Bond Capacity:</b>
<b>Existing Bond Mill Levy:</b>	<b>Bond Capacity Remaining:</b>

February 26, 2016

Dear Building Excellent Schools Today (BEST) Board,

In accordance with the Capital Construction Assistance Online Grant Application, Academy School District 20 (ASD20) is writing in support of The Classical Academy's (TCA) renovation/expansion plan for the TCA Central Elementary School (formerly ASD20's Mountain View Elementary School).

In 2003, TCA purchased ASD20's Mountain View Elementary school. It is a structurally sound building which recently celebrated its 50<sup>th</sup> anniversary. The renovation will include adding approximately 25,000 sq. ft. of classrooms/offices space, estimated at \$4.3M, and renovating the existing Central Elementary school for \$1.8M. With about \$740K for architectural and owner costs, the total project is \$6.84M. This renovation will address the safety and security needs of a 50-year-old building as well upgrades to several aging operating systems and installation of energy efficient features to address Colorado High Performance Building requirements. Additionally, the need for students to attend classes in portable modular units will be eliminated – a large security issue. With these improvements, TCA will be able to use the building for another 50 years.

Academy School District 20 has the confidence in TCA to complete this project. TCA has completed each of its building projects under budget since its conception in 1997. The estimated project cost for the Central Campus is \$6.84M. TCA will match 56% of the costs (\$3.83M) and will be requesting the remaining 44% (\$3.0M) through the BEST grant to help fund the project. TCA will complete the Central Campus renovation project by the summer of 2017. Estimated start time for the project is the summer of 2016.

From its start, TCA has owned all of its facilities and land. In 2008, TCA partnered with ASD20 to pass a mill levy override and currently share in those revenues. In that same year, as well as in 2015, TCA successfully obtained funding through the Colorado Educational and Cultural Facilities Authority (CECFA). Today, TCA budgets 16.5% of its per pupil operating revenue on its non-maintenance and operation facility costs. TCA qualifies for the charter school intercept and or moral obligation program. The last time TCA issued bonds, it received a Standard and Poor's BBB/Stable rating. Funding for this project will come from the revenue generated from refinancing TCA's 2003 bonds. One of the stipulations associated with refinancing these bonds is the requirement to spend the revenue on capital needs by September 2017. Receipt of BEST Grant funding this year would dovetail perfectly with this timing.

Academy School District 20 looks forward to seeing a repurposed building that safely provides an enriching educational environment that meets the needs of 598 elementary students and their families.



Dr. Mark Hatchell  
Academy District 20 Superintendent

**• Facilities Impacted by this Grant Application •****Elizabeth C-1 - HS Roof replacement - Elizabeth HS - 2000****School Name: Elizabeth HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	139,000
Replacement Value:	\$43,135,218
Condition Budget:	\$11,478,768
Total FCI:	26.61%
Energy Budget:	\$48,650
Suitability Budget:	\$911,400
Total RSLI:	20%
Total CFI:	28.8%
Condition Score: (60%)	3.86
Energy Score: (0%)	1.88
Suitability Score: (40%)	4.94
School Score:	4.29



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Elizabeth C-1

**County:** Elbert

**Project Title:** HS Roof replacement

**Previous BEST Grant(s) Funded:** 2

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** It was on the list, but not enough funds.

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

The Elizabeth High School has served the local community since 2000. The school has experienced significant roof moisture problems for a couple of years; buckets regularly line the corridors and classrooms. Our staff reviews monthly, the conditions of the roof to remove any obvious debris. While repairing common leaks is a solution, the ballasted condition of the original roof (15 years old and out of warranty) makes it difficult to determine, pinpoint and repair the source.

The design firm of CSHQA helped the district develop specifications which are reflected in the application. The ballasted EPDM membrane is loosely laid over polyisocyanurate and in most areas is adequately sloped to roof drains and scuppers. Some of the mechanical curbs and wall flashing are not tall enough to protect the sometimes heavy, drifting snow accumulation we experience. Those areas would also be addressed with this grant application.

These roof assemblies are holding/transferring moisture within their construction and it occurs from both snow melt and rainwater. The school regularly experiences many independent roof leaks scattered throughout the building; the interruption of moisture is a problem to both our students and staff. Its continuation can bring a major concern of structural decking decay and rust generation. At this time, we have not witnessed any mold spore generation. Long term problems with continued deck degradation combined with a large drift snow load (regularly present) can increase the risk of roofing failure.

Repair of the roofing is not practical, replacement is our intended option. If the roofing system is not replaced soon, damage of the roofing assembly and building structure will continue to escalate; resulting in a larger and more expensive repair/replacement later.

Our GPS location is no stranger to significant weather; including both high winds and baseball size hail storms. Our intended design solution will address these storm conditions so the roofs will be covered and protected under a manufacturer's warranty.

The roofing design demands the removal of all stone ballast and perform a tear off of the EPDM membrane. The stone will be salvaged and used elsewhere in the District. With the EPDM membrane removal the existing thermal insulation (intended to be salvaged) will be inspected and any damaged or degraded material will be replaced of equal composition.

The new roofing assembly will consist of multi-layer modified bitumen asphalt felts increasing our membrane protection from 45 mils to 330 mils; increase from one layer of protection to 4 layers. In addition, all of our flashing materials will be replaced, drains and scuppers re-established. Our intended roofing warranty terms will offer the District 30 years of moisture protection, the longest lasting roofing system available.

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

## Deficiencies Associated with this Project:

Our review of the current conditions of the building roofing assemblies identifies the following:

Many of the roof decks are currently compromised by both aged material and a material surface that prevents visual inspection of the buried membrane. It can no longer adequately protect the building occupants and equipment as necessary.

Moisture intrusion of the roofing assembly has led to damage of both wall and ceiling construction within the building environment.

Continued moisture exposure of the roof assembly will continue to cause damage and decay to the roof decking and structure. Long term decay can lead to greater degree of replacement and/or the potential for mold spore development in the building's interior construction.

## Proposed Solution to Address the Deficiencies Stated Above:

If awarded the grant, the Elizabeth School District will direct our design professional/roof consultant (who will be chosen through a competitive selection process) to prepare bidding documents that would allow multiple "primary roofing manufacturers" to participate. However, in doing so, we do not want to reduce the criteria for quality control during and after construction.

Our district wishes to put itself in the highest position to obtain the BEST Grant support. Our installation will carry a 30-year manufacturer's warranty from date of install and our district wishes to maintain that length of protection. These installations can also protect our roofing from significant hail storms and high wind gusts.

The original ballast covered EPDM will be removed and the substrate conditions inspected. Any damaged or deteriorated insulation, protective gypsum board sheathing and structural decking will be addressed at this time. The new roof surfacing will be Flood and Gravel to protect the structure from hail damage up to 2.5 inches. With the Flood and Gravel surface, walking pavers around the roofing ad equipment will not be necessary.

This system provides 330 mils of thickness with redundant layers of waterproofing versus a single layer of 45 mils.

The new roofing assemblies proposed will be designed and installed throughout the structure will protect/warrant the building envelop of published NRCA guidelines and align with CDE's philosophy of committing to long lasting building systems.

## How Urgent is this Project?

Moisture penetration into the building will continue until these roof conditions are corrected. Water stains in the ceiling tiles indicate moisture has already made its way into and through the full roofing assembly.

This intrusion can lead to further damage to the insulation, protective gypsum board and structural decking failure. Moisture intrusion may also lead to mold spore generation within the building construction. Both of these would be catastrophic to the occupants and equipment being protected by these roofing assemblies.

This intrusion can lead to further damage to the insulation, protective gypsum board and structural decking failure.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

Our grant request proposes to return the existing construction back to PSCG conformity under sections 1.2.1, 1.2.4, 3.1, 3.2, 3.2.1, 3.2.1.1, 4.1 and 6.1.

Sec. 1.2.1 The District structure has several deficiencies applicable to the health, safety and environmental codes and standards as required by state and federal law. Significant moisture intrusion, maintenance of structural integrity and ability to maintain high Indoor Air Quality are all significant areas of concern.

Sec. 1.2.4 The damaged and remaining roof areas of this district structure envelop do not meet thermal/energy efficiency performance standards. Moisture intrusion has compromised the limited thermal benefit of the roofing insulation and must be replaced.



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Sec. 3.1 A significant portion of the EHS structure roofing areas remain inadequate and building conditions are not protected by a sound, functioning rooftop envelop. Areas of the buildings metal roof decking have been subjected to significant and repetitive moisture intrusion.

Sec. 3.2 Many portions of district structure (under consideration here) do not have a weather tight roofing system. Aged, deteriorated and poorly designed roofing assemblies allow for significant, repetitive moisture intrusion into the building, and compromise the intended protection of its building occupants and property. Many roofing areas lack proper drainage slope and drainage support. The roofing envelop remaining is in poor condition.

Sec. 3.2.1.1 New roofing assemblies will be designed and installed for this district structure that will protect the building's occupants and property within. Existing roofing assemblies will be upgraded, including additional slope and drainage support. The roofing will protect the building with the best (longest) warranty terms available for the funds requested that would meet/exceed the requirements of published NRCA guidelines and building code requirements.

Sec. 4.1 The replacement of the roof areas will establish a building upgrade, complete with high quality, durable and easily maintainable roofing materials. The current and on-going maintenance of blister replacement will be eliminated.

Sec. 6.1 These replacement improvements of the roofing assemblies will continue to extend the service life of this district structure; a vital element of this rural community's infrastructure. Such efforts will without a doubt, improve many of the present health and safety deficiencies present within the district structure.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The District has historically performed an impressive job of maintaining its existing facilities (and the specific systems) under consideration here within this grant request. However, the roofing system has exceeded its warranty terms and useful service life. It must be addressed globally throughout the building versus a fix here and a fix there. The current level of maintenance necessary to preserve these aged systems is beyond normal and customary; warranting this request for replacement.

It is the intent of the District to provide adequate resources necessary to sustain these new improvements. Through cooperation with the primary product manufacturer and system warranties as well as those independent warranties from the misc. installers, the District staff will be an active part of the required general maintenance.

The District will commit to following the preventative maintenance measures recommended by the roofing systems manufacturer. At the conclusion of construction, a full Owner's Manual and training will be requested by the District for record purposes. The systems manufacturer, installer, designer and district staff will be required to walk and inspect the completed project annually for the first two years. In addition, we will expect as part of the long term warranties, biannual inspections from trained staff of the manufacturer as well as our district staff.

The District currently budgets \$60,000 from their capital project budget for annual facility upgrades. The District intends to maintain a similar level of financial commitment to ensure funds remain available when these system's "service life" terms expire.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

NA

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

**FY15-16 Charter School Capital Construction Allocation from the State:**



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Current Grant Request:</b>	\$1,151,028.51	<b>CDE Minimum Match %:</b>	62
<b>Current Applicant Match:</b>	\$566,924.49	<b>Actual Match % Provided:</b>	33
<b>Current Project Request:</b>	\$1,717,953.00	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		General Fund Reserves and /or COPs
<b>Total of All Phases:</b>	\$1,717,953.00	<b>Escalation %:</b>	5
<b>Affected Sq Ft:</b>	101,890	<b>Contingency %:</b>	5
<b>Affected Pupils:</b>	701	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$17	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$16	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$2,451	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	145		NA

<b>District FTE Count:</b>	2,250	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$173,342,346	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$77,024	<b>Bonded Debt Failed:</b>	\$5,200,000
<b>Unreserved Gen Fund 13-14:</b>	\$2,600,229	<b>Year(s) Bond Failed:</b>	13, 14
<b>Median Household Income:</b>	\$88,689	<b>Outstanding Bonded Debt:</b>	\$8,980,000
<b>Free Reduced Lunch %:</b>	18	<b>Total Bond Capacity:</b>	\$34,668,469
<b>Existing Bond Mill Levy:</b>	11.412	<b>Bond Capacity Remaining:</b>	\$25,688,469

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

For questions 4-11

Only answer the questions which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your school district.

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1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES.

Like many districts in the state, during the recession Elizabeth focused limited operating funds towards the classroom and programs for students. As funding slowly begins to increase, the pressure to rebuilt educational offerings, attract and retain quality teachers and catch up with infrastructure maintenance and repair is exacerbated by inequitable funding and a particular characteristics of the local tax base.

A reduction of matching contribution is essential for the district to avoid falling even further behind in its educational offerings, while also making reasonable progress with its infrastructure repair and maintenance program.

The net effect of all the factors affecting our district is that either students are shortchanged or our buildings deteriorate. Every additional dollar spent on a roof replacement is a dollar less spent on students. More on this is included in later questions.

2. Please describe why the cost of complying with the match contribution would significantly limit educational opportunities within your school district or BOCES.

Three factors outside of district control create circumstances that significantly constrain the equity of educational opportunities provided to students in the Elizabeth School District. A reduction of the matching contribution would offset the impact of these factors and allow additional money to flow to student's educational opportunities instead of costly infrastructure.

The first factor is a funding formula that results in the district being close to the lowest funded district in the state. The second is extremely high teacher turnover which is driven by the close proximity of large districts with significantly more revenue. The third is a tax base which makes local revenue collection cost prohibitive.

In order to provide more detail on the three factors mentioned above, regarding overall funding, according to data on the Colorado Department of Education website, Elizabeth School District is the one of the lowest funded school districts in the state, when considering local, state and federal revenue, on a per pupil basis.

The most recent comprehensive CDE analysis was completed in 2012. The magnitude of the gap only increased in that time as districts have continued to pass local mill levy overrides. According to this analysis, Elizabeth's per pupil funding was \$6,620, while the statewide average was \$9,756 and the statewide median was \$8,891.

<http://www.cde.state.co.us/cdefinance/AccreditationCategoriesDistributionPerPupilFunding>

File Name: Analysis Data – FY 2011-12

Regarding teacher turnover, Elizabeth has one of the highest three-year average turnover rates in the state at 30%. Larger, better funded districts border Elizabeth Schools to the West and North. According to the most recent data on the Colorado Department of Education website, Elizabeth School District average teacher day rate was 157 lowest out of 178 districts at \$206.20. The average teacher salary in Elizabeth was \$37,836.81.

Douglas County average was \$50,652.96, Aurora was \$52,929.72 and Cherry Creek was \$63,209.90. The average salaries of these neighboring districts were higher than the top of the teacher salary schedule in Elizabeth, at \$50,000.

<http://www.cde.state.co.us/search/node/teacher%20salaries%202013>

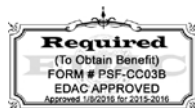
The extremely low level of total funding (local, state and federal) has forced the district to cut programs and services to students, while also struggling to cope with an uncompetitive salary structure relative to neighboring districts.

It would cost the district approximately \$2,000,000 per year from the General Fund to institute a competitive salary structure thereby bringing district teacher turnover into line with better funded neighboring districts.

Our district has eliminated course offerings, including our entire German Language Program, fewer AP and college concurrent classes at our high school, fewer music classes at our Middle School, and cut literacy coaches at our Elementary Schools. We have eliminated administrative expenses at every level, and in every department.

In order to relieve pressure on the General Fund, and to support key aspects of the educational programs in the district, the district has placed three mill levy override questions on the ballot over the last 13 years (2002, 2008, 2014), and none have passed. All three measures attempted to increase salaries for teachers. The most recent measure also contained funding for technology and safety, and had a five-year sunset.

Additionally, under different boards of education and different district administration, the district has put a total of five tax initiatives on ballot in the last 13 years, to address annual education related needs as well as long term capital needs, and all have failed. The fact is the Elizabeth School District faces strong reticence from voters about passing mill levy overrides for annual operating expenses, as well as bonds for capital needs.



It is not fiscally prudent, in the near term, for the school district to plan for capital repairs funded by additional local tax revenue. Yet, the condition of the roof at Elizabeth High School continues to worsen, the cost of replacement continues to increase, and the risk for additional damage to the building expands (for example - water damage to building interior, degradation of the insulation under the roof, mold development, damage to technology infrastructure, etc.).

Therefore, to solve these urgent infrastructure issues, matching funds must be diverted from education programs over the course of an entire decade, at a cost of \$100,000 for 10 years. This results in the district having to cut two teachers from the budget each year for the next 10 years.

If the waiver were granted, it would allow the district to reduce the teaching staff elimination by one teacher over a ten-year period. The impact of one additional teacher over the course of a decade would allow us to sustain an elective course offering, most likely in the performing and visual arts, at either the middle or high school level for a decade.

Approval of a matching fund reduction will reduce the need to make further cuts to services and programs for students, while also allowing the district to make needed infrastructure repairs before those costs escalate out of control.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants, or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

The school district has been working with almost every local political, civic and private organization over the last several years to promote wide-spread understanding of the most critical and urgent infrastructure needs of the district, including the need to replace the roof on the Elizabeth High School.

This includes the creation of an Infrastructure Assessment Committee (IAC) comprised of 12 members of the general public at-large who were very effective in our community. As well, a citizen Blue Ribbon committee reviewed and made recommendations on a short list of items for inclusion on a small bond initiative, and supported the need to replace the roof. Political and other community leaders have actively supported the communication efforts and given their strong endorsement of the need and the solution. Communication has been supported through a range of avenues, with continual outreach to parents, staff, and community members, to engage them in the decision-making and support of this initiative. The district is also supported by our local print media to communicate to those that would not normally have a direct connection with IAC, school or its newsletter.

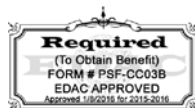
4. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

The District has challenges due to unique demographic and geographic aspects of the community.

One significant portion of the Elizabeth School District community is a bed-room community for the Denver metro area, with many residents commuting out of the area and doing much of their shopping in the commercial parts of Aurora, Parker, Lone Tree, Castle Rock, Centennial, etc. Another large segment of the district is ranches. Just a very small portion of the community is comprised of commercial development. The large parcels of property zoned agriculture produces relatively very little in property tax revenues.

Additionally, most of the balance of the remaining property is residential parcels, also adding minimal value in assessed valuation. Of the remaining few parcels zoned commercial, which is only a small portion of the overall assessed valuation, the amount of mills needed to address the district's capital needs costs residents significantly more in property taxes in comparison to other metro area school districts.

For example, one mill in the Elizabeth School District generates \$151K, while one mill in Cherry Creek, Boulder Valley,



Douglas County, and Adams 12 generates \$4.4MM, \$4.9MM, \$4.8MM and \$1.8MM respectively. While our district's needs are significantly less than these other metro area districts, the lack of a commercial tax base places more of a burden on the home owner to bear the tax increase than in other neighboring metro area school districts. This, then dramatically reduces the ability of the district to pass bond measures, even ones that are relatively small.

5. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

6. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

While the percentage of pupils eligible for free and reduced lunches is below the statewide average, the percentage has grown at a much faster rate than the statewide average, more than doubling over the last seven years. Additionally, many families that struggled financially during the recession moved out of the district to find more affordable housing in neighboring communities.

The negative impact of this significant rise in the number of students with increased educational needs as a result of their family's economic situation has been compounded by dramatic decreases in pupil funding which are not buffered by supplemental revenue from local sources. Declining enrollment driven by families' needs to be closer to their employment and to find more affordable housing have further compounded the negative impact on educational programs and services.

We also believe that the district's percentage of students eligible for free and reduced lunch is not representative of the actual situation since free and reduced lunch subsidies have a negative stigma in our community, being viewed negatively as government handouts.

7. Bond Election failures and successes in the last 10 years – The more attempts the school district has had, the lower the match.

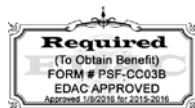
Over the past 10 years the district has run two bond elections. Both initiatives were designed to support BEST Grant matching funds in order to replace leaking roofs at Singing Hills Elementary School and Elizabeth High School.

The 2013 bond measure lost by 60.9%. For comparative purposes, state-wide school funding initiative Amendment 66 lost by 84% in Elbert County, the third largest NO vote in the state, and well above traditionally anti-tax counties like Douglas County (72.1% NO vote) and El Paso County (73.3% NO vote). In 2013 Elbert County government had a tax measure on the ballot as well, and this measure lost by an even greater margin, losing by 85.7%.

The school district results show that 23 to 25% of the voters who voted against the state and county tax measures actually supported the school tax measure. A 23% to 25% differential is meaningful in an election. It shows that the district and community clearly identified and communicated the need for new roofs, and developed strong support for the solution. But, this was not enough to overcome a significant anti-tax sentiment.

In 2014, the school district bond initiative picked up a lot of ground losing by a much smaller margin, with 52.5% voting NO. The 2014 election brought more voters to the election box, with 7,764 in 2014 versus 5,555 in 2013. Of the new voters in 2014, the vast majority supported the school bond measure, with 1,517 (69%) supporting the tax increase for the school district.

The likelihood of additional local revenue being approved by voters in the time frame corresponding to the needs identified in the Grant application to preserve our single High School is highly unlikely. It is not fair that the students of Elizabeth Schools be educated in inferior, and potentially unsafe, facilities. The state constitution requires that students receive a fair and equitable education, and facilities are clearly part of what constitutes equitable.



8. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

9. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

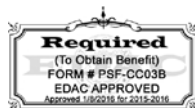
10. The school district's unreserved fund balance as it relates to their overall budget.

The district's unreserved fund balance within the General Fund is \$597,811 or 3.2% as a percentage of expenditures and transfers. Depending on your perspective \$597,811 might be considered a large reserve amount or a very small one. From our district's perspective, it represents 14.5 days of operational costs, a very small amount to mitigate our ongoing capital needs.

The intent of the unreserved fund balance is for unforeseen emergencies or repairs, which could result from a severe weather event like a tornado. Obviously, this is not a very large amount to address a variety of situations that could arise during the course of a school year, again highlighting the district's precarious financial situation and our need for a reduction in our match.

11. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

The Capital Construction Assistance Board approved the district's waiver request last year, in 2015, and we believe the same justification exists this year as did last year.



• Facilities Impacted by this Grant Application •

**Elizabeth C-1 - ES Wastewater Treatment Facility - Singing Hills ESP/ Preschool - 1995**

**School Name: Singing Hills ES/Preschool**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	53,000
Replacement Value:	\$14,541,421
Condition Budget:	\$5,046,443
Total FCI:	34.70%
Energy Budget:	\$18,550
Suitability Budget:	\$893,900
Total RSLI:	15%
Total CFI:	41.0%
Condition Score: (60%)	3.42
Energy Score: (0%)	2.05
Suitability Score: (40%)	4.69
School Score:	3.93





# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Elizabeth C-1

**County:** Elbert

**Project Title:** ES Wastewater Treatment Facility

**Previous BEST Grant(s) Funded:** 2

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework                 |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input checked="" type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | Septic System/Wastewater Treatment Facility                |

## General Information About the District / School, and Information About the Affected Facilities:

Singing Hills Elementary School (Singing Hills) has served the local community since 1996. Currently, approximately sixty staff are employed by Singing Hills, which include teachers, administrative staff, maintenance staff, and other representatives for school affiliated programs. Singing Hills provides schooling for students from pre-kindergarten through fifth grade. The pre-kindergarten program accommodates approximately fifty-five to sixty students and operates at half days for four days per week. The kindergarten through fifth grade program accommodates approximately 450 students and operates at full school days for five days per week.

The Singing Hills septic system which services the facility has developed numerous compliance issues as state standards have evolved over time. The existing septic system serving the Singing Hills Elementary School was designed in 1995 with the exclusive purpose to remove waste from the building. Since that time the state has added rules governing the maximum nitrogen levels allowable in the surrounding groundwater. The original system was not designed to treat wastewater to comply with maximum nitrogen levels in groundwater of surrounding the site.

As a result of additional requirements for chemicals present in groundwater, the Colorado Department of Public Health and Environmental (CDPHE) has issued compliance limitations for nitrogen as measured by downstream monitoring wells at the Singing Hills site. The limits must be in force prior to February of 2019 and include a total inorganic nitrogen (TIN) limit of 10 mg/L and a total dissolved solids (TDS) limit of 400 mg/L.

Trend data from the existing groundwater monitoring wells indicate that groundwater TIN and TDS concentrations are currently well above the aforementioned compliance limitations. Lack of compliance by the 2019 deadline could likely result in very costly fines and the inability to use the school facility for any purpose.

In addition to the concerns voiced by the CDPHE, the school district does not wish to jeopardize the health, safety and welfare of our students, staff and surrounding community by employing a substandard system to remove and treat wastewater from the facility.

To develop a solution to address the compliance requirements, the Elizabeth School District retained the services of JVA Consulting Engineers to prepare the Preliminary Engineering Report for the wastewater treatment facility, also known as a "WWTF", serving the school. The focus of the report was to evaluate potential upgrades to the septic system that are capable of meeting the TIN and TDS standards.

## Deficiencies Associated with this Project:

The Elizabeth School District owns and operates the school which includes a wastewater septic system that consists of a 1,500-

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

gallon grease interceptor and an 8,500-gallon two-compartment septic tank, followed by a 150-foot by 150-foot leach field. The Singing Hills system was installed in 1995. Later, in 2009, groundwater monitoring wells were installed to measure performance of the system according state standards.

The Singing Hills system has had multiple state compliance issues in recent years. The district worked with the state to resolve the issues, but the original system has been ineffective in meeting the compliance limitations. After negotiations between the state and the district, the Colorado Department of Public Health and Environment issued revised timeline for compliance limitations of the downstream monitoring wells at the site. The maximum limits become effective in February of 2019. The new limits include a total inorganic nitrogen TIN limit of 10 mg/L and a total dissolved solids TDS limit of 400 mg/L. Historic readings from existing groundwater monitoring wells indicate that groundwater TIN and TDS concentrations produced by the existing system are well above the aforementioned compliance limitations.

Singing Hills is in need of a cost effective, sustainable, and long term wastewater treatment solution that can address the compliance limitations that become effective February 1, 2019.

### **Proposed Solution to Address the Deficiencies Stated Above:**

The capital improvements necessary to update the existing wastewater system include: decommissioning the existing septic tank and leach field and adding the following: 15,000 gallon septic/anoxic tank, two stage textile media filter, upflow denitrification filter, UV disinfection and a drip irrigation soil treatment area. A Site Application would be required to add the aforementioned improvements to the wastewater treatment facility at Singing Hills. A schematic design of the proposed wastewater treatment facility is in the photos along with the attached Preliminary Engineering Report.

Decommissioning the existing septic tank would be accomplished by pumping everything out of the tank, breaking the bottom of the septic tank, collapsing the sides and top into the void, and filling the remaining void with pea gravel or native material. Decommissioning the effluent line to the leach field would be accomplished by abandonment in place, and the leach field would be decommissioned by capping the inlet line.

The proposed wastewater treatment system would be engineered to meet Singing Hills discharge permit limits effective February 1, 2019, with the compliance point at end of pipe (prior to conveyance to the soil treatment area).

The drip irrigation soil treatment area mentioned in the first paragraph can also be used to establish turfgrass where the leach field currently is located. Eventually this large area can be incorporated into a park/recreation to be enjoyed by the students of Singing Hills, as well as the surrounding community.

### **How Urgent is this Project?**

The need is quite urgent. When the current system was originally installed in 1995 as part of a new school at this site, it was only designed to remove the waste generated by the school. It was not designed to treat the waste. Subsequent to the construction of the system, state and federal standards have evolved and the original design of the system is no longer compliant according to the State's oversight agencies.

Due to the new standards, the district has been the recipient of numerous violation notices. Some of the language included in these notices is a threat of "enforcement options", such as a "Cease and Desist Order that may include the assessment of penalties". Also included in these threats is a "civil penalty of up to \$10,000 per violation for each day which such a violation occurs". Aside from the threat of enforcement action that clearly demonstrates the urgency of this project, the district is very concerned about the health, safety and welfare of its students, staff and neighbors by protecting the environment with the installation of a system designed to safeguard the local aquifers for many years.

The district has repeatedly sought assistance and guidance from the CDPHE, however the department was only able to tell the district what is wrong. District staff met with staff from CDPHE and negotiated a new permit which extended deadline for the district to become compliant with the new standards. While the new permit grants the district until February 2019 to meet these guidelines, there is a lot of preparation that will go into the construction of the new facility. The goal is to complete the installation of the new wastewater treatment facility by the end of 2017. This will allow the district a full twelve months,

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

minimally, to establish that the system is working properly and fully complies with state requirements.

The process for the project includes soliciting RFPs to select an engineering firm to design a CDPHE acceptable solution and a contractor to construct to the facility, a lengthy review process by the CDPHE, the permitting process and seeking financial assistance so that limited funds intended for the classroom are not diverted to the construction of an upgraded wastewater treatment facility. Additional steps may be necessary to comply with grant rules, if the district is awarded a BEST Grant.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

While there are not any areas in this project that are specifically addressed within the Public School Facility Construction Guidelines, we will attempt to identify how the project will address sections that are somewhat close in scope to this construction.

4.1.5 Plumbing - This project will ensure that the groundwater in the vicinity of the school will remain safe for many years.

4.1.10 Health code standards - With the completion of this project, the district will conform with all the rules and regulations of the Department of Public Health and Environment.

4.3 Building site requirements - The large system capacity of the WWTF will accommodate any foreseeable increase in student and staff population.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The school district has historically performed an impressive job of maintaining and improving its existing facilities, within the given budget constraints. The current wastewater system was designed to meet the needs of the school at the time it was built, but the system no longer meet state standards.

It is the intent of the district to provide adequate resources necessary to sustain compliance with the new standards accomplished through this project. Through cooperation with the primary product manufacturer and system warranties, as well as those independent warranties from the miscellaneous installers, the district staff will be an active part of the required general maintenance.

The district will commit to following the preventative maintenance measures recommended by the WWTF manufacturer. At the conclusion of construction, a full Owner's Manual and training will be requested by the district for record purposes. The systems manufacturer, installer, designer and district staff will be required to walk and inspect the completed project annually for the first two years. In addition, we will expect as part of the long term warranties, biannual inspections from trained staff of the manufacturer as well as our district staff.

With diligent, annual preventative maintenance, the WWTF solution is designed to have a 20-year lifespan. To address the inevitable replacement of the system, the district will set aside \$20,000 annually in General Fund reserves to ensure funds remain available when this system's "service life" terms expire.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

NA

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$260,348.64	<b>CDE Minimum Match %:</b>	62
<b>Current Applicant Match:</b>	\$424,779.36	<b>Actual Match % Provided:</b>	62
<b>Current Project Request:</b>	\$685,128.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		General Fund Reserves and /or COPs
<b>Total of All Phases:</b>	\$685,128.00	<b>Escalation %:</b>	7
<b>Affected Sq Ft:</b>	53,000	<b>Contingency %:</b>	20
<b>Affected Pupils:</b>	394	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$13	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$2	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$11	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$1,739	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	135		NA
<b>District FTE Count:</b>	2,250	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$173,342,346	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$77,024	<b>Bonded Debt Failed:</b>	\$5,200,000
<b>Unreserved Gen Fund 13-14:</b>	\$2,600,229	<b>Year(s) Bond Failed:</b>	13, 14
<b>Median Household Income:</b>	\$88,689	<b>Outstanding Bonded Debt:</b>	\$8,980,000
<b>Free Reduced Lunch %:</b>	18	<b>Total Bond Capacity:</b>	\$34,668,469
<b>Existing Bond Mill Levy:</b>	11.412	<b>Bond Capacity Remaining:</b>	\$25,688,469



• **Facilities Impacted by this Grant Application** •

**Canon City RE-1 - Roof Replacement at Multiple Facilities - Canon City HS - 1960**

**School Name: Canon City HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	209,762
Replacement Value:	\$72,750,210
Condition Budget:	\$28,820,496
Total FCI:	39.62%
Energy Budget:	\$0
Suitability Budget:	\$11,270,300
Total RSLI:	25%
Total CFI:	55.1%
Condition Score: (60%)	2.85
Energy Score: (0%)	3.54
Suitability Score: (40%)	4.10
School Score:	3.35



**Canon City RE-1 - Roof Replacement at Multiple Facilities - Lincoln ES - 1951**

**School Name: Lincoln ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	36,824
Replacement Value:	\$8,989,511
Condition Budget:	\$4,882,831
Total FCI:	54.32%
Energy Budget:	\$0
Suitability Budget:	\$1,423,200
Total RSLI:	11%
Total CFI:	70.1%
Condition Score: (60%)	2.70
Energy Score: (0%)	3.23
Suitability Score: (40%)	4.00
School Score:	3.22



**Canon City RE-1 - Roof Replacement at Multiple Facilities - McKinley ES - 1951**

**School Name: McKinley ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	36,172
Replacement Value:	\$9,541,522
Condition Budget:	\$4,448,633
Total FCI:	46.62%
Energy Budget:	\$0
Suitability Budget:	\$1,657,500
Total RSLI:	14%
Total CFI:	64.0%
Condition Score: (60%)	2.72
Energy Score: (0%)	2.81
Suitability Score: (40%)	4.15
School Score:	3.29



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Canon City RE-1

**County:** Fremont

**Project Title:** Roof Replacement at Multiple Facilities

**Previous BEST Grant(s) Funded:** 2

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

The Fremont County RE-1 School District is located in Canon City. Our economic base centers around corrections, tourism, and some farming and ranching. We educate 3,700 students in grades PK-12 in 9 facilities. Our most recent District Performance Framework score was 56.8%-Improvement. RE-1 parents truly value choice and so we offer 2 neighborhood elementary schools, an elementary science and technology magnet, a choice-in K-8 exploratory, a large traditional K-8 school, a K-8 core knowledge charter school, a traditional middle school, a traditional high school, an at-risk grade 6-12 school, and an online grade 6-12 school. Our most recent constructed facilities are Harrison K-8 (population 770, completed 2006), and portions of Canon City High School (originally built 1961 with newer portions completed in 2006).

Canon City's total assessed valuation is \$229,321,679, and our mil rate is currently set at 27.130 with an additional 8.044 mils set aside each year through 2024 to pay off the construction of Harrison K-8 School and an addition to Canon City High School.

Canon City Schools is one of Colorado's floor funded districts, one of only two that has not been able to pass a mil-levy override. As a result of the application of the negative factor applied to the Colorado School Finance Act our total funding shrunk by approximately 3.5 million dollars per year hitting a high of just under 26 million dollars total program funding during fiscal year 2010, and bottoming out at 22.5 million dollars per year total program funding for fiscal year 2013. This resulted in our falling behind on many facilities maintenance projects. Total funding for fiscal year 2015-16 is 25.7 million dollars, but we still have a 3.5 million dollar negative factor applied to our formula.

Additionally, the Canon City School District currently has mil override capacity, but our most recent attempt to pass a mil override in November 2013 resulted in a loss by 120 votes out of approximately 8,000 cast.

Additional information is included in the following exhibits:

Exhibit -A-: Project Budget

Exhibit -B-: Project Timeline

Exhibit -C-: Project Specifications – Lincoln, McKinley and CCHS

Exhibit -D-: 2001 Roof Survey – Excerpts for Lincoln, McKinley and CCHS

Exhibit -E-: District School/Site location map

Exhibit -F-: Floor plans – Lincoln, McKinley and CCHS

Exhibit -G-: QZAB Lease/Purchase Agreements (4)

Exhibit -H-: District-wide 2012 Facilities Study NOT ENCLOSED – previously sent

Exhibit -I-: District-wide Facilities Study Revised 2016 NOT ENCLOSED - on CD

Exhibit -J-: District-wide 2001 Roof Survey

Exhibit -K-: Enclosure: CD with the above listed Exhibits, the completed application and project photos

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

## Deficiencies Associated with this Project:

In this grant we are asking for support in repairing roofing sections at Lincoln School of Science and Technology, McKinley Elementary, and Canon City High School at a total cost of \$1,010,723.

Repairs to Lincoln would cover 7,471 square feet at a total cost of \$208,015. Repairs to McKinley would cover 4,120 square feet of gymnasium/cafeteria space at a total cost of \$127,136. Both of these repair costs are higher per square foot than typical because they will require removal and reinstallation of solar panels. Repairs at the Canon City High School would cover 35,567 square feet at a total cost of \$675,572 (no solar panels need to be dealt with here).

### Lincoln Details:

Section B and D of the Lincoln School which totals 7,471 square feet of Asphalt bur ½" per foot of slope over a wood deck the first layer of insulation consists of a ½" thick perlite board that is then covered with a four-ply asphalt built up roof membrane with an asphalt flood coat and aggregate. This roof has been repaired multiple times as well and section B is above a gym/multi purpose room floor also. The age of the roof is 30 years and the roofing analysis shows the roof had 10 years remaining from the 2001 survey. We will remove the existing roof and install a tapered insulation system covered by a ½" gypsum board and adhere an 80 mil Duro-last pvc membrane. Please see roof spec.

### McKinley Details:

Section D of McKinley School which totals 4,120 square feet of asphalt bur ½" per foot of slope over a wood deck. The first layer of insulation consists of a ½" thick perlite board which is then covered with a four-ply asphalt built up roof membrane with an asphalt flood coat and aggregate. This roof has been repaired multiple times and this section is also over a gym/multi purpose room floor, causing us concern about high costs of repair to that should extensive leakage occur. This section had 9 years remaining based on our 2001 roof survey. Our plan is to remove the existing roof and install a tapered insulation system covered by a ½" gypsum board and adhere an 80 mil Duro-last pvc membrane. Please see roof spec.

### CCHS Details:

Section H of the Canon City High School was an addition in 1980 which totals 35,567 square feet of 12" on center ¼" per foot to 1" per foot of slope raised rib metal roof. There are multiple areas of this roof that have been repaired many times and are having functional issues. The roofing analysis we conducted in 2001 said the remaining life was 10 years at that time. We will leave the existing roof and install an overlay with 1 ½" insulation cover with ½" gypsum board and adhere an 80 mil Duro-last pvc membrane. Please see roof spec.

The GE Johnson Construction company and Jewett Roofing inspected all of these sections of roof and put together cost estimates for us.

As stated above, a district roofing analysis was conducted in 2001 that identified the age and condition of all roofs in the district. Over time many issues have been addressed (all of Washington School, and the most needy parts of The ACCESS Center, Lincoln School of Science and Technology, McKinley Elementary School, Canon City Middle School, and Canon City High School). However, there is still so much square footage that needs to be addressed that we feel we just can't put off repairing them by paying for them year after year at the rate we can afford to fund in our capital reserve budget. After careful consideration of a large number of possible projects we have come to the conclusion we are absolutely sure these roofs needing to be serviced cover facilities we intend to make use of long into the future.

## Proposed Solution to Address the Deficiencies Stated Above:

A section of roofing at Lincoln School of Science and Technology totaling 7,471 square feet covering a portion of the East Wing and the cafeteria/gymnasium at a total cost of \$208,015. Repairing this section of roof would mean all roofing needs for this facility will be addressed through 2026 at this facility.

A section of roofing at McKinley Elementary School totaling 4,120 square feet covering the gymnasium/cafeteria at a total cost of \$127,136. Repairing this section of roof would mean all roofing needs for this facility will be addressed through 2026 at this facility.



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

At Lincoln and McKinley we will remove the existing roof and install a tapered insulation system covered by a ½” gypsum board and adhere an 80 mil Duro-last pvc membrane.

At CCHS we will leave the existing roof and install an overlay with 1 ½” insulation cover with ½” gypsum board and adhere an 80 mil Duro-last pvc membrane.

Our most needy sections of Canon City High School roofing totaling a minimum of 35,567 square feet over the art/multi purpose and vocational facilities at a maximum cost of \$675,572. Our most recent cost analysis showed our actual need at this building is actually 2.75 million dollars worth of roofing, but this figure fits into a cash match we feel we can provide.

## How Urgent is this Project?

Based on the district’s most current roofing analysis/master plan, the lifespan of the roofs we are asking for assistance to replace ended around 2010. Each are already showing tremendous aging from the outside and have been leaking on occasion with our facilities staff being required to troubleshoot and patch on a continual basis. Our greatest fear is that as these roofs continue to leak we will have to deal with more serious structural issues related to the potential rusting of roofing steel, and health issues related to mold infestation. Should we receive this grant we anticipate being able to schedule and execute many of the repairs during the summer of 2016.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

The established specifications for these planned roof replacement projects were prepared by a roofing consultant and meet or exceed standards established under the Public School Facility Construction Guidelines. Project specifications attached hereto as Exhibit -C-.

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

Our annual capital renewal budget allocations for the past three fiscal years were as follows: 13-14 = \$399,996, 14-15 = \$600,000, and 15-16 = \$700,000.

Over this time our ending unrestricted capital reserve fund balance has dropped from 1.172 million dollars in 14-15, and then down to an anticipated \$868,028 in 15-16.

With our current and future anticipated capital reserve transfers set at \$700,000 per year we approach a nearly \$200 per student allocation, well above the recommended maintenance of effort outlined in the BEST grant process.

In reality, we believe our greatest opportunity for a long term facilities solution for the Canon City School District can only be achieved by pursuing a more comprehensive BEST grant in the future; one that requires asking our voters to provide an appropriate match in an amount we can not possibly afford through current year-to-year operating revenue. We entered into this grant application process hoping to come up with such a plan, but after receiving cost estimates and considering all possible paths forward we realized we need to slow down our larger process to make sure we have a crystal clear vision of our future plans for the two facilities we are not addressing through this grant, Washington Elementary School and Canon City Middle School. These two facilities just mentioned have far greater facilities improvement needs per pupil than the ones for which we have applied for assistance through this grant process. However, we are quite confident that any investment made to Lincoln, Canon Exploratory, McKinley, Harrison, and Canon City High School will be well spent as we currently see no future version of our district that does not include our full use of each of these facilities. We intend to spend the next 12 months considering the best possible path forward when it comes to our district’s utilization of Washington Elementary and Canon City Middle School.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

This application is designed to improve the building envelope of several of our facilities in the Canon City School District by addressing significant roofing needs at Lincoln School of Science and Technology, McKinley Elementary School, and Canon City High School.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Building descriptions are as follows:

Lincoln School of Science and Technology was built in 1951 with an addition added in 1980 and various major renovations conducted in 1968, 1981, 1985, and 1986. After conducting community meetings as a part of the process of creating our 2012 facilities master plan, after extensive analysis of the quality of the building, and based on district population patterns we have committed to making use of this facility for the foreseeable future. The building currently houses 266 students in grades K-5 and is operating at 88% of its capacity.

McKinley Elementary School was also built 1951, with an addition added in 1980, and various major renovations conducted in 1959, 1969, and 1981. After conducting community meetings as a part of the process of creating our 2012 facilities master plan, after extensive analysis of the overall quality of the building, and after extensive board consideration to consolidate and/or eliminate buildings in the district to save operation costs we have committed to making use of this facility for the foreseeable future. The building currently houses 222 students in grades K-5 and, though it is currently only operating at 72% of its capacity, it is in a geographic area of our district that needs a neighborhood school, otherwise transportation costs would increase significantly for district.

Canon City High School was originally constructed in 1961 with various additions added through 2006 and major renovations being made in 1965, 1966, 1967, 1988, 2003, 2004, and 2006. After conducting community meetings as a part of the process of creating our 2012 facilities master plan, after extensive analysis of the quality of the facility, and based on current and future district population patterns we are committed to making use of this facility for the foreseeable future. The building currently houses 1015 students in grades 9-12 and is operating at 94% of its capacity.

In all a total of 1503 students will be affected by this grant.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$667,077.18	<b>CDE Minimum Match %:</b>	34
<b>Current Applicant Match:</b>	\$343,645.82	<b>Actual Match % Provided:</b>	34
<b>Current Project Request:</b>	\$1,010,723.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		Capital Reserve
<b>Total of All Phases:</b>	\$1,010,723.00	<b>Escalation %:</b>	0
<b>Affected Sq Ft:</b>	47,158	<b>Contingency %:</b>	4.34
<b>Affected Pupils:</b>	1,542	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$21	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$0	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$21	<b>Who owns the Facility?</b>	3rd Party
<b>Cost Per Pupil:</b>	\$655	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	31		NA

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>District FTE Count:</b>	3,570	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$229,321,679	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$64,245	<b>Bonded Debt Failed:</b>	\$5,450,000
<b>Unreserved Gen Fund 13-14:</b>	\$817,727	<b>Year(s) Bond Failed:</b>	13
<b>Median Household Income:</b>	\$40,787	<b>Outstanding Bonded Debt:</b>	\$17,105,000
<b>Free Reduced Lunch %:</b>	56	<b>Total Bond Capacity:</b>	\$45,864,336
<b>Existing Bond Mill Levy:</b>	8.255	<b>Bond Capacity Remaining:</b>	\$28,759,336

• Facilities Impacted by this Grant Application •

**Garfield 16 - HS Sitework, HVAC, ADA and Security Project - Grand Valley HS - 2002**

**School Name: Grand Valley HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	101,000
Replacement Value:	\$33,615,205
Condition Budget:	\$5,581,398
Total FCI:	16.60%
Energy Budget:	\$0
Suitability Budget:	\$1,148,500
Total RSLI:	38%
Total CFI:	20.0%
Condition Score: (60%)	3.89
Energy Score: (0%)	2.40
Suitability Score: (40%)	4.60
School Score:	4.17



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Garfield 16

**County:** Garfield

**Project Title:** HS Sitework, HVAC, ADA and Security Project

**Previous BEST Grant(s) Funded:** 5

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof                          | <input type="checkbox"/> Asbestos Abatement        | <input type="checkbox"/> Water Systems                |
| <input type="checkbox"/> School Replacement  | <input type="checkbox"/> Fire Alarm                    | <input type="checkbox"/> Lighting                  | <input checked="" type="checkbox"/> Facility Sitework |
| <input type="checkbox"/> Renovation          | <input checked="" type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade        | <input type="checkbox"/> Land Purchase                |
| <input type="checkbox"/> Addition            | <input checked="" type="checkbox"/> HVAC               | <input checked="" type="checkbox"/> Energy Savings | <input type="checkbox"/> Other, please explain:       |
| <input checked="" type="checkbox"/> Security | <input checked="" type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement        |   |

**General Information About the District / School, and Information About the Affected Facilities:**

Garfield County School District No. 16 is a small rural school district of just over 1000 students. The district is located in Western Garfield County. The district serves the communities of Parachute and Battlement Mesa. The economic driver in the region has been primarily focused on fossil fuel extraction, including oil shale in the 1970's and 1980's, and natural gas over the past 15&#8208;20 years. The volatility in the petroleum industry has caused tremendous fluctuations in populations, with a continual "boom&#8208;and&#8208;bust" cycle occurring in the region for more than forty years. The "boom&#8208;and&#8208;bust" cycle has forced the district into a position of focused spending limitations to hedge against giant reductions in student populations and state funding. In recent years, the school district has shifted its educational focus on a problem&#8208;based learning approach, coupled with the highly rigorous Advanced Placement curriculum. The district uses the Expeditionary Learning Model for its K&#8208;8 structure, and an Advanced Placement for All model at the high school, where every students takes Advanced Placement courses for the majority of the core course work. The two models have been providing some very encouraging academic results across our system and are resulting in very high academic growth rates for all of our students. The facilities in Garfield 16 have either been built since the early 1980's or have been renovated over the past 35 years. While our three person maintenance crew does a tremendous job keeping the buildings in great condition, the systems in each building are starting to show their age. The district maintained a capital improvement funding program until the state allowed for dollars to be shifted to operational spending as the recession started. The district has maintained a fund to fix minor issues, but with the negative factor has been unable to divert any other dollars to the budget. With the passage of a bond issue and mill levy in November 2014, the district will work to bring every facility up to par and reinstate a capital improvements budget to provide on&#8208;going maintenance to district facilities. Garfield 16's matching requirement for the BEST is 66%, which is high, but with our bond will absolutely provide the district the opportunity to target local and matching funds to meet all the needs outlined in the bond program. The district intends to provide a 68% match, which exceeds the required match from the BEST program guidelines.

One of the major goals for the bond program is to make sure every school in the district is a safe and healthy learning environment for our children, staff, and community members.

**Deficiencies Associated with this Project:**

The districts' on&#8208;going due diligence in working to ensure a safe and healthy learning environment, resources have been focused on continual monitoring of potential issues and documentation of areas of concern. As part of our bond program, our environmental, mechanical, and civil consultants have determined that there are critical deficiencies at Grand Valley High School that need to be rectified to ensure a safe and healthy learning environment and reduce the risk of the building envelop and structure failing, causing potentially catastrophic consequence. Those deficiencies include (Deficiencies, Solutions, Urgency, and Guidelines are all labeled A,B,C,D,E for ease of readability and cross reference);

A.The biggest and most pressing deficiency at GVHS is the failure of the schools drainage system, keeping water from

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

infiltrating the support structures around the exterior walls, which has created the very serious potential of structural failure to the school envelope. Ground Engineering provided a report indicating the dominant issue with building envelop and site issues in the following statements;

### Drainage

"The common factor in all of the settlement and swell related structural distress, erosion, sinkholes, poor pavement and sports field performance is water. Therefore to manage and minimize further damage and ongoing soil movement, it will be necessary to make drainage improvements to the greatest extent possible around the perimeter of the building. Increasing slopes away from the building, and even the installation of new storm sewer may be necessary. All wet utility lines and drains should be video-recorded or leak tested to determine if leaking utilities and drains are contributing to the soil movements. Where slabs-on-grade cannot be re-leveled but must be replaced, the maximum practical amount of sub-excavation and replacement with moisture treated, processed, and compacted on-site soils should be performed, or the slabs should be structurally supported.

As an alternative to sub-excavation and replacement of the on-site soils below the running track, it may be better to eliminate irrigation altogether and to switch to an artificial turf system. Both excellent surface and subsurface drainage should be provided as part of the track system, and the placement of an impermeable membrane or geotextile layer that provides reinforcement, separation and wicking (drainage) is suggested to minimize the potential for piping and sinkhole formation. This is particularly the case where a minimal amount of soil sub-excavation and on-site soil replacement rework is performed. Once drainage improvements have been made to the greatest extent possible, areas of distress should be periodically monitored for movement by survey. Once movements have largely ceased, repairs can be made with a reasonable degree of certainty that further repairs will not be necessary the following year. However, repairs for distress that may affect the structural integrity of the building should be performed immediately. The effectiveness and length of repair performance will be dependent on the degree of drainage achieved, as well as periodic maintenance to maintain grades, clean drains, seal cracks, and keep water away from the building".

B. Due to water infiltration and poor soil conditions at GVHS, there has been a failure of the substructure under the schools walkways, paved areas, and interior corridors and walls, making the school out of compliance with American's with Disabilities Act (ADA) codes, and causing safety issues for many of our neediest students, parents, and community members. The failure of the substructure has caused heaving and buckling across the campus. The geotechnical and civil engineers have determined that the foundations for the hard surface areas was not deep enough and did not include the correct materials to provide a solid structure to support the surface structures.

Again, our geotechnical and forensic engineers, BC&E engineers and supported by Ground Engineering, define the sidewalk and paving issues in the following narrative.

"In our opinion, the sidewalk areas to the south of the building are in poor condition and there are many trip hazards due to differential movement of the concrete panels which need to be. The remaining areas of the sidewalk at the complex have isolated concrete panels which have cracked and show differential movement which need to be addressed, but the remaining portions are still in serviceable condition.

Given the existing conditions, we do not believe it would be practical to completely eliminate the risk of future movement of the exterior sidewalks and curbs. However, the main entry appears to have a high risk of trip-and-fall; therefore, in our opinion consideration should be given to complete removal and replacement of the concrete sidewalk and curb at the front entry of the school. A new properly prepared subgrade should be installation and new reinforced concrete flatwork should be placed. This will not eliminate the risk of future movement, but should reduce the movement issues to a manageable level. We recommend this issue also be reviewed by the geotechnical engineer.

B1) In our opinion, the remaining portions of the concrete sidewalks could be repaired selectively. Areas where settlement or heave has occurred and created drainage issues or trip hazards, we recommend the issue be addressed by a combination of grinding edges of the concrete down, pressure grouting under the sidewalk sections, and removing and replacing selected sidewalk panels to reduce or eliminate the issues".

B2) Asphalt Pavements: Asphalt paved parking lots exists on three sides of the building, with additional pavement on the north side of the gymnasiums. Based on the recent geotechnical investigation the asphalt pavement consists of 2-inches of asphalt over 6-inches of base materials laid on natural soils. This does not conform to the recommendations contained in the original geotechnical report. Based on our conversation with Mr. Walton of FCI and our review of the original design drawings it does not appear that the subgrade below the parking lot pavement was over-excavated and prepared; rather a thinner section of asphalt and subgrade were placed on the natural unprepared soils".



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

C. A pressing life safety at GVHS and one of the highest priority issues at GVHS is a failing boiler system. The original boiler has required constant maintenance over the past three years and needs to be replaced to keep the students and staff of the high school learning and working in a healthy learning environment. The current boiler parts are either very hard or impossible to obtain and the recommendation from our mechanical engineers is to replace the boilers as soon as possible.

D. Another major issue at GVHS, and one of the highest community identified issues, is a lack of any cooling in the activity wing of the school, which, during past events has led to parents and community members becoming ill and passing out, requiring medical assistance and creating a very unsafe and unhealthy environment for staff, students, and community.

E. Finally, and certainly not the least important issue, Grand Valley High School is in desperate need of security upgrades to solve a high priority deficiency. The intent of the security upgrades for Grand Valley High School is to modify the main entrance to the school with a secure vestibule that will provide an enhanced level of security and safety for the students, staff, and community the school serves. In conjunction with the vestibule, lighting, camera, and fencing upgrade. The school is built primarily of brick, which provides some security for students, staff, and community members, however the entryway has no flow control as part of the school's security plan. Currently an individual can enter the building and turn down an adjacent corridor, avoiding the office, or choose to walk past the office without checking in or being acknowledged by staff. In working with community, staff, and doing research with law enforcement, this creates a critical safety issue for our community members. This lack of flow control presents a major security risk for students, staff, and community members using the facilities.

### Proposed Solution to Address the Deficiencies Stated Above:

A. Solutions to the issue related to water infiltration in the soils have been provided by Building Construction Engineers Inc. (BC&E) and confirmed by Ground Engineering.

We have discussed a number of issues and have provided recommendations for repairs/further investigation for many of the items described above. We have provided the following summary of recommendations for consideration of the design team in their design of repairs for the complex. Some of our recommendations involve further evaluation. It should be noted that these recommendations are provided to reduce the effects of the subgrade movement on the building, and are not intended to completely eliminate the sources of the movement, as we do not believe that can be practically accomplished on this site at this time. As we are not the designer-of-record for any portion of this repair project, we recommend this report be provided to the design team and to the owner such that they can incorporate our recommendations into their design of the repairs as they deem appropriate.

Structural Solutions:

A1) Brick Veneer and CMU Block Exterior Walls:

- Investigate conditions at the exterior wall on south elevation on the east end by making an exploratory excavation from the exterior to expose the concrete stem wall and perimeter subgrade drainage system piping, and videotape inspection of buried piping.

- Refer to drainage improvements below.

- Repoint cracks in the masonry.

A2) Site-Cast Concrete Tilt-up Panels:

- At the east gymnasium, investigate conditions at the exterior wall by making an exploratory excavation from the exterior to expose the concrete stem wall and perimeter subgrade drainage system piping, and video inspection of buried piping.

Additional repairs may be necessary depending on the results of the additional investigation.

- At the wood shop, investigate conditions at the exterior wall by making an exploratory excavation from the exterior to expose the concrete stem wall. Provide a separation of the site wall from the building wall.

- Repair failed connections.

A3) Interior Concrete Floor Slabs-on-Grade:

- Further investigation by making exploratory openings in the interior concrete floor slab.

- Videotape investigation of the buried piping in areas where the buried pipe locations coincide with the movement of the



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

floor slab. Possible repairs may include chemical/urethane grouting of subgrade to stabilize the soils, installation of carpets in areas, modifications to flooring to allow for movement.

- Injection of hollow areas under the settled portions of the floor slab along perimeter foundation walls. Re-level floor slabs with the addition of leveling compound and the addition of carpet in areas most affected. Refer to drainage improvements below.

### A4)Interior Partition Walls:

- Separate metal-stud partition walls from exterior walls and columns by the installation of isolation joints and cover plates to conceal the gaps.
- Re-construct portions of the CMU block partition walls to provide isolation between portions of the wall supported on concrete floor slab-on-grade and portions supported by column and perimeter wall foundations.
- Isolate interior partition walls from roof framing where possible.

### Weather-Resistance Related Recommendations:

#### A5)Brick Veneer and CMU Block Exterior Walls:

- Replace deteriorated and failed sealants where they occur.
- Powerwash clean areas of staining below windows.

#### A6)Site-Cast Concrete Tilt-up Panels:

- Further investigate moisture within wall panels.
- Replace deteriorated and failed sealants where they occur.
- Coat the exterior of the wall panels with an elastomeric coating or other material to be determined.

#### A7)Windows

- Remove and replace deteriorate and failed sealants where they occur.
- Replace window gaskets where they are shrinking.

### Drainage and Pavement Related Recommendations:

#### A8)Grading:

- Improve the slope and drainage adjacent to the exterior walls of the building on the south and east elevations. On the south from the entry to the east end of the building.
- Replace the sealant in the joints of the drainage pan on the north side of the gymnasiums.

#### A9)Running Track: (Not part of BEST Grant, but is part of the bond scope.)

- Replace the running track with a new pavement system which includes proper thick of pavement and proper subgrade materials and preparation.

Reduce the moisture which is introduced at the in-field and the areas directly surrounding the running track. The use of synthetic grass to reduce the moisture requirements of the in-field.

This portion of the field is part of the BEST grant. The engineers concur that the deficiency in our structural systems is direct result of water infiltration, combined with poor sub-soils. To significantly reduce the risk of structural failure of the school structure, one of the solutions includes;

The construction of a drainage system on the in-field and below the track, which will move moisture away from the facility, significantly reducing the risk of structural failure.

B. Solutions to the issue related to water infiltration in the soils have been provided by Building Construction Engineers Inc. (BC&E) and confirmed by Ground Engineering.The solution for the failure of the substructure in the paved drive and walkways will include;

#### B1)Concrete Sidewalks:

- Replace the sidewalk and curbs on the south side at entry.
- Patch, grind, and replace portions of the concrete sidewalks elsewhere.

#### B2)Asphalt Pavements:

- Replace the pavement and subgrade at the south parking lot and drive lane.
- Replace the pavement and subgrade at the entries to the east and west parking lots, and at selected areas within the east and west parking lots.
- Patch, seal, and perform replacement of selected pavement areas elsewhere.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

C. The solution for the boiler replacement at Grand Valley High School in Parachute, Colorado. This narrative provides information, consistent with the level of detail available at Schematic Design, to help confirm the cost and configuration of the Mechanical systems.

All systems shall be constructed in accordance with all appropriate building codes and be installed complete for a fully-functional facility. The design intent is to optimize energy efficiency and minimize maintenance costs, all for the lowest possible construction cost.

The Contractor's Scope of Work shall be based on all drawings and narratives including architectural, structural, mechanical, plumbing and electrical. All systems shall be priced as complete, working systems. The Contractor shall price all components necessary to extend the Schematic Design documents to full and complete working systems.

### GENERAL DESIGN CRITERIA

Compliance with applicable codes should be considered a minimum requirement.

The entire building HVAC and plumbing systems shall be designed in accordance with the following:

- Narratives and plans prepared by H+L Architecture and M-E Engineers, Inc.
- 2012 International Building Code.
- 2012 International Mechanical Code.
- 2012 International Fire Code.
- 2012 International Energy Conservation Code.
- 2015 International Plumbing Code.
- 2015 International Fuel Gas Code.
- National Electrical Code.
- ASME Boiler and Pressure Vessel Code.
- Local modifications to above Codes.

### LEED

- ASHRAE 90.1-2010 Standard entitled "Energy Efficient Design of New Buildings Except New Low-Rise Residential Buildings."
- Other ASHRAE Standards as are reasonably applicable to the project.
- National Fire Protection Association criteria. NFPA 13.14 and 20.
- SMACNA Sheet Metal Contractors Association Standards for Duct Construction.
- UL – Underwriters Laboratories.

### SYSTEMS SCOPE

The following lists the systems included in this Scope of Work.

- Heating
- Ventilation
- Exhaust
- Natural Gas
- Insulation
- Acoustic and Vibration Control for Mechanical Systems
- Energy Management and Temperature Control Systems
- Other Mechanical Systems in support of known conditions and consistent with the Intent

### Statement

### DESCRIPTION OF MECHANICAL WORK APPLICABLE CRITERIA

#### Design Conditions

The following criteria will be used to calculate the heating and cooling loads in accordance with ASHRAE and for the design of the HVAC systems:

Historical design conditions will be used for the project location. They are shown below. These conditions represent the base point for the load simulation model and do not necessarily reflect conditions at time of space or coil "peak".

Winter –

Outdoor Design Temperature: -1°F Dry Bulb

Indoor Design Temperature: 72°F

Elevation: 5,545 FT

Controls: heating water re-set will be utilized to comply with the requirements of ASHRAE 90.1, minimizing operating costs, and maximizing human comfort.

### DESCRIPTION OF HVAC SYSTEMS SYSTEMS – GENERAL

The existing heating water boilers will be replaced and will be utilized for heating water, which will be distributed throughout

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

the building for heating via air handlers, fan coils, finned tube and terminal units.

The heating water system will be thoroughly chemically cleaned (internally) and flushed. Systems then will be circulated through cartridge type filtering devices until clean.

All HVAC pumps shall be tested and dynamically balanced. Couplings and mechanical seals shall be inspected for flashing and cavitation at all flow rates.

Each water system will be hydrostatically tested and proved leak tight prior to insulation.

Combustion air and flue venting will be coordinated and architecturally integrated with existing louver and chimney (or new roof terminations).

### HEATING PLANT

Replace (2) existing boilers with (2) high efficiency condensing style boilers with sealed combustion systems ducted directly to the outdoors. The heating system shall consist of (2) 3,000 MBH OUTPUT forced draft boilers with approximately 92% efficiency at 130F return water temperature. Provide AERCO Benchmark Model, or equal.

### START-UP

Division 23 shall include services of factory-trained representatives for a period of at least ten (3) working days to supervise initial start-up and assist in necessary adjustments to place the equipment in operation. The division will work with the commissioning agent in this effort.

In addition to start-up time, include additional five (1) days to train designated operation personnel to safely and properly operate and maintain the equipment.

### CONTROLS GENERAL DDC,

Building Management System (BMS) will be provided using electric dampers, motors, etc., for control. All new controls shall be Automated Logic.

The boiler controls will be provided under Division 23 and in full compliance with Garfield County School standards.

Controls shall be BacNet compatible direct digital electronic control (DDC) system. All new hardware and software used shall be BacNet compatible, and the system shall be integrated to the existing front end. All control valves will be Belimo (or equivalent) electronic actuators operated by a DDC control interface.

The controller shall incorporate the following additional features for enhanced external system interface:

- System start temperature feature
- Pump delay timer
- Auxiliary start delay timer
- Auxiliary temperature sensor
- Analog output feature to enable simple monitoring of temperature setpoint, outlet temperature or fire rate
- Remote interlock circuit
- Delayed interlock circuit
- Fault relay for remote alarm

The controls contractor will make available to the operating staff, training sessions designed to leave the operating staff with "hands-on" capability.

### DESCRIPTION OF THE PLUMBING SYSTEM SYSTEMS – GENERAL

Plumbing scope will be required to support new mechanical work. Replace domestic water and sanitary drains to support new evaporative cooling equipment inside existing mechanical room.

Systems will be designed and installed in accordance with Local Building and Plumbing Codes, applicable standards, and County ordinances. Only approved materials and installation methods will be allowed. The Plumbing System includes:

#### Condensate Piping:

- Install piping from equipment drain connection to nearest floor drain. Piping shall be at least full size of connection. Provide an isolation valve if required.
- Install condensate neutralization kit.

#### Gas Piping:

- Natural gas will be regulated and metered at the existing gas meter located at building exterior.
- Piping: Schedule 40 black steel pipe, 150 pound malleable iron screwed fittings on above ground pipe, welded fittings on concealed pipe and pipe located in return air plenums, and welded fittings with all piping coated and wrapped on buried pipe.

The existing boilers system consists of two (2) Smith Cast Iron boilers. Each boiler has a gross output capacity of 3,000 MBH at an elevation of 5,300'. These boilers are force draft fired and non-condensing. The boilers when new were rated at 83% thermal efficient with 83.5% combustion efficiency. These boilers were installed in 2001-2002 and are approximately 15 years

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old.

The specified new boilers consist of two (2) high efficiency condensing style boilers. Each boiler will have a gross output of 3,000 MBH at an elevation of 5,300'. The thermal efficiency of the new boilers is 92% efficient at 130 F return water temperature. The new boilers specified are AERCO Benchmark Model or equal. In summary the boiler system capacity is staying the same with 2 boilers each rated at 3000 MBH output at altitude. The thermal efficiency of the boiler plant is increasing by 9% from 83% to 92%.

D. The solution to the issue of NO cooling in the school activity is provided by H & L Architecture. The project is a renovation and addition to the existing Grand Valley High School (Building) in Parachute, Colorado. Refer to the architectural plans for a detailed description of the facility. This narrative provides information, consistent with the level of detail available at Schematic Design, to help confirm the cost and configuration of the Mechanical systems.

All systems shall be constructed in accordance with all appropriate building codes and be installed complete for a fully-functional facility. The design intent is that the mechanical systems enhance the facility's flexibility of use, provide a safe and comfortable environment, optimize energy consumption, and minimize maintenance costs, all for the lowest possible construction cost.

The Contractor's Scope of Work shall be based on all drawings and narratives including architectural, structural, mechanical, plumbing, electrical, civil, and landscape. All systems shall be priced as complete, working systems. The Contractor shall review this narrative and the drawings for "scope" not "take-offs." The Contractor shall price all components necessary to extend the Schematic Design documents to full and complete working systems.

### GENERAL DESIGN CRITERIA

Compliance with applicable codes should be considered a minimum requirement.

The entire building HVAC and plumbing systems shall be designed in accordance with the following:

Narratives and plans prepared by H+L Architecture and M-E Engineers, Inc.

2012 International Building Code.

2012 International Mechanical Code.

2012 International Fire Code.

2012 International Energy Conservation Code.

National Electrical Code.

Local modifications to above Codes.

### LEED

ASHRAE 111-1988 Standard entitled "Practices for Measurement, Testing, Adjusting, and Balancing of Building Heating, Ventilation, Air-Conditioning, and Refrigeration Systems."

ASHRAE 62 Standard entitled "Ventilation of Acceptable Indoor Air Quality."

ASHRAE 55-2004 Standard entitled "Thermal Environmental Conditions for Human Occupancy."

ASHRAE 15-2001 Standard entitled "Safety Standard for Refrigeration Systems."

ASHRAE 90.1-2007 Standard entitled "Energy Efficient Design of New Buildings Except New Low-Rise Residential Buildings."

Other ASHRAE Standards as are reasonably applicable to the project.

National Fire Protection Association criteria. NFPA 13.14 and 20.

SMACNA Sheet Metal Contractors Association Standards for Duct Construction.

UL – Underwriters Laboratories.

### SYSTEMS SCOPE

The following lists the systems included in this Scope of Work.

- Heating
- Cooling
- Ventilation
- Acoustic and Vibration Control for Mechanical Systems
- Energy Management and Temperature Control Systems
- Other Mechanical Systems in support of known conditions and consistent with the Intent

### Statement DESCRIPTION OF MECHANICAL WORK APPLICABLE CRITERIA

Design Conditions

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The following criteria will be used to calculate the heating and cooling loads in accordance with ASHRAE and for the design of the HVAC systems:

Garfield County School District No. 16 SCHEMATIC DESIGN

Historical design conditions will be used for the project location. They are shown below. These conditions represent the base point for the load simulation model and do not necessarily reflect conditions at time of space or coil "peak".

Winter –

Outdoor Design Temperature: -1°F Dry Bulb

Indoor Design Temperature: 68° - 72°F

Summer –

Outdoor Design Temperature: 90.3°F DB, 58.1°F MCWB

Indoor Design Temperature: 72° - 75°F

Elevation: 5,545 FT

Relative Humidity Control: None

Ventilation Requirements:

- All areas to be supplied with ventilation in accordance with ASHRAE Standards.
- The volume of outside air delivered via air handling units will be controlled via carbon dioxide sensors. Outside air dampers at the air handlers will modulate in response to the carbon dioxide level in order to maintain the level within the parts-per-million-level required by ASHRAE. Additionally, the HVAC system is designed to provide about 10% positive pressure with respect to the outside.

Acoustics: The background noise criteria (NC) design goals shall be as follows:

- Public Spaces NC 35
- Gymnasium NC 45
- Vocational Shops NC 50

Controls: discharge air and heating water re-set will be utilized to comply with the requirements of ASHRAE 90.1, minimizing operating costs, and maximizing human comfort.

DESCRIPTION OF HVAC SYSTEMS SYSTEMS – GENERAL

The (3) three gymnasium heating and ventilating units shall be demolished and replaced with packaged DX Roof-top Units.

Provide demand control ventilation of each gymnasium space. Provide 1 space mounted CO2 sensor per every 5,000 SF.

The heating water system will be thoroughly chemically cleaned (internally) and flushed. Systems then will be circulated through cartridge type filtering devices until clean.

Each water system will be hydrostatically tested and proved leak tight prior to insulation.

All water systems will be balanced to design flow rates and documented.

All associated air distribution will be balanced and documented.

Vocational Shop Dust Collector shall be demolished and replaced.

Provide 5 KW electric cabinet unit heater(s) to serve new security vestibule.

AIR HANDLING SYSTEMS

Main Gymnasium: Two (2) new packaged DX cooling RTUs including the following:

- Provide (2) variable volume (VAV) rooftop air handling units to serve the main gymnasium.

Each unit will be configured for single zone VAV and includes the following components:

- Bottom supply / return air connections
- Curb adapter (existing curb to remain)
- DX Mechanical Cooling with digital or variable speed compressors – 30 Tons
- Heating Water Coil (180F EWT; 30% PG) - 400,000 BTU/HR
- Supply fan (VFD to be provided by ATCC)
- Filter section (MERV 8/13)
- 100% Economizer section
- Provide: Daikin, Carrier, JCI, Temtrol, or Aeon
- 10,000 cfm, 1.0" WC ESP supply
- 25% Minimum Outside Air
- Mixing Box Section with air blender
- Outside Air Measuring Station
- DDC Controller to be field mounted.
- Auxiliary Gymnasium: One (1) new packaged DX cooling RTU including the following:

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- Provide (1) variable volume (VAV) rooftop air handling unit to serve the auxiliary gymnasium.
- The unit will be configured for single zone VAV and includes the following components:
- Bottom supply / return air connections
- Curb adapter (existing curb to remain)
- DX Mechanical Cooling with digital or variable speed compressors – 30 Tons
- Heating Water Coil (180F EWT; 30% PG) - 400,000 BTU/HR
- Supply fan (VFD to be provided by ATCC)
- Filter section (MERV 8/13)
- 100% Economizer section
- Provide: Daikin, Carrier, JCI, Temtrol, or Aeon
- 10,000 cfm, 1.0" WC ESP supply
- 25% Minimum Outside Air
- Mixing Box Section with air blender
- Outside Air Measuring Station
- DDC Controller to be field mounted.

### START-UP

Division 23 shall include services of factory-trained representatives for a period of at least ten (10) working days to supervise initial start-up and assist in necessary adjustments to place the equipment in operation. The division will work with the commissioning agent in this effort.

In addition to start-up time, include additional five (5) days to train designated operation personnel to safely and properly operate and maintain the equipment.

### CONTROLS

#### GENERAL

DDC, Building Management System (BMS) will be provided using electric dampers, motors, etc., for control. All new controls shall be Automated Logic.

The BMS will be provided under Division 23.

The BMS will be a BacNet compatible direct digital electronic control (DDC) system. All new hardware and software used shall be BacNet compatible, and the system shall include a web based front end. The system shall consist of programmable control modules at the equipment, building control modules as needed.

All control valves and damper actuators will be Belimo (or equivalent) electronic actuators operated by a DDC control interface. All heating water valves at the air handlers will have 2-way control valves.

The BMS system shall connect to major energy using HVAC and plumbing systems and components for control, scheduling, optimizing, recording, trending, maintenance management, trend logging, etc. The BMS will be easily programmable and provide flexibility to handle the intermittent use of the facility. Programmed sequences and schedules will maximize energy-efficiency within the facility. The controls contractor will make available to the operating staff, training sessions designed to leave the operating staff with "hands-on" capability.

All new work shall be fully integrated with the existing controls system. Re-use of existing plant components is acceptable provided all output points are communicated to the new BMS.

E. The proposed solution to increase flow control in Grand Valley High School will be to construct security vestibules at the main entrance of the school site. Working with H&L Architects and FCI constructors, a schematic design for a 600 square foot security vestibule, which will be comprised of a remodel of the existing entry foyer, typically referred to in the industry as a man trap. This solution has been developed and vetted by our community steering committee. It will allow general flow when students are entering or exiting, but will restrict entry during all other business hours. School personnel will have the capacity to lock and unlock interior doors to allow, verified individuals with visitor badges, access to the school. In addition to the vestibule at Grand Valley High School, the security plans call for upgrades to perimeter fencing, the addition of ten security cameras, a security badge system that does instant background checks that uses the individuals drivers license to screen for felons and other potential "high&#8208;risk" candidates, key card access to other exterior doors, and adding lighting around the new vestibule, all of which will be procured through our local bond dollars, and grants funds that may be secured.

In summary, the district would like to make clear that we are not seeking any funding from BEST to cover surface restoration, including turf or track, but are seeking help with specific deficiencies that are deemed to be life/safety and ADA compliance issues. Every deficiency and solution identified in our bond scope for your consideration focuses on the health and safety of



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the students and staff that attend and work at Grand Valley High School. By securing BEST funding, the district will be able to stay within budget and not be forced to make value engineering decisions that will certainly reduce the capacity for our district to meet the learning needs of our children. We thank you for your consideration of this proposal in advance.

### How Urgent is this Project?

A. The school's drainage system, that sheds water from the foundation of the building is critical to the long-term lifespan of the facility. Currently the system does not provide enough positive flow away from the school, which has caused separation and movement to interior walls. The district forensic engineer has determined that there is not an imminent or catastrophic threat of failure in the near future, however without the changes to the drainage the issue could worsen and lead to structural failure of the school envelope and structure.

B. As part of the bond program, forensic and civil engineers have worked to solve various issues around the campus that have led to considerable uplifting and sinkage in various hard surfaces, including sidewalks and driveways. These conditions are creating substantial issues for students and staff access to the facility, and most importantly impacting the ability for complete ADA access to the school and surrounding site. Not only is this an ADA code issue, but produces an equity issue for our community members to be able to access educational opportunities in the high school, creating a very urgent situation.

C. The urgency of a boiler replacement is critical. The current boiler has failed several times this school year and has been cobbled back together by our maintenance staff, but in no way provides a healthy learning environment for our children or staff.

D. The addition of the cooling units at the high are of very high importance for our community. The last graduation held in the facility caused four different individuals (parents/grandparents) to pass out, with two of those individuals being transported to the regional hospital. The danger to parents and students is very evident and cannot be mitigated in any other manner, including fans, which we have tried.

E. At GVHS, the public has direct access to students with very limited or no ability to control access. The public could enter the facilities without any school personnel having the capacity to visually see them enter. The current security situation is absolutely unsafe and needs to be remedied immediately to provide for the safety and security of children in the school. The safety and security of the children of any community is of paramount importance to those who are charged providing that security. It is incumbent upon our school district to keep our students, staff, and community members' safe while in or around our schools. Our community voiced very clearly over the past year that they would support our bond efforts if safety and security was the top priority, and we feel that the solutions we have designed will certainly go a long way to providing a safe and secure environment in both of our elementary schools.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

A. 4.1.1 Sound building structures. Each building should be constructed and maintained with sound structural foundation, floor, wall and roof systems. 4.1.1.1 - All building structures shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30 and ANSI S12.60, Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools. The district will meet the requirements listed for section 4.1.1 and 4.1.1.1

B.4.1.13 A site that safely separates pedestrian and vehicular traffic and is laid out with the following guidelines: 4.1.13.1 - Physical routes for basic modes (busses, cars, pedestrians, and bicycles) of traffic should be separated as much as possible from each other. If schools are located on busy streets and/or high traffic intersections, coordinate with the applicable municipality or county to provide for adequate signage, traffic lights, and crosswalk signals to assist school traffic in entering the regular traffic flow. 4.1.13.2 - When possible, provide a dedicated bus staging and unloading area located away from students, staff, and visitor parking. 4.1.13.3 - Provide an adequate driveway zone for stacking cars on site for parent drop-off/pick-up zones. Drop-off area design should not require backward movement by vehicles, and be one-way in a



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counterclockwise direction where students are loaded and unloaded directly to the Adopted 09/02/2015 8 curb/sidewalk. Students should not have to load or unload where they have to cross a vehicle path before entering the building. It is recommended all loading areas have "No Parking" signs posted. 4.1.13.4 - Provide well-maintained sidewalks and a designated safe path leading to the school entrance(s). The district will meet the requirements listed for section 4.1.13 and all other sub-sections listed in the guidelines.

C. 4.1.4 Mechanical systems. A safe and efficient mechanical system that provides proper ventilation, proper sound levels and maintains the building temperature and relative humidity. The mechanical system shall be designed, maintained and installed utilizing current State and Federal building codes, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30. 4.1.4.1 - Healthy building indoor air quality (IAQ) through the use of the mechanical heating, ventilation and air conditioning (HVAC) systems or operable windows and by reducing air infiltration and water penetration with a tight building envelope.

Adopted 09/02/2015 4 4.1.4.2 - Mechanical systems shall comply with: ASHRAE Standard 62.1-2013 Ventilation for Acceptable Indoor Air Quality, ASHRAE 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings, and ASHRAE Standard 189.1-2014 Standard for the Design of High-Performance Green Buildings.

The district will meet all the requirements listed in section(s) 4.1.4, 4.1.4.1, 4.1.4.2

D. 4.1.4 Mechanical systems. A safe and efficient mechanical system that provides proper ventilation, proper sound levels and maintains the building temperature and relative humidity. The mechanical system shall be designed, maintained and installed utilizing current State and Federal building codes, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30. 4.1.4.1 - Healthy building indoor air quality (IAQ) through the use of the mechanical heating, ventilation and air conditioning (HVAC) systems or operable windows and by reducing air infiltration and water penetration with a tight building envelope.

Adopted 09/02/2015 4 4.1.4.2 - Mechanical systems shall comply with: ASHRAE Standard 62.1-2013 Ventilation for Acceptable Indoor Air Quality, ASHRAE 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings, and ASHRAE Standard 189.1-2014 Standard for the Design of High-Performance Green Buildings.

The district will meet all the requirements listed in section(s) 4.1.4, 4.1.4.1, 4.1.4.2

E. Security 4.1.9 Security. The degree of resistance to, or protection from, harm. It applies to any vulnerable and valuable asset; such as a person, building or dwelling. Security provides "a form of protection where a separation is created between the assets and the threat." These separations are generically called "controls," and sometimes include changes to the asset or the threat. These separations and degrees of resistance can be achieved through several models and techniques. 4.1.9.1 &#8208; Video Management Systems (VMS). Adopted 12/05/2014 5 4.1.9.1.1 &#8208; Cameras. Cameras are typically used to implement a video management system. In new construction, these should be internet protocol (IP) cameras on Power over Ethernet (PoE) cabling infrastructure, high definition over coax cameras, or analog cameras. Cameras should support motion activation, pan&#8208;tilt&#8208;zoom functionality, and standard video compression. The district will meet the requirements listed for section 4.1.9.1.1, though this is not part of this grant program. 4.1.9.1.2 &#8208; Closed circuit or IP video recorders. A central video management system should be capable of monitoring live feeds from multiple cameras from a central location, recording to digital media. Acceptable recorders include: network video recorder (NVR), high&#8208;definition composite video interface (HD&#8208;CVI), digital video recorder (DVR).

The district will meet the requirements listed for section 4.1.9.1.1, though this is not part of this grant program. 4.1.9.1.3 &#8208; All video management systems should be integrated into their local first responder's alert notification system.

The district will meet the requirements listed for section 4.1.9.1.3, though this is not part of this grant program. 4.1.9.2 &#8208;

Controlled access. 4.1.9.2.1 &#8208; Manual. 4.1.9.2.1.1 &#8208; The number of entryways into the building or onto the campus should be limited. New construction shall be designed to restrict normal entrance to only one or two locations, with no recessed doorways, provided that sufficient entryways are available for fire department access and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507&#8208;30. The district will meet the requirements listed for section 4.1.9.2.1.4. 4.1.9.2.1.2 &#8208;

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All exterior doors shall be locking and equipped with panic bars to open readily from the egress side. Panic bars should utilize flush push bar hardware to prevent chaining doors shut. The district will meet the requirements listed for section 4.1.9.1.2.4.1.9.2.1.2.1 &#8208; Unless a door is intended for ingress, exterior doors should not have handles and locks on the outside. In all cases exposed hardware should be minimized, provided that sufficient entryways are available for fire department access and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507&#8208;30. The district will meet the requirements listed for section 4.1.9.2.1.2.1.4.1.9.2.1.3 &#8208; Doors should be constructed of steel, aluminum alloy, or solid&#8208;core hardwood. If necessary, glass doors should be fully framed and equipped with burglar&#8208;resistant tempered glass. Translucent glass should be avoided in all cases. The district will meet the requirements listed for section 4.1.9.2.1.34.1.9.2.1.4 &#8208; Exit doors with panic push&#8208;bars should be "Access Control Doors" per the codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507&#8208;30, to prevent easy access by criminals and vandals, or in a lock&#8208;down / lock&#8208;out situation. The district will meet the requirements listed for section 4.1.9.2.1.44.1.9.2.1.5 &#8208;

Heavy&#8208;duty metal or solid&#8208;core wooden doors should be used at entrances in areas containing expensive items. These areas include classrooms, storerooms, and custodians' rooms. Interior doorway doors should also be heavy&#8208;duty metal or solid core wooden doors. The district will meet the requirements listed for section 4.1.9.2.1.54.1.9.2.1.6 &#8208; Door hinges should have non&#8208;removable pins. The district will meet the requirements listed for section 4.1.9.2.1.64.1.9.2.1.7 &#8208;

Door frames should be constructed of pry&#8208;proof material. Adopted 12/05/2014The district will meet the requirements listed for section 4.1.9.2.1.74.1.9.2.1.8 &#8208; Armored strike plates shall be securely fastened to the door frame in direct alignment to receive the latch easily. The district will meet the requirements listed for section 4.1.9.2.1.84.1.9.2.2&#8208;

Automated. Acceptable automated controlled access includes: automatic identification card/badge readers. The district will meet the requirements listed for section 4.1.9.2.24.1.9.2.2.1 &#8208; Faculty, staff, and administration. School personnel may be issued additional tools for authenticating their identity in order to maintain efficient access to school facilities. The district will meet the requirements listed for section 4.1.9.2.2.14.1.9.2.2.2 &#8208;

Student. Schools shall expect students to carry some form of verifiable identification, if automated access to school facilities is to be provided. The district will meet the requirements listed for section 4.1.9.2.2.24.1.9.3 &#8208;

Front door security4.1.9.3.1&#8208; Building vestibules. Where appropriate, buildings shall employ double entry door designs that provide a secured area for visitors to authenticate and gain clearance. Known as "man traps", security vestibules solve several common security issues such as students opening doors for visitors, visitors bypassing check&#8208;in points, direct access to the interior from attackers, piggy&#8208;back entrances, and propped doors. The district will meet the requirements listed for section 4.1.9.3.14.1.9.3.2&#8208;

Video entrance systems. Building designs shall allow for school personnel to be able to monitor incoming visitors from a safe location out of reach, or line of site from incoming visitors who have not yet been authenticated or cleared for entry. These entry points shall use remote video and access control technology to conduct multi&#8208;factor authentication of incoming visitors (e.g. visual verification and ID, PIN/password and ID, or biometric and other form of visual identification). The district will meet the requirements listed for section.4.1.9.3.2.1 &#8208;

Video entrance systems shall use IP technology to allow access control to be conducted by school personnel from multiple locations, so that multiple personnel can provide coverage for screening incoming visitors, eliminating entry system override or "door propping". The district will meet the requirements listed for section.4.1.9.3.2.2 &#8208;

Video entrance systems shall be integrated with school communication, alarm, or school database systems to allow personnel to screen visitors. The district will meet the requirements listed for section.4.1.9.3.3&#8208;

Line of sight.The front entrance should be designed to maximize the line of sight distance for school occupants to detect an

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intruder from each relevant perimeter (e.g. classroom to hallway, office or guard station to entryway, or entryway to exterior fence access, or exterior fence access to property perimeter). The district will meet the requirements listed for section 4.1.9.3.3.4.1.9.4 &#8208;

Door lock / intrusion detection. Doors should have sufficient data cabling to a central interim distribution frame (IDF) or master distribution frame (MDF) to support access control/door release mechanisms, door sensors, IP Authentication sensors, and/or IP surveillance cameras as well as power cabling sufficient to support such hardware. The district will meet the requirements listed for section 4.1.9.4.4.1.9.4.1&#8208;

Interior classroom doors shall have locking hardware for lock downs, which does not interfere with automatic closing and latching functions required by the fire code and may have door sidelights, or door vision glass that allow line of sight into the corridors during emergencies, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507&#8208;30. Adopted 12/05/2014 7 4.1.9.5 &#8208; Event alerting and notification (EAN) system. An EAN system that utilizes an intercom / phone system with communication devices located in all classrooms and throughout the school to provide efficient inter&#8208;school communications, and communication with local fire, police, and medical agencies during emergency situations. The district will meet the requirements listed for section 4.1.9.1.5, however this is not part of this grant.4.1.9.6 &#8208;

Secure sites should include the following: 4.1.9.6.1&#8208; Locations to avoid. The district will meet the requirements listed for section 4.1.9.6.1.4.1.9.6.2&#8208;

Location of utilities. The district will meet the requirements listed for section 4.1.9.6.2.4.1.9.6.3&#8208;

Roof access. The district will meet the requirements listed for section 4.1.9.6.3.4.1.9.6.4&#8208; Lighted walkways. The district will meet the requirements listed for section 4.1.9.6.4 4.1.9.6.5&#8208;

Secured playgrounds. The district will meet the requirements listed for section 4.1.9.6.5.4.1.9.6.6&#8208;

Bollards at main entrances and shop areas with overhead doors. The district will meet the requirements listed for section 4.1.9.6.6.4.1.9.6.7&#8208;

Signage. The district will meet the requirements listed for section 4.1.9.6.7.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

Garfield 16 is committed to maintaining its facilities by budgeting for annual capital renewal needs, following a rigorous facilities/plant maintenance program (developed jointly with the manufacturer's, installers, and our maintenance team), and a long&#8208;term (20 year) capital renewal program that will be developed by the Board of Education, our maintenance team, and our district leadership. The capital budget will reflect, at a minimum, the \$100 per student plan suggested by the division, and will increase as funding becomes available.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Grand Valley High School was built in 2001. After fifteen years of life, the building is beginning to see some mechanical and civil issues that are contributing to potential life-safety issues, as well as considerable issues with ADA compliance.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

**FY15-16 Charter School Capital Construction Allocation from the State:**

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<b>Current Grant Request:</b>	\$2,125,285.55	<b>CDE Minimum Match %:</b>	66
<b>Current Applicant Match:</b>	\$4,516,231.80	<b>Actual Match % Provided:</b>	68
<b>Current Project Request:</b>	\$6,641,517.35	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	2014 Bond Proceeds	
<b>Total of All Phases:</b>	\$6,641,517.35	<b>Escalation %:</b>	3.3
<b>Affected Sq Ft:</b>	91,218	<b>Contingency %:</b>	13
<b>Affected Pupils:</b>	300	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$73	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$8	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$65	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$22,138	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	304	NA	

<b>District FTE Count:</b>	1,001	<b>Bonded Debt Approved:</b>	\$65,077,287
<b>Assessed Valuation:</b>	\$1,219,074,770	<b>Year(s) Bond Approved:</b>	06, 14
<b>PPAV:</b>	\$1,217,857	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$2,271,403	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$60,179	<b>Outstanding Bonded Debt:</b>	\$28,560,000
<b>Free Reduced Lunch %:</b>	49	<b>Total Bond Capacity:</b>	\$243,814,954
<b>Existing Bond Mill Levy:</b>	4.839	<b>Bond Capacity Remaining:</b>	\$215,254,954

• Facilities Impacted by this Grant Application •

**Garfield 16 - ES Security Vestibules - Grand Valley Ctr For Family Learning - 1937**

**School Name: Grand Valley Ctr For Family Learning**

Number of Buildings:	1
All or Portion built by WPA:	Yes
Gross Area (SF):	45,000
Replacement Value:	\$11,286,885
Condition Budget:	\$986,780
Total FCI:	8.74%
Energy Budget:	\$0
Suitability Budget:	\$119,300
Total RSLI:	49%
Total CFI:	9.8%
Condition Score: (60%)	4.30
Energy Score: (0%)	2.50
Suitability Score: (40%)	4.84
School Score:	4.52





# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Garfield 16

**County:** Garfield

**Project Title:** ES Security Vestibule

**Previous BEST Grant(s) Funded:** 5

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement  | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition            | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input checked="" type="checkbox"/> Security | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Garfield County School District No. 16 is a small rural school district of just over 1000 students. The district is located in Western Garfield County. The district serves the communities of Parachute and Battlement Mesa. The economic driver in the region has been primarily focused on fossil fuel extraction, including oil shale in the 1970's and 1980's, and natural gas over the past 15&#8208;20 years. The volatility in the petroleum industry has caused tremendous fluctuations in populations, with a continual "boom&#8208;and&#8208;bust" cycle occurring in the region for more than forty years. The "boom&#8208;and&#8208;bust" cycle has forced the district into a position of focused spending limitations to hedge against giant reductions in student populations and state funding. In recent years, the school district has shifted its educational focus on a problem&#8208;based learning approach, coupled with the highly rigorous Advanced Placement curriculum. The district uses the Expeditionary Learning Model for its K&#8208;8 structure, and an Advanced Placement for All model at the high school, where every students takes Advanced Placement courses for the majority of the core course work. The two models have been providing some very encouraging academic results across our system and are resulting in very high academic growth rates for all of our students. The facilities in Garfield 16 have either been built since the early 1980's or have been renovated over the past 35 years. While our three person maintenance crew does a tremendous job keeping the buildings in great condition, the systems in each building are starting to show their age. The district maintained a capital improvement funding program until the state allowed for dollars to be shifted to operational spending as the recession started. The district has maintained a fund to fix minor issues, but with the negative factor has been unable to divert any other dollars to the budget. With the passage of a bond issue and mill levy in November 2014, the district will work to bring every facility up to par and reinstate a capital improvements budget to provide on&#8208;going maintenance to district facilities. Garfield 16's matching requirement for the BEST is 66%, which is high, but with our bond will absolutely provide the district the opportunity to target local and matching funds to meet all the needs outlined in the bond program. The district intends to provide a 68% match, which exceeds the required match from the BEST program guidelines.

One of the major goals for the bond program is to make sure every school in the district is a safe and healthy learning environment for our children, staff, and community members.

## Deficiencies Associated with this Project:

The Center for Family Learning is in desperate need of security upgrades to solve a high priority deficiency. The intent of the security upgrades for The Center for Family Learning is to modify the main entrance to the school with a secure vestibule that will provide an enhanced level of security and safety for the students, staff, and community the school serves. In conjunction with the vestibule, lighting, and camera upgrades are part of the bond project. The school is built primarily of brick, which provides some security for students, staff, and community members, however the entryway has no flow control as part of the school's security plan. Currently an individual can enter the building and turn down an adjacent corridor, avoiding the office, or choose to walk past the office without checking&#8208;in or being acknowledged by staff. In working with community, staff, and doing research with law enforcement, this creates a critical safety issue for our community members. This lack of

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

flow control presents a major security risk for students, staff, and community members using the facilities.

### Proposed Solution to Address the Deficiencies Stated Above:

The proposed solution to increase flow control in The Center for Family Learning will be to construct security vestibules at the main entrance of the school site. Working with H&L Architects and FCI constructors, a schematic design for a 500 square foot security vestibule, typically referred to in the industry as a man trap, has been developed and vetted by our community steering committee. It will allow general flow when students are entering or exiting, but will restrict entry during all other business hours. School personnel will have the capacity to lock and unlock interior doors to allow, verified individuals with visitor badges, access to the school. In addition to the vestibule at The Center for Family Learning, the security plans call for the addition of ten security cameras, a security badge system that does instant background checks that uses the individuals drivers license to screen for felons and other potential "high&#8208;risk" candidates, key card access to other exterior doors, and adding lighting around the new vestibule, all of which will be procured through our local bond dollars, combined with grant dollars if secured.

### How Urgent is this Project?

At The Center for Family Learning, the public has direct access to students with very limited or no ability to control access. The public could enter the facilities without any school personnel having the capacity to visually see them enter. The current security situation is absolutely unsafe and needs to be remedied immediately to provide for the safety and security of children in the school. The safety and security of the children of any community is of paramount importance to those who are charged providing that security. It is incumbent upon our school district to keep our students, staff, and community members' safe while in or around our schools. Our community voiced very clearly over the past year that they would support our bond efforts if safety and security was the top priority, and we feel that the solutions we have designed will certainly go a long way to providing a safe and secure environment in our elementary schools.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

The district will comply with the Public School Facility Guidelines by;

Security 4.1.9 Security. The degree of resistance to, or protection from, harm. It applies to any vulnerable and valuable asset; such as a person, building or dwelling. Security provides "a form of protection where a separation is created between the assets and the threat." These separations are generically called "controls," and sometimes include changes to the asset or the threat. These separations and degrees of resistance can be achieved through several models and techniques.4.1.9.1 &#8208; Video Management Systems (VMS).Adopted 12/05/2014 5 4.1.9.1.1&#8208; Cameras. Cameras are typically used to implement a video management system. In new construction, these should be internet protocol (IP) cameras on Power over Ethernet (PoE) cabling infrastructure, high definition over coax cameras, or analog cameras. Cameras should support motion activation, pan&#8208;tilt&#8208;zoom functionality, and standard video compression. The district will meet the requirements listed for section 4.1.9.1.1, though this is not part of this grant program.4.1.9.1.2&#8208; Closed circuit or IP video recorders. A central video management system should be capable of monitoring live feeds from multiple cameras from a central location, recording to digital media. Acceptable recorders include: network video recorder (NVR), high&#8208;definition composite video interface (HD&#8208;CVI), digital video recorder (DVR).

The district will meet the requirements listed for section 4.1.9.1.1,4.1.9.1.3&#8208; All video management systems should be integrated into their local first responder's alert notification system.

The district will meet the requirements listed for section 4.1.9.1.3, though this is not part of this grant program.4.1.9.2 &#8208;

Controlled access. 4.1.9.2.1&#8208; Manual. 4.1.9.2.1.1 &#8208; The number of entryways into the building or onto the campus should be limited. New construction shall be designed to restrict normal entrance to only one or two locations, with no recessed doorways, provided that sufficient entryways are available for fire department access and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507&#8208;30.The district will meet the requirements listed for section 4.1.9.2.1.1.4.1.9.2.1.2 &#8208;

All exterior doors shall be locking and equipped with panic bars to open readily from the egress side. Panic bars should utilize



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

flush push bar hardware to prevent chaining doors shut. The district will meet the requirements listed for section 4.1.9.1.2.4.1.9.2.1.2.1 &#8208; Unless a door is intended for ingress, exterior doors should not have handles and locks on the outside. In all cases exposed hardware should be minimized, provided that sufficient entryways are available for fire department access and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507&#8208;30. The district will meet the requirements listed for section 4.1.9.2.1.2.1.4.1.9.2.1.3 &#8208; Doors should be constructed of steel, aluminum alloy, or solid&#8208;core hardwood. If necessary, glass doors should be fully framed and equipped with burglar&#8208;resistant tempered glass. Translucent glass should be avoided in all cases. The district will meet the requirements listed for section 4.1.9.2.1.34.1.9.2.1.4 &#8208; Exit doors with panic push&#8208;bars should be "Access Control Doors" per the codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507&#8208;30, to prevent easy access by criminals and vandals, or in a lock&#8208;down / lock&#8208;out situation. The district will meet the requirements listed for section 4.1.9.2.1.44.1.9.2.1.5 &#8208;

Heavy&#8208;duty metal or solid&#8208;core wooden doors should be used at entrances in areas containing expensive items. These areas include classrooms, storerooms, and custodians' rooms. Interior doorway doors should also be heavy&#8208;duty metal or solid core wooden doors. The district will meet the requirements listed for section 4.1.9.2.1.54.1.9.2.1.6 &#8208; Door hinges should have non&#8208;removable pins. The district will meet the requirements listed for section 4.1.9.2.1.64.1.9.2.1.7 &#8208;

Door frames should be constructed of pry&#8208;proof material. Adopted 12/05/2014The district will meet the requirements listed for section 4.1.9.2.1.74.1.9.2.1.8 &#8208; Armored strike plates shall be securely fastened to the door frame in direct alignment to receive the latch easily. The district will meet the requirements listed for section 4.1.9.2.1.84.1.9.2.2&#8208;

Automated. Acceptable automated controlled access includes: automatic identification card/badge readers. The district will meet the requirements listed for section 4.1.9.2.24.1.9.2.2.1 &#8208; Faculty, staff, and administration. School personnel may be issued additional tools for authenticating their identity in order to maintain efficient access to school facilities. The district will meet the requirements listed for section 4.1.9.2.2.14.1.9.2.2.2 &#8208;

Student. Schools shall expect students to carry some form of verifiable identification, if automated access to school facilities is to be provided. The district will meet the requirements listed for section 4.1.9.2.2.24.1.9.3 &#8208;

Front door security4.1.9.3.1&#8208; Building vestibules. Where appropriate, buildings shall employ double entry door designs that provide a secured area for visitors to authenticate and gain clearance. Known as "man traps", security vestibules solve several common security issues such as students opening doors for visitors, visitors bypassing check&#8208;in points, direct access to the interior from attackers, piggy&#8208;back entrances, and propped doors. The district will meet the requirements listed for section 4.1.9.3.14.1.9.3.2&#8208;

Video entrance systems. Building designs shall allow for school personnel to be able to monitor incoming visitors from a safe location out of reach, or line of site from incoming visitors who have not yet been authenticated or cleared for entry. These entry points shall use remote video and access control technology to conduct multi&#8208;factor authentication of incoming visitors (e.g. visual verification and ID, PIN/password and ID, or biometric and other form of visual identification). The district will meet the requirements listed for section.4.1.9.3.2.1 &#8208;

Video entrance systems shall use IP technology to allow access control to be conducted by school personnel from multiple locations, so that multiple personnel can provide coverage for screening incoming visitors, eliminating entry system override or "door propping". The district will meet the requirements listed for section.4.1.9.3.2.2 &#8208;

Video entrance systems shall be integrated with school communication, alarm, or school database systems to allow personnel to screen visitors. The district will meet the requirements listed for section.4.1.9.3.3&#8208;

Line of sight.The front entrance should be designed to maximize the line of sight distance for school occupants to detect an intruder from each relevant perimeter (e.g. classroom to hallway, office or guard station to entryway, or entryway to exterior fence access, or exterior fence access to property perimeter). The district will meet the requirements listed for section

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

4.1.9.3.3.4.1.9.4 &#8208;

Door lock / intrusion detection. Doors should have sufficient data cabling to a central interim distribution frame (IDF) or master distribution frame (MDF) to support access control/door release mechanisms, door sensors, IP Authentication sensors, and/or IP surveillance cameras as well as power cabling sufficient to support such hardware. The district will meet the requirements listed for section 4.1.9.4.4.1.9.4.1&#8208;

Interior classroom doors shall have locking hardware for lock downs, which does not interfere with automatic closing and latching functions required by the fire code and may have door sidelights, or door vision glass that allow line of sight into the corridors during emergencies, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507&#8208;30. Adopted 12/05/2014 7 4.1.9.5 &#8208; Event alerting and notification (EAN) system. An EAN system that utilizes an intercom / phone system with communication devices located in all classrooms and throughout the school to provide efficient inter&#8208;school communications, and communication with local fire, police, and medical agencies during emergency situations. The district will meet the requirements listed for section 4.1.9.1.5, however this is not part of this grant.4.1.9.6 &#8208;

Secure sites should include the following: 4.1.9.6.1&#8208; Locations to avoid. The district will meet the requirements listed for section 4.1.9.6.1.4.1.9.6.2&#8208;

Location of utilities. The district will meet the requirements listed for section 4.1.9.6.2.4.1.9.6.3&#8208;

Roof access. The district will meet the requirements listed for section 4.1.9.6.3.4.1.9.6.4&#8208; Lighted walkways. The district will meet the requirements listed for section 4.1.9.6.4 4.1.9.6.5&#8208;

Secured playgrounds. The district will meet the requirements listed for section 4.1.9.6.5.4.1.9.6.6&#8208;

Bollards at main entrances and shop areas with overhead doors. The district will meet the requirements listed for section 4.1.9.6.6.4.1.9.6.7&#8208;

Signage. The district will meet the requirements listed for section 4.1.9.6.7.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

Garfield 16 is committed to maintaining its facilities by budgeting for annual capital renewal needs, following a rigorous facilities/plant maintenance program (developed jointly with the manufacturer's, installers, and our maintenance team), and a long&#8208;term (20 year) capital renewal program that will be developed by the Board of Education, our maintenance team, and our district leadership. The capital budget will reflect, at a minimum, the \$100 per student plan suggested by the division, and will increase as funding becomes available.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The Center for Family Learning is a PreK - 1 elementary school serving the students of Garfield 16. The building was the original K-12 school for the district from the mid 1930's to the present. A major renovation took place in 2007, when the school was overhauled to meet the needs of our youngest learners. While the building has been renovated, the school is lacking a safe and secure main entry point which the community felt was a major point of emphasis in passing the bond in 2014.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

**FY15-16 Charter School Capital Construction Allocation from the State:**

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Current Grant Request:</b>	\$148,274.13	<b>CDE Minimum Match %:</b>	66
<b>Current Applicant Match:</b>	\$315,082.52	<b>Actual Match % Provided:</b>	68
<b>Current Project Request:</b>	\$463,356.65	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	2014 Bond Proceeds	
<b>Total of All Phases:</b>	\$463,356.65	<b>Escalation %:</b>	4.4
<b>Affected Sq Ft:</b>	45,000	<b>Contingency %:</b>	18
<b>Affected Pupils:</b>	247	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$10	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$2	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$8	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$1,876	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	182	NA	
<hr/>			
<b>District FTE Count:</b>	1,001	<b>Bonded Debt Approved:</b>	\$65,077,287
<b>Assessed Valuation:</b>	\$1,219,074,770	<b>Year(s) Bond Approved:</b>	06, 14
<b>PPAV:</b>	\$1,217,857	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$2,271,403	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$60,179	<b>Outstanding Bonded Debt:</b>	\$28,560,000
<b>Free Reduced Lunch %:</b>	49	<b>Total Bond Capacity:</b>	\$243,814,954
<b>Existing Bond Mill Levy:</b>	4.839	<b>Bond Capacity Remaining:</b>	\$215,254,954

• Facilities Impacted by this Grant Application •

**Garfield RE-2 - ES Partial Roof Replacement - Elk Creek ES - 1978**

**School Name: Elk Creek ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	67,305
Replacement Value:	\$16,512,096
Condition Budget:	\$868,324
Total FCI:	5.26%
Energy Budget:	\$23,557
Suitability Budget:	\$300,200
Total RSLI:	47%
Total CFI:	7.2%
Condition Score: (60%)	4.26
Energy Score: (0%)	2.08
Suitability Score: (40%)	4.92
School Score:	4.52



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Garfield RE-2

**County:** Garfield

**Project Title:** ES Partial Roof Replacement

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

The Garfield School District No. Re-2 is an 822 square mile, K - 12 school district. Garfield Re-2 has a total of 10 schools – six K – 4, two middle (5 – 8) and two high schools. We serve the communities of Rifle, Silt and New Castle, CO. Our district is home to an IB high school, four governor's award winning schools and a National Blue Ribbon School.

The affected school, Elk Creek Elementary, is a 67,305 square foot elementary school that was built in 1979 in New Castle, CO. It began as a Pre-K-8 school (Riverside School), transitioned to a 4-8 school as the District grew, became a 5-8 school (Riverside Middle School) and when the new Riverside Middle School was built as part of our 2006 bond program, it became Elk Creek Elementary. The student enrollment is 259 Pre-K – 4th grade students.

The building has had two additions and a significant remodel in 2008 to transition from a middle school to a world-class elementary school.

As part of the 2006 bond program, Garfield Re-2 replaced half of the roof (approximately 34,000 square feet) in the remodel. The most significantly compromised components of the roof were replaced. Budget constraints precluded Garfield Re-2 from re-surfacing the entire roof. The roof sections we are seeking to replace during the summer of 2016 are between 39 and 25-years of age. They are all out of warranty.

Garfield School District No. Re-2 has a building maintenance staff of eight full-time employees that provide maintenance of the Garfield Re-2 facilities. Part of their regular duties include preventative maintenance, regular repair and emergency repair of our roofs. Garfield Re-2 does work with roofing contractors and consultants to complete projects that are beyond the scope of our staff's capabilities.

## Deficiencies Associated with this Project:

There is a need to replace the approximately 33,358 square feet of roof because it has begun to leak. The Elk Creek Elementary roof has experienced about 20 significant leaks over the last six years. There are two in particular that are in difficult places – Garfield Re-2 staff repair the leak, and within a month or two, the leak emerges again. The maintenance department reports regular cycles of leaks with drywall damage and repairs. Damaged areas are concealed from the public's view, however, repairs in several places are futile under the current conditions. According to the ECE roof evaluation report submitted by Division 7 Design on January 1, 2016.

There are four sections of roof that need to be resurfaced including the western 4,890 sq. feet, the north wing, the eastern 5,686 sq. feet and the south (pre-school) wing of the building. These roof sections range in age between 39-years and 25-years. All sections are out of warranty.

The crickets between drains are severely undersized and water ponds in the cricket valleys, stopping short of each roof drain. Winter freeze and thaw cycles are creating breaches in the protective layers of Elk Creek Elementary.

## Proposed Solution to Address the Deficiencies Stated Above:

The solution to the deficiencies named in the section above isn't one single thing. It is the application of a roofing assembly that begins with a "test as you go" evaluation of the existing insulation to remain.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Garfield Re-2 is proposing to replace the remaining 33,358 that was not replaced as part of the 2008 remodel of the building. We are seeking both BEST grant and Garfield County Federal Mineral Lease dollars to help support us in this effort. We will replace the existing membrane with a 90-mil EPDM membrane (thicker than the required 60-mil membrane). This will add to the warranty of the roof as well.

Under the guidance of Division 7 Design and the Garfield Re-2 Facilities Director Craig Jay, the existing membrane will be removed.

The existing insulation is 3-inch polyisocyanurate insulation. The only insulation that will be removed is that which is damaged or wet. An additional 1.5-inch of polyisocyanurate insulation will be added. This will be fastened with mechanical fasteners. Wise stewardship of the District's capital investments precludes throwing away 3" of perfectly good polyisocyanurate insulation (r-16.68), so long as it's sound and dry. From a sustainability standpoint it is a good idea to limit the impact on our local landfill.

This is, however the best opportunity to add insulation to the existing assembly. We relied on guidance from Colorado Energy Office and the Colorado Department of Local Affairs (DOLA), who jointly developed a program to help jurisdictions like ours adopt the 2009 IECC. This project will overlay the existing with 1-1/2" of polyisocyanurate insulation and a high density polyisocyanurate cover board for a sub-total of R-10.84 resulting in a total of R-27.52 over the general slope of the roof. This meets current code set at R-20 and meets the recommendation of the next generation, near adoption of R-25 for this climate zone.

Our roof covering of 90 mil thick EPDM is black, for a reason. Many jurisdictions march lock step in the high reflectance "white is right" movement to win LEEDS points. Our micro-climate in New Castle at 5,600 feet above sea level has considerably more heating degree days than cooling degree days, so energy cost is not an issue. Our project would win LEEDS points for innovation in the use of high energy absorption material to melt snow on a structure that lags behind current live load design capacity. This logic, and the use of a light weight assembly over the eight pound per foot gravel surfaced built-up roof will add significant live load capacity. Crickets added to the roof in areas of ponded water will increase insulation value and reduce the weight of stored standing water where the existing roof holds water. New internal roof drains and overflow drains or scuppers assure the District of a dry roof when the rain stops.

There are no ballasts to replace, and roof drainage will be assisted by the inclusion of crickets between roof drains. The roof replacement will include the removal of eight pounds per square foot of tar and gravel and adding back only one pound per square foot.

### **How Urgent is this Project?**

There is a need to replace the approximately 33,358 square feet of roof because it has begun to leak. The Elk Creek Elementary roof has experienced about 20 significant leaks over the last six years. There are two in particular that are in difficult places – Garfield Re-2 staff repair the leak, and within a month or two, the leak emerges again.

There are four sections of roof that need to be resurfaced including the western 4,890 sq. feet, the north wing, the eastern 5,686 sq. feet and the south (pre-school) wing of the building. These roof sections range in age between 39-years and 25-years. All sections have significantly out lived their warranty.

We do not have an exact date that the roof will fail. As it ages, it will continue to fail in places and continue to do additional damage.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

Section 4 of the Public School Facility Construction Guidelines dictates that for health and safety, schools should have a weather-tight roof that drains water positively off the roof and discharges the water off and away from the building. Currently, Elk Creek Elementary does not have such a roof.

The Garfield Re-2 maintenance staff has done an excellent job performing regular maintenance on the roof, however, due to



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

it's age, the ECE roof has experienced about 20 significant leaks over the last six years. There are two in particular that are in difficult places – Garfield Re-2 staff repair the leak, and within a month or two, the leak emerges again. The roof will continue to develop more frequent leaks, and it is time to replace the older components of the ECE roof.

The Elk Creek Elementary roof is a low slope roof. Under section 4.1.2.1, subsection 4.1.2.1.2, the proposed roofing solution will include a 90-mil EPDM roof membrane. This is substantially thicker than the required 60-mil roof membrane and with it, comes a warranty of 30-years.

Under the guidance of Division 7 Design and the Garfield Re-2 Facilities Director Craig Jay, the existing membrane will be removed, and replaced. The existing insulation is 3-inch polyisocyanurate insulation. The only insulation that will be removed is that which is damaged or wet. An additional 1.5-inch of polyisocyanurate insulation will be added and fastened with mechanical fasteners.. There are no ballasts to replace, and roof drainage will be assisted by the inclusion of crickets between roof drains. The roof replacement will include the removal of eight pounds per square foot of tar and gravel and adding back only one pound per square foot. Division 7 Design will be employed as the owner's rep for this project.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The District has adopted practices intended to protect the value of one of our most important assets; the roofing assembly on every one of our buildings. This practice is in addition to the published warranty requirements of a manufacturer with a current roof system warranty. The following program is to serve as the first draft of an evolving document that will be reviewed and revised as needed. The Maintenance Department is the primary staff intended to implement this directive; however, reporting moisture intrusion is the responsibility of the entire staff. If you see something, say something.

The practices include a visual inspection of the interior of the building looking for leaks, as well as a comprehensive external inspection of key areas including cap flashings, edge metal, base flashings, penetrations, field of the roof, ballast and roof adhesives and surface coatings if present.

Staff will be evaluating for things like loose areas of attachments, loose or missing stripped-in flashing, splits in the stripping at metal flashing joints, secure and sealed top terminations for base flashings, a covered top seal of the membrane base flashing, inspection of drain clamping rings and drain strainers, and the inspection of the seals and termination around pipes at the top of pipe boots.

Building principals are expected to limit roof access. Any rooftop equipment or cabling needed to support the educational needs of students or staff must be performed by the Maintenance Department or an approved contractor. Lost toys or car keys or other valuables will be retrieved by the Maintenance Department, without exception.

Financially, Garfield Re-2 admittedly is unable to maintain all of our capital needs, however roofs are viewed as a priority item. Our Capital improvement plan is reviewed annually with the Superintendent, Finance Director, Facilities Director and building principals. Areas that include life-safety systems, such as roofs, are given priority within the Capital Improvements budget.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Garfield Re-2 built the school new, remodeled it in 2008. The roof needs repair.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

**FY15-16 Charter School Capital Construction Allocation from the State:**

**Current Grant Request:** \$226,252.80

**CDE Minimum Match %:**

64



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Current Applicant Match:</b>	\$402,227.20	<b>Actual Match % Provided:</b>	64
<b>Current Project Request:</b>	\$628,480.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	General Fund and Grants	
<b>Total of All Phases:</b>	\$628,480.00	<b>Escalation %:</b>	0
<b>Affected Sq Ft:</b>	33,358	<b>Contingency %:</b>	0
<b>Affected Pupils:</b>	226	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$19	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$0	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$19	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$2,781	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	148	NA	
<hr/>			
<b>District FTE Count:</b>	4,606	<b>Bonded Debt Approved:</b>	\$74,900,000
<b>Assessed Valuation:</b>	\$1,229,154,740	<b>Year(s) Bond Approved:</b>	06
<b>PPAV:</b>	\$266,888	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$11,343,163	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$53,642	<b>Outstanding Bonded Debt:</b>	\$103,383,126
<b>Free Reduced Lunch %:</b>	54	<b>Total Bond Capacity:</b>	\$245,830,948
<b>Existing Bond Mill Levy:</b>	7.552	<b>Bond Capacity Remaining:</b>	\$142,447,822

• **Facilities Impacted by this Grant Application** •

**La Veta RE-2 - District Safety & Security - La Veta Kindergarten - 1911**

**School Name: Kindergarten**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	1,500
Replacement Value:	\$312,240
Condition Budget:	\$308,027
Total FCI:	98.65%
Energy Budget:	\$0
Suitability Budget:	\$0
Total RSLI:	4%
Total CFI:	98.7%
Condition Score: (60%)	2.99
Energy Score: (0%)	1.61
Suitability Score: (40%)	1.91
School Score:	2.56



**La Veta RE-2 - District Safety & Security - La Veta ES - 1952**

**School Name: La Veta ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	33,133
Replacement Value:	\$8,799,402
Condition Budget:	\$4,226,798
Total FCI:	48.04%
Energy Budget:	\$11,597
Suitability Budget:	\$2,093,700
Total RSLI:	21%
Total CFI:	72.0%
Condition Score: (60%)	3.30
Energy Score: (0%)	1.88
Suitability Score: (40%)	3.20
School Score:	3.26



**La Veta RE-2 - District Safety & Security - La Veta Jr/Sr HS - 1911**

**School Name: La Veta Jr/Sr HS**

Number of Buildings:	3
All or Portion built by WPA:	Yes
Gross Area (SF):	31,874
Replacement Value:	\$10,665,364
Condition Budget:	\$3,702,671
Total FCI:	34.72%
Energy Budget:	\$0
Suitability Budget:	\$1,557,900
Total RSLI:	18%
Total CFI:	49.3%
Condition Score: (60%)	3.41
Energy Score: (0%)	2.81
Suitability Score: (40%)	3.73
School Score:	3.54



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** La Veta RE-2

**County:** Huerfano

**Project Title:** District Safety & Security

**Previous BEST Grant(s) Funded:** 2

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input checked="" type="checkbox"/> Security   | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

**General Information About the District / School, and Information About the Affected Facilities:**

La Veta Re 2 is a rural district that provides educational programming for 219 students in pre-school through 12th grade. In 2014 the district was recognized as "Accredited with Distinction," having met or exceeded the rigors of the State's performance indicators. Success in academic areas can be attributed to the focus on maximizing available resources to provide students with every opportunity to succeed and excel. Academic programs are introduced at the earliest possible opportunity with a commitment of a district managed pre-school program and full day funded kindergarten. In addition to core academic subjects all students are provided instruction in internet safety, library material access, extracurricular activities, and opportunities for civic or community engagement. High School students can enroll in career and technical education classes in a work force readiness program or receive both high school and college credit for successfully completing concurrent enrollment classes. For a small district to provide diverse tracts for students requires that the staff be extremely flexible on the subject matter they teach. The need for diversity and the traditional struggle of small, rural districts to recruit and retain teachers is represented by the 94.82% of classes taught by Highly Qualified instructors as compared to 99.19% for the State.

Student enrollment has varied greatly in the past four years. A recent high enrollment of 226 occurred in 2012/2013 with a drop in 13/14 to 191 and a slight recovery in 14/15 of 215 with current enrollment of 219. Fluctuations in enrollment mirror the adverse economic environment and reality of double digit unemployment (10.7%) experienced throughout Huerfano County. Local economics are reflected in a continued increase in the percentage of families that qualify for the Free and Reduced Lunch program. Program eligibility in 2011/2012 was 43% with a continued growth to current levels of 64%. Economic challenges at the local and state levels have had an adverse effect on district financial revenues. A balanced budget has required the district to make choices to reduce educational and maintenance programs in cost control measures and to aggressively seek other resources to offset revenue deficits. The end result of deferred facility maintenance is that what was once thought to be a short term financial crisis has now extended to long term implications. In the past 5 years, remodeling or renovation has only been accomplished by leveraging nominal Capital Project funding with state and federal grant money. Priorities for these funding requests, as is the case with this application, have been determined utilizing state facility assessment data and matching those with priorities established by Federal, State, and private philanthropic organizations.

All Tier I educational facilities are positioned in a campus format with a public thoroughfare, Garland Street, dividing the campus in half. The individual buildings that comprise the campus vary greatly in age and condition. High School programs are conducted in three buildings: the main building constructed in 1911, the science annex and the VoAg building, both constructed in 1971. The elementary building was constructed in 1952, with additions of classrooms, cafeteria and gymnasium in 1983 and again in 1986. Pre-school and kinder classes are in a building originally constructed in 1983 but remodeled in 2001. All structures are maintained by district custodial/maintenance employees. Recent high cost maintenance issues and ongoing maintenance concerns associated with aging infrastructure have forced the district to evaluate the best approach for the buildings. State facility assessment data raises the question of whether to renovate or build new. Colorado Facility Index (CFI) has the elementary at 72%, a 2002 renovation on the High School building has improved that CFI rating to 49.3% and the pre-school/kindergarten building rating is 98.7%.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

### Deficiencies Associated with this Project:

Access to District facilities is unique in light of what the norm is for access to most K-12 facilities. The existing campus is effectively divided in half by a public street. Five of the seven buildings are on one side with the remaining two on the other. Class schedules, activities and the need to access facilities that support those efforts requires students to traverse across this thoroughfare continually during the course of the school day. This continual free flow of students and staff has traditionally resulted in a policy of open access to all buildings during the course of the regular school day. This policy and unsecured procedures are further necessitated by a lack of technology or security measures to implement alternatives. Technology that supports safety and security measures is limited to non-existent. Currently there is not a camera surveillance system in place that could minimize the opportunity of crime or assist in a potential investigation, or provide the means to monitor access to buildings in conjunction with locked/secured entryways. All entryways can and are locked during non-school hours, however, the practice has been that during the regular school day primary entryways are keyed open allowing free access to all buildings to facilitate student mobility. Non-primary entrances are locked with access limited to personnel with assigned keys. Existing difficulty with the current key system is that anyone who has access to a key machine can have keys replicated as the locks and keys are readily available to the general public. In reality, this system allows anyone, and nearly everyone, to have a key and ultimate access to every building on campus.

Primary entryways at the elementary, middle school, science building and high school are predominantly original to the buildings and reflect that age and use. Actual door units are constructed of solid wood or steel materials that meet construction standards. Unfortunately they all have glass inserts that are not tempered for burglar-resistance. Sidelight and door frames are steel that have deteriorated particularly where they have come in contact with cement and at stress points of hinge locations. Locks are a common Schlage variety with key access. While the locks are currently functional the extended use and ease in replicating keys marginalizes the effectiveness of security. Panic push bars are of both the flush mount and bar styles with door closures reflective of the age of the entryway. Again, the age and use of these mechanisms are reflected in their inability to properly close and latch after opening and in some cases the push bars have failed to operate in egress.

Communication systems include both telephones, intercom and radios assigned to key personnel. The telephone is an AT&T system installed in the early 1980's. For several years, the district has struggled with finding replacements for the handsets that have failed due to the age and obsolescence of the system. That age and obsolescence reached critical mass in February when the processing board failed, eliminating all programs for the phone system and the ability to send or receive calls for a four hour period. A backup card was finally secured and installed by the system professional. He advised the district that there were no other replacement boards available, as suppliers have gone out of business and the backup battery system has been compromised to the extent that any power outage will eliminate the phone programming and the system from operating. A Bogen intercom system currently serves the majority of classrooms, offices and activity centers. Identified limitations with the system include an inability to increase volume for high-noise areas such as gymnasiums and shops, a lack of service in one particular building that occurred during a recent remodel, and single access points in each area. The district is currently working on correcting both the volume issue and lack of service and expect to have that completed within the next 60 days. Emergency radios equipped with a district band allows communication amongst key personnel, and is tied to the county communication system allowing district personnel to communicate with law enforcement and emergency responders.

### Proposed Solution to Address the Deficiencies Stated Above:

The primary solution for access control and the one component that supports implementation of other solutions is the installation of a Video Monitoring System. System design calls for the installation of over 80 cameras in key locations throughout the district. Those locations include coverage of the entryways for all seven campus facilities, parking lots, playground, interior hallways, common areas and key classrooms. Camera locations dictate the style, type and capability, however, all cameras are internet protocol (IP) devices, are powered over Ethernet (POE) and are high definition, analog. Rather than activated by motion, the cameras are activated by a change in the pixel quality allowing for adjustment to incidents of casual wildlife activity. Video Management is web based which will allow for real-time viewing from either a remote location by authorized personnel or from the central office location. The central office will have a monitor that can view any camera at any time by selecting the site from a menu and/or have a multi array of cameras viewable for entryway access and control measures. Video recordings will automatically be saved to a hard drive with 8 tb of memory which will allow for retention of anywhere from 7-30 days depending upon activity. Recordings that need to be retained for longer periods can be uploaded to cloud files, or saved to jump drives or discs.



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Solutions that support controlled access require the replacement of primary entryways. Buildings that require replacement of doors and hardware include the High School, two primary entryways at the Elementary, three primary entryways in the Middle School including the cafeteria and one entryway in the science building. All units will include doors of steel material, fully framed, non-translucent burglar resistant glass, non-pryable steel or aluminum jambs and flush push bar hardware, non-removable hinge pins and armored strike plates secured to the jamb. Several entryways are redesigned to allow larger doorways for better access and keyed lock/removable center stiles to accommodate handling of large items. Each unit has an electronic magnetic strike plate allowing access control from the central office and a lock with a key system that cannot be duplicated without district authorization. All designated primary entryways are intended to be locked during hours of operation with access controlled remotely by the central office or by keys distributed to authorized personnel. Specifications for all doors and components have been developed to comply with applicable codes adopted by the Colorado Division of Fire Prevention and Control and meet the Public School Facility Construction Guidelines.

The final safety/security component of this proposal is the replacement of the obsolete phone system with a Shoretel Voice Over IP dual telephone and intercom system. Components of the phone system includes the installation of 46 phones with one in every classroom, office and supervised common area of the district. Phones are equipped with multiple feature keys for system directory, intercom, conference calling, transfer, redial and hold. The cost estimates include a network assessment, IP PBX installation, onsite training for the entire teaching and administrative staff, and the first years of technical support.

Communication and security deficiencies in the district were heavily documented in the School Assessment Reports completed by CDE in 2009. The fact that it has taken the District seven years to fully address those deficiencies does not minimize their significance. What that passage of time actually represents is a concentrated effort by the District to remediate infrastructure that did not have the capability to support technology based systems. With the improvements to fiber access improving speed and reliability, the District has invested in the installation of fiber optic cable, new switches and access points in every building. These upgrades now provide the backbone for the camera and phone system.

District Administration recognizes that if the solutions to campus safety and security are to be comprehensive they must include changes in policy and practices. Those changes are a result of work by the Safety Task Force and include: primary entrances will be clearly marked with signage directing visitors to a central office, and locked during hours of operation with access by key or access controlled by school personnel. Staff and students will be issued identification badges for ready identification and verification of status. Key access to facilities will be fully documented and limited to personnel that are screened and authorized.

The proposed safety and security solutions stem from completion of a Homeland Security Checklist completed by the district task force and recommendations made by consultants from Colorado School Safety Resource Center following a direct observation of district facilities. Standards for applicable components reflect the guidelines for Public School Facility Construction Guidelines from CDE Division of Public School Capital Construction Assistance and conformity to all applicable codes adopted by the Colorado Division of Fire Prevention and Control.

### How Urgent is this Project?

Documentation of existing deficiencies with communications and security first occurred during completion of the School Assessment Report completed by CDE in 2009-2010. At that juncture of the component assessment it was noted the "Age and functionality of the system is inconsistent and should be replaced due to increased condition budget needs, potential failure of its components, or in order to meet the performance guidelines for this system. Communication systems should be replaced, security and surveillance systems should be installed." The recommendation to renew the system within 12 months because of the "potentially critical" nature of the component is being addressed in this application. The differences from then to now are that the operational function of the phone system has failed once and is one power failure away from becoming completely dysfunctional. The district buildings were designed and constructed to meet the expansion and increased academic facility demands of a growing community in 1936, 1952, 1984, and 1986. The issue was space and not how building location would affect safety/security concerns in the future. High School and pre-school/kinder buildings are on one side of a public street and the elementary and middle school are on the other. Unfortunately both sides of the street share facilities with all student populations making the stream of bodies continual during the school day. Elementary students cross for art, library, PE and music, High School cross for the cafeteria and gymnasium, and Middle School for classrooms. Solutions to monitoring this movement and minimizing access to buildings is represented in the development of a security camera system and replacement of entry doors. Knowing the flaws of the campus location, the recurring frequency of school violence and the passage of SB 15-213 (Claire Davis Safety Act) have escalated safety and security of the La Veta Campus to an extreme level of urgency. A lack of and marginal operation of systems indicates a current condition of failure. therefore, the district

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

has established a timeframe that reflects an immediate corrective response of a summer/early fall timeframe.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

This project conforms to the Public School Facility Construction Guidelines with each specific component as identified below.

### Security Camera/Video Management Systems (VMS) Code 4.1.9.1

#### 4.1.9.1.1 Cameras

The proposed camera video system is the next generation VMS that will exceed the standards as defined in the school facility guidelines. Specifications for the 3 styles of 80+ cameras selected for installation all include Internet protocol, power over Ethernet, capable of capturing high quality/high resolution video from 2-3 megapixel depending on camera. Rather than requiring motion to activate the monitoring this system relies on a change in viewed pixels allowing for a refinement of activity to exclude noxious activities potentially generated by wildlife. All housing is vandal, dust and moisture resistant to protect against outdoor environments or contact with humans.

#### 4.1.9.1.2 Closed circuit or IP video recorders.

The system has an IP storage device that eliminates the need for a separate Network Video Recorder (NVR) by incorporating the server and storage hardware in a single device. An all-in-one recording, viewing and management system allows for up to 128 channels. Video can be viewed instantly in real-time from a central location (Central Administrative Office) or can be viewed remotely by administrative personnel assigned viewing functions. Real time viewing does not affect the system's ability to record activity as it relies on a dual stream to allow for simultaneous viewing and recording. All recordings are saved to a hard drive with 8 tb of memory. The memory capacity of the hard drive will allow for retention of recordings for a minimum of 7 days with the potential of that to increase to up to 31 days, depending on the amount of activity recorded. Administration can choose to retain video for extended periods of time by recording to a disc, jump drive or cloud file.

### Controlled Access 4.1.9.2

#### 4.1.9.2.1 Manual

##### 4.1.9.2.1.1 Number of entryways.

A review of existing campus facilities finds a total of 28 separate exterior access points that can be and often are used throughout the school day to allow entrance and exit of students. This application proposes to replace 7 entryways in 3 separate buildings to provide a means to restrict normal entrance into these buildings to one or two locations.

##### 4.1.9.2.1.2 Hardware

New entry doors will be outfitted with key based locking mechanisms. A keyway that cannot be readily duplicated will be utilized to minimize potential of a keyed, unauthorized access. Egress panic bars will be flush mounted to eliminate opportunities to chain secure a unit.

##### 4.1.9.2.1.3 Construction

All doors will be steel constructed with any glass panels comprised of burglar-resistant, non-translucent, tempered glass.

##### 4.1.9.2.1.6 Hinges. Door hinges will have non-removable pins.

##### 4.1.9.2.1.7 Frames Door frames will be steel/pry-proof material.

### Front door security 4.1.9.3

#### 4.1.9.3.2 Video entrance systems.

All entrances will be monitored by school personnel located in a central office. All doors will be lock secured with the monitor able to allow electronic access only after multiple avenues of identification have been presented. Video monitoring is required as the school personnel are not located in line of site or within reach of primary entryways.

4.1.9.3.2.1 Video access IP technology. The VMS allows for remote access by any school personnel that has been allowed clearance to access the system. Up to five different access views can be allowed at any one time.

#### 4.1.9.5 Event alerting and notification (EAN) system.

This project includes the installation of a Shoretel VOIP phone system in all classroom and office, and activity location in every building. The phone system incorporates both intercom and phone capabilities to allow efficient inter-school communication and provide a means to communicate with first responders during an emergency.

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

La Veta Re 2 has a multi-tiered maintenance response based upon the condition and need of the system component. This same approach will be utilized to maximize the equipment life and insure efficient operation. Tier one maintenance are those

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

issues that can be resolved by district personnel with backgrounds and expertise as licensed electrician and technology design. These individuals can address day-to-day concerns with operation and maintenance of the system including replacement of general components such as cameras or handsets. Maintenance personnel have the ability to maintain and repair all door system components including push bar hardware, hinges and locks. Tier two maintenance are those issues that require specialized skill not available at the district level. A Few examples of this level would include camera or phone system program modifications and calibration of cameras. The district is proposing to maintain a service agreements with both the camera and phone system providers to remediate these issues. Door issues that cannot be resolved in-house are infrequent, however, the district has both a specialized lock and glass vendor on call that are familiar with the campus. Funding to support maintenance and repair costs can utilize the maintenance and technology department budget depending upon the nature of the issue. Both departments have equipment repair, purchased professional services, and non-capital equipment lines within their budgets. The District anticipates that the potential impact to these resources will be minimized initially due to extended equipment system warranties and the documented reliability and durability. Camera equipment has a three year guarantee with a projected eight year life cycle. The phone equipment carries a one year warranty. A life cycle projection has not been determined for the phone system, however, the district is calculating a ten year useful life. The District is using the information contained with the School Assessment Report to establish the useful life of exterior doors to be 30 years. A replacement cost analysis and capital project budgetary set aside will be established utilizing the calculated useful life of each component and the initial acquisition cost. That process would begin at the conclusion of year six for the camera system, year nine for the phone system and year 29 for the doors. Beginning the process ahead of the potential expenditure allows for budgetary adjustments over multiple years to minimize an impact at point of replacement.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

This application from La Veta School District is not for the renovation, reconstruction, expansion or replacement of an existing building but a request for assistance in a comprehensive remediation of safety and security issues that are prevalent across the entire campus. The scope of the project includes the installation of a video management system and a voice over IP PBX phone system in all six buildings that comprise the school campus. Replacement of seven primary entrance doors in the various buildings would be the only component of this application that could be considered a renovation. If we utilize the renovation designation, then there is some general information relevant to all the structures that is needed to clarify existing conditions. None of the school facilities were purchased but rather built for the express purpose of providing educational facilities for the families in La Veta and the surrounding area. The building that is considered the original school, and now utilized as the High School, was constructed in 1911, expanded in 1935 and renovated in 2002. The Elementary School was constructed in 1952, expanded in 1983 and 1986 when Middle School classrooms and a gymnasium were added. Construction of the science building was completed in 1971 and the preschool/kinder building was completely renovated in 2000/2001. All of these structures were considered, at the time of construction, adequate for the educational purpose they were intended. Renovation and remodeling projects that have ensued over the years were identified in the same light. The factor that no one was able to predict, as late as 2002, is the increased incidence of school violence. None of the district buildings are considered adequate in design, equipment or infrastructure to minimize or prohibit the potential of physical harm to our students or staff.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$256,169.39	<b>CDE Minimum Match %:</b>	38
<b>Current Applicant Match:</b>	\$41,701.99	<b>Actual Match % Provided:</b>	14
<b>Current Project Request:</b>	\$297,871.38	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		General Fund, Capital Reserve and Capital Project Fund
<b>Total of All Phases:</b>	\$297,871.38	<b>Escalation %:</b>	5
<b>Affected Sq Ft:</b>	66,507	<b>Contingency %:</b>	5
<b>Affected Pupils:</b>	210	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$4	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$3	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$1	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$1,418	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	317		NA
<hr/>			
<b>District FTE Count:</b>	204	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$35,098,138	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$171,629	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$664,876	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$45,739	<b>Outstanding Bonded Debt:</b>	\$575,000
<b>Free Reduced Lunch %:</b>	59	<b>Total Bond Capacity:</b>	\$7,019,628
<b>Existing Bond Mill Levy:</b>	2.225	<b>Bond Capacity Remaining:</b>	\$6,444,628

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant’s waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

For questions 4-11

Only answer the questions which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your school district.

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1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES.

La Veta Re2 is requesting a partial waiver or reduction of the matching contribution for a BEST application. The District recognizes the importance of establishing fiscal commitment for the project but struggle with establishing a full cash match in lieu of maintaining academic programming. To balance BEST Match requirement with funding opportunities the district is maximizing financial and resource capabilities with a commitment of \$41,086.50 (37% of total required match) and requesting a waiver of the remaining \$70,434.37.

The District has maintained high academic standards and student success as evidenced in the full accreditation by the State. Sustaining these standards requires a district commitment to recruiting, retaining and supporting the instructional staff charged with insuring student success. In a district that commitment is predominantly defined monetarily through salaries, benefits, curricular materials and opportunities for professional development. In a small, rural district that commitment is represented in the general fund budget where just the instructional expenditures are 42% of total costs. The requested waiver amount is equivalent to the salary for two teachers with Bachelor credentials and 6 years of experience. Approving a partial waiver of the 38% cash match will give the district the flexibility to maintain and enhance the focus and educational objectives that have proved successful without having to make monetary cuts to support this

necessary project.

2. Please describe why the cost of complying with the match contribution would significantly limit educational opportunities within your school district or BOCES.

Over the course of the past 5 years of fiscal constraints the district has experienced a 25% reduction in the level of funding available through the state. This loss of revenue cannot be replaced with local resources therefore the district has to decide the best avenues for balancing the budget. Options that are open to discussion include reduction of expenditures that include personnel, programming and services and/or consciously choosing to spend reserves. The district's strategy has been a combination of several actions including defining those programs or activities that are non-negotiable, cutting expenditures to non-essential items across the board, and then planning the level administration and the board is willing to spend through reserves. RE2 has been able to maintain all educational programs including, physical education, art and music as well as sustaining the curricular needs of general education classrooms. That level of commitment has come at a cost to support services which has seen a reduction in personnel, funds for repairs, maintenance and supplies and an elimination of cyclical maintenance and replacement schedules to a level of necessity. BEST funding currently has a RE2 matching requirement of 38% of the total project cost which is down from what has been as high as a 61% match. That match equates to \$110,403.00 of a \$290,000 project. To re-allocate the match in the current budget would mean that the priorities to maintain educational programming would be significantly impacted. The "fluff" of the budget was cut three years ago so this adjustment would equate to a loss of instructional staff, programs or a percentage of both in an attempt to correct safety and security deficiencies with the existing buildings. Consultants from Colorado School Safety Resource Center completed a direct observation of the facilities and cited access control, communication, a lack of surveillance systems, delineation of school facilities as a few of the primary concerns with securing students and facilities in an emergency. The District is at a crossroad of determining if the cost to insure the safety and security of students and staff is of greater value than the cost of providing personnel and programming for a student's education.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants, or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

Prior to the submission of this BEST funding application the district has worked to leverage funding from state and federal programs to enhance technological capability anticipating the need for expanded WIFI and Ethernet capability to support safety and security project implementation. For the past two years the district has utilized Capital Project funding and Federal E-rate reimbursement money to build a technological infrastructure to support the current technology demands of speed, access and band width and anticipate the potential demands of future upgrades for camera surveillance and Voice over IP phones. Capital construction money was expended in 2015 to interconnect all buildings on campus with fiber optic cable. Total project cost was just under \$12,000 and included over 1000 feet of fiber optic, patch panels, installation and testing to insure cables are ready to be lit in the next phase. The second phase of this installation is scheduled for later in 2016. The additional \$8500 cost to the district will actually finish cable terminations enabling the system to go live. Once the cable is live the district has submitted approval for reimbursement requests through E-rate for switches, Wi-Fi access points and over 100Mbps of internet access to make the cable fully operational. The equipment is considered a Category 2 request and such will only be reimbursed at 80% requiring the district to match the remaining 20% at an anticipated cost of approximately \$3700 for a project cost of just over \$18,000. The district has doubled the contracted internet access service from a 50Mbps to 100Mbps to offset increased demands and projected needs for proposed security measures. This decision will result in an increased monthly fee of \$100 from \$662 paid in 2015 to \$761 for 2016.

The District has made every attempt to leverage all available resources for this project in an effort to minimize the financial impact on a request to the BEST program. To insure that the availability of funds is maximized to its full extent requires the district to incorporate a comprehensive approach by combining smaller aspects of the project into an efficient scope of work for increased economy of scale, minimized mobility costs and elimination of redundancy of design, engineering and management services associated with independent projects. The success of the District to successfully maximize project management and use of funds was most recently demonstrated with the construction of a Fire escape on the High School that utilized Best, USDA Community Facility and district funding to complete a project on time and on budget.

4. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.



5. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

US Census Bureau table B19013 Data set 2008-2012 American Community Survey 5 year.

State Median income \$58,244 Huerfano County \$32,754

County median income data has been selected because it is more representative of the family incomes of the students who choose to attend district schools.

While the La Veta Re 2 district boundaries contain approximately one third of all the area in Huerfano County over 40% of our student population reside outside of those district boundaries.

6. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

La Veta Re2- Free and Reduced lunch rate was 64% as of October 1<sup>st</sup>, 2015. Percentage was calculated using FTE student population of 219 with 108 identified for the Free category and 32 identified for Reduced. Data to compare with a statewide average was not available.

Information that was available on the CDE website for 2012 shows that the statewide average for Free & Reduced eligibility was 41.56% which was a slight increase of .29% from 2011 eligibility of 41.27%. A study of the district average during the same time period shows 2012 eligibility at 53.10% which is 4.97% higher than the 2011 eligibility rate of 48.13%. Both years the District exceeded the state average but more revealing is the dramatic increase in the percentage of students eligible for the program in a four year period. That increase is a direct reflection of the economic instability of the community and county at large.

7. Bond Election failures and successes in the last 10 years – The more attempts the school district has had, the lower the match.

From 1981-2011 the District has had two successful Bond Elections. The most recent was in November of 2002. A \$1,000,000.00 bond was passed by a rather large margin 503-For and 170-Against. The bond money had been identified for use in the renovation of the High School.

The second occurred in November 1984 for approval of a \$880,000 bond. This bond was utilized to construct a facility that included a regulation gymnasium, stage, locker rooms, offices and classroom space.

The district has not requested voter approval of a mill levy override for the period of 1999 through 2015.

8. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

Re2 has an outstanding principal balance due of \$525,000 on a Bond Redemption as of the fiscal audit dated June 30 of 2015. The original bond debt of \$1,000,000.00 was approved by property owners in November of 2002 and is scheduled to be retired in 2022. The Bond Redemption mill levy certified by the County Treasurer in December of 2015 was for 2.225 mills to generate approximately \$74,672 assuming a 99% collection rate.

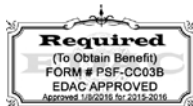
The General Fund program was certified at 26.312 with an additional 0.062 for Abatements. Total General Fund Mill Levies were for 26.374 mills. Total mills, including Bond Redemption, were 28.599.

Information was not readily available to determine how the district mill levy compared to the state average.

9. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

The District's bond capacity was calculated using:

Current year total taxable assessed valuation	\$35,098,138.00 X 20%= \$7,019,627
Subtract Bonded Indebtedness	<u>(525,000)</u>
<b>Bond Capacity</b>	<b>\$6,494,627.00</b>



• Facilities Impacted by this Grant Application •

**Lincoln Academy - Lincoln Academy Safety/ Security Upgrades - 1985 & 1986**  
*No Statewide Facility Assessment Information Available*



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Lincoln Academy

**County:** Jefferson

**Project Title:** Lincoln Academy Safety/ Security Upgrades

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |  |  |  |  |
|--|--|--|--|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof                  | <input type="checkbox"/> Asbestos Abatement            | <input type="checkbox"/> Water Systems                     |
| <input type="checkbox"/> School Replacement  | <input checked="" type="checkbox"/> Fire Alarm | <input checked="" type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework                 |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement    | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase                     |
| <input type="checkbox"/> Addition            | <input type="checkbox"/> HVAC                  | <input type="checkbox"/> Energy Savings                | <input checked="" type="checkbox"/> Other, please explain: |
| <input checked="" type="checkbox"/> Security | <input type="checkbox"/> ADA                   | <input checked="" type="checkbox"/> Window Replacement | Replace failing exterior doors and door hardware           |

**General Information About the District / School, and Information About the Affected Facilities:**

Lincoln Academy's facility master plan goal is to continue to invest in the existing facilities with a long-term plan to maintain, upgrade and potentially replace portions of the facilities.

It has become apparent through the master plan process that specific items must be addressed as soon as possible for the health, safety & security of students, staff and visitors. These specific 4 scope items are:

- Replace Failing Fire Alarm System: The current system doesn't communicate between the two buildings or function reliably for the safety of the building occupants.
- Upgrade Insufficient Egress Lighting: The school needs emergency lights and exit signs that cover all areas for safe emergency egress.
- Replace Failing Exterior Doors and Door Hardware: Many doors don't close and lock completely, allowing access to the building.
- Replace Failing Windows: Many windows are difficult to operate, lack screens and don't close all the way, allowing access to the building.

More information on these systems is included in the Deficiencies and Solutions sections.

As a charter school, Lincoln Academy must shoulder the burden for all of its facility's needs and has sought all options for funding. Lincoln Academy did not receive facility bond proceeds from the 2012 Jefferson County School District bond package. Lincoln Academy does not have the financial resources to fully fund these needed upgrades, so the school is applying for BEST funding assistance to correct the deficiencies immediately and provide a safe educational environment for its community.

**Deficiencies Associated with this Project:**

This grant application focuses on deficiencies with fire alarm, egress lighting, doors and windows that pose health, safety & security risks to students and staff. The fire alarm system is failing, egress lighting coverage is insufficient, many exterior doors don't close and lock properly, and many windows are missing screens and don't close, allowing unauthorized access to the building.

The inadequate state of these systems is a constant safety concern for the school, and staff must monitor the functioning of

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

these components throughout the building on an ongoing basis. Lincoln Academy is at risk at any time of an unfortunate event that could cause harm to students or staff.

As a result of working with Jeffco School District, and the Arvada Fire Department, Lincoln Academy has worked hard to develop a security plan that provides all students with safe access to core program activities. Every year as staff return to school, they are trained in the Standard Response Protocol (SRP). The idea behind the SRP is that it is a simple, shared lexicon between students, staff and first responders in an emergency. Staff and students are trained for four actions that could be taken during a critical incident: Lockout, lockdown, evacuate, and shelter. Jeffco School District's safety and security team comes to one of Lincoln's drills each year and evaluates the school's process of following the protocol. Additionally, Jeffco's safety and security team has offered suggestions of ways to improve the safety of our school. Lincoln Academy has been able to implement many of Jeffco's suggestions, however it has not been able address the issues that are part of this grant application yet, because of the cost involved in this work.

Lincoln Academy has two buildings (A and B), which were constructed between 1983 and 1986, except a 2008 Cafeteria addition to Building A.

Below is a detailed list of building deficiencies:

**Fire Management:** The building fire alarm and emergency notification systems are an ongoing safety concern. Building A and B have separate analog fire alarm systems that do not communicate with each other. Portions of the systems in both buildings are obsolete, with replacement parts not longer being made and therefore difficult to find.

Examples of frequent occurrences:

- Alarms go off, the Fire Department arrives, but no source or reason can be found.
- Alarms go off and equipment is found to have failed. Because parts are no longer made, it can take days or weeks to track parts down. LACS has been required to implement a "fire watch" at least 3 times while school was in session, because of failed components. The fire alarm system had to be shut down completely until parts could be found.
- It is difficult to know where or why an alarm is activated. The alarm will sound in one building, but both buildings will evacuate.
- Building occupants are confused when one building alarms, and the other building does not.

**Emergency lighting:** Emergency lighting and exit signage is inadequate throughout both buildings. About 40% of the exit signs and emergency lights are either not functioning or do not have battery backup. Adequate coverage of emergency lighting is poor in many areas, and the school is concerned that students might not be able to find their way to the building exits in an emergency.

**Paths of Egress:** With inadequate emergency lighting coverage and backup, Lincoln Academy is concerned that paths of egress may not be clearly identified in an emergency event.

**Security:** The poor condition of the majority of doors and windows is a significant health, safety & security concern.

•**Doors:** Of the facility's total 34 exterior doors, 30 of them are in need of replacement due to poor operating condition. Exterior doors do not fully latch, though they appear to be closed. During normal operation as well as lockdown drills, the exterior doors need to be checked by staff members to make sure they are latched. Expansion and contraction of materials at different times of the year and door hardware that needs repair are common issues that cause the failure to latch and control access adequately. All exterior doors have door hardware/handles on the exterior side of the door, even doors that are intended for exiting only.

•**Windows:** 60% of the facility's operable windows are not functioning safely. Many windows do not open, or are very difficult to close. Many of the window screens have deteriorated or have fallen off of the windows. It is an ongoing security task to monitor windows to make sure they are all closed and secured at the end of the day. Because they cannot be secured, these openings are a risk for intruders to enter the building. Without screens, there is a safety concern that students could be harmed by falling from a window.



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

## Proposed Solution to Address the Deficiencies Stated Above:

The solution to the health, safety and security deficiencies in Lincoln Academy is to replace the fire alarm system and deficient emergency light fixtures, doors and windows.

This solution was arrived at through a comprehensive Facility Master Plan that assessed the school's facilities and developed a long term plan to address prioritized deficiencies. The Master Plan process included:

- Independent assessment of facility condition and educational adequacy
- Analysis of energy use, maintenance, enrollment, building utilization and capacity
- Master Plan Criteria were developed to guide the planning process, establish goals and evaluate options
- Review of options for consideration
- Community meetings held to discuss and gather input on community values and the appropriate course of action

The Committee considered several options with impartial and open minds. Options included continued investment in the existing facilities, replacement of facilities and relocation. Consideration was given to health, safety and security; educational needs; cost; schedule and logistics. The Committee's recommendation was to continue to invest in the existing facilities with a long-term plan to repair and replace portions of the facilities because it makes the most efficient use of the school's assets and financial capacity.

As an outcome of the master plan, LACS identified the highest-priority needs, with health, safety and security deficiencies rising to the top of the list:

(The first items below are proposed for this BEST project.)

- Replace the inadequate fire alarm systems in each building with one integrated system that will provide the needed warning system to increase the safety of the school facility.
- Replace emergency lights and exit signs that are missing or are not functioning.
- Replace exterior doors and windows that are not functioning.

(The following are other items not included in this BEST project. Lincoln will continue to fundraise for these items.)

- Replace HVAC with more efficient systems.
- Improve site circulation, parking and drainage for better safety and capacity.
- Add backfill at one column location in crawlspace.
- Partial roof replacement to address recent hail damage.
- Plan for future enrollment growth.

Full implementation of the master plan also ideally includes replacing Building B in the future, but this will not be fully realized until sufficient funding can be secured. Consequently, a phased plan was developed to address the needs over time, beginning with the health, safety and security components that are proposed in this grant application.

This project focuses on health, safety and security. It will provide a reliable fire notification system in order to clearly and accurately alert building occupants of a fire alarm, emergency lighting that works and helps students exit safely, and doors and windows that will control access to the building. This solution will help Lincoln Academy provide the healthy, safe and secure facility that all students deserve.

## How Urgent is this Project?

The items in this application are a growing and constant risk for the school, and the time to make the corrections is now. Lincoln Academy is trying to address its highest priority health, life safety and security deficiencies, and these deficiencies require immediate attention and correction. Since purchasing the facility, Lincoln has made other significant health, safety and security improvements. LACS has diligently addressed system failures as they occur, but continuing to repair components as they fail is a lost investment in these systems and overall facilities.

By correcting these deficiencies, Lincoln will be able to efficiently manage the health, safety and security of the schools staff

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

and students. Keeping the students and staff safe is the highest priority for the school. Lincoln Academy has diligently and responsibly managed its finances since its charter, however, financial resources for charter schools are limited. Lincoln acknowledges the BEST funding program would enable them to address these facilities high priority needs.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

This project will provide a fully-functioning fire alarm system to alert students and staff in emergencies, provide needed lighting and exit signs for safe egress, and provide doors and windows that will actually close and latch securely.

Below is a detailed list of the project solutions, compared with the CDE Public School Facility Construction Guidelines:

4.1.3.2 Emergency lighting and exit signage will be designed and installed in accordance with state requirements. They shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

4.1.6 Fire Management: The existing analog zoned fire alarm control panel and associated wiring and devices will be replaced in each building with a new digital addressable fire alarm system including a voice notification system, which would require the replacement of horns with speakers and greater device coverage for intelligibility. The fire alarm and emergency notification system will be designed and installed in accordance with state requirements, to conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

4.1.9 Security: Lincoln Academy has worked hard to develop a security plan that provides students with safe access to its program activities. This project will replace doors and windows that are not functioning, so that they work with the security plan.

4.1.9.2.1.2 - All exterior doors shall be locking and equipped with panic bars to open readily from the egress side. Panic bars should utilize flush push bar hardware to prevent chaining doors shut.

4.1.9.2.1.2.1 - Unless a door is intended for ingress, exterior doors should not have handles and locks on the outside. In all cases exposed hardware should be minimized, provided that sufficient entryways are available for fire department access and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

4.1.9.2.1.3 - Doors should be constructed of steel, aluminum alloy, or solid-core hardwood. If necessary, glass doors should be fully framed and equipped with burglar-resistant tempered glass. Translucent glass should be avoided in all cases.

4.1.9.2.1.4 - Exit doors with panic push-bars should be "Access Control Doors" per the codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30, to prevent easy access by criminals and vandals, or in a lock-down / lock-out situation.

4.1.9.2.1.5 - Heavy-duty metal or solid-core wooden doors should be used at entrances in areas containing expensive items. These areas include classrooms, storerooms, and custodians' rooms. Interior doorway doors should also be heavy-duty metal or solid-core wooden doors.

4.1.9.2.1.6 - Door hinges should have non-removable pins.

4.1.9.2.1.7 - Door frames should be constructed of pry-proof material.

4.1.9.2.1.8 - Armored strike plates shall be securely fastened to the door frame in direct alignment to receive the latch easily.

4.1.9.2.2 - Automated. Acceptable automated controlled access includes: automatic identification card/badge readers.

4.1.9.2.2.1 - Faculty, staff, and administration. School personnel may be issued additional tools for authenticating their identity in order to maintain efficient access to school facilities.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

4.1.9.2.2.2 - Student. Schools shall expect students to carry some form of verifiable identification, if automated access to school facilities is to be provided.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

LACS takes great pride in its facilities and understands the importance of maintaining a fund for capital renewal and maintenance. Lincoln is committed to maintaining a capital renewal budget, and currently transfers a set amount each year into its capital renewal budget to support facility needs, equipment failures and other un-anticipated events.

The Lincoln Academy master plan identifies the ultimate strategy for growth and improvements anticipated over the next 10 years. The first phase of the overall plan is to initiate building improvements that will provide for a safe and secure facility for the Lincoln Academy community. Implementing corrections to the deficiencies will prevent threats, provide a safer learning environment and support future phases of the master plan.

The building systems will be maintained through normal and frequent maintenance checks by in-house facilities staff. The full time maintenance staff is qualified and capable of maximizing the life of the project components. The quality of new doors and windows will have a 25-30 year life span and should not need replacement for a significant amount of time. LACS intends to plan for and set aside funding for the eventual replacement of these components.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

LACS received its charter in 1996 and was previously located at 6980 Pierce Street in Arvada, Colorado. By 2010 the Board recognized that the facilities were not adequate to serve the enrollment, and the site did not have the capacity for future improvement or growth. In 2012, there were 556 students (95 SF/student) on a 2.9 acre site with no playfields and minimal parking. The school relied on a nearby city park for outdoor physical education and recess. After an exhaustive three-year search for property, the current location was identified as a very suitable fit and was purchased in 2013.

This facility met the school's criteria that the facility be able to accommodate the school's enrollment with educationally adequate facilities, a centrally located site close to current families, and a fiscally responsible purchase. In the first year of relocating to this facility, LACS recognized the need to develop a facilities plan to guide future facilities related decisions in a fiscally responsible and diligent manner. In 2015 LACS completed a facilities master plan that assessed the facilities and developed a long term (10-year) plan to address prioritized deficiencies and accommodate future growth.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

The property was previously owned and occupied by two schools. The first, Maranatha Christian School, was a private K-12 school. The second school was Two Roads K-12 Charter School. Prior to purchasing the current location, the facility was professionally appraised, and determined to be a suitable and comparable use. The appraisal determined the facility to be in good operating condition for Lincoln Academy to use immediately.

Since owning the property, LACS has invested in the property and buildings to improve the functionality and enhance the learning environment. Improvements include:

- Electrical and mechanical improvements in the Kitchen to allow it to be utilized as a cafeteria and not a short order kitchen.
- HVAC improvements including the installation of air-conditioning units in a computer classroom and four classrooms that previously did not have a cooling system.
- Increased the science classroom size, installation of four lab stations for increased program needs.
- Minor interior remodel of seven middle school classrooms to accommodate program needs. Renovations included the removal of independent classrooms restroom facilities.
- Minor interior remodel of the library for additional educational space needs
- Replacement of 6 existing boilers with 5 new high efficiency boilers.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

- Construction to enclose the front office reception desk for security purposes. This allows visual access to the entry vestibule. Addition of 3 additional security entrances on doors.
- Installation of a dedicated and secure kiln room for art education. Upgrades include additional ventilation, an upgrade to the existing wall construction and appropriate smoke & fire detection.
- Fundraising and installation of a new playground structure.

**FY15-16 Charter School Capital Construction Allocation from the State:** \$160,516.00

<b>Current Grant Request:</b>	\$669,765.00	<b>CDE Minimum Match %:</b>	63
<b>Current Applicant Match:</b>	\$669,765.00	<b>Actual Match % Provided:</b>	50
<b>Current Project Request:</b>	\$1,339,530.00	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		Operational Funds
<b>Total of All Phases:</b>	\$1,339,530.00	<b>Escalation %:</b>	7
<b>Affected Sq Ft:</b>	82,000	<b>Contingency %:</b>	10
<b>Affected Pupils:</b>	650	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$16	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$3	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$13	<b>Who owns the Facility?</b>	3rd Party
<b>Cost Per Pupil:</b>	\$2,061	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	126		If LACS were to relocate or cease to exist, the property would be sold and proceeds would be used to settle remaining debt on its bond. The master plan process that Lincoln Academy completed in 2015 confirmed that the school will remain in the current location for the foreseeable future. The academic program, administrative organization and financial management are strong; enrollment has grown every year of the school's existence since receiving it charter in 1996, and the school benefits from committed parent and community support. The school site is centrally located for its community, and the site has excellent long-range potential for development and growth to support the school for many years to come.

<b>District FTE Count:</b>	<b>Bonded Debt Approved:</b>
<b>Assessed Valuation:</b>	<b>Year(s) Bond Approved:</b>
<b>PPAV:</b>	<b>Bonded Debt Failed:</b>
<b>Unreserved Gen Fund 13-14:</b>	<b>Year(s) Bond Failed:</b>
<b>Median Household Income:</b>	<b>Outstanding Bonded Debt:</b>
<b>Free Reduced Lunch %:</b>	<b>Total Bond Capacity:</b>
<b>Existing Bond Mill Levy:</b>	<b>Bond Capacity Remaining:</b>



## BEST Charter School Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant’s waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as practicable by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents or other relevant documentation as applicable to support the responses provided.

For questions 4-15

Only answer the questions which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your charter school.

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1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district, charter school, or BOCES.

Lincoln Academy is dedicated to keeping our students safe and protected. The waiver to 50% matching will allow Lincoln to move forward immediately with the upgrades to our fire and security system supporting a secure environment for student learning.

2. Please describe why the cost of complying with the matching contribution would significantly limit educational opportunities within your school district, charter school or BOCES.

Should the waiver be denied, Lincoln would need to delay implementing this project by 1-3 years because we will be utilizing funds from annual PPR and Mill levy reimbursement to cover the matching costs. Lincoln wants to contribute as much as it can in order to address the project’s urgent needs as soon as possible, but the 50% match is at the limit of our cash reserves.

If this project were delayed, Lincoln would continue to provide manual processes and system patches to the current systems, which puts us at greater risk as the systems continue to fail.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

The Master Planning committee has considered numerous options for the funding of these repairs and upkeep requests. In addition to performing debt load assessments, the school consistently reviews our operating expense to determine if budgets could be transferred to higher priority opportunities such as capital improvement or replacement. At this time, we believe that our operational fund are very tightly aligned with the direct education of our students and additional debt, beyond that needed for our growth, would create long term fiscal constraints that would impact future generations of students.

Lincoln recently went to our family community for funds to improve the playground. As such, it would be difficult to ask for further contributions at this time

Jeffco is very supportive of Lincoln's request for BEST grant application but conversations confirm that the district is unable to back Lincoln financially at this time.

4. Weighted average of district matches which comprise the student population.

5. Does the authorizing district have 10% or less bonding capacity remaining?

As a charter school, the district debt capacity is not in play. However, Lincoln assessed the potential of a new Bond issuance to support our school growth needs as well as the facility improvements. Ultimately, LA determined that the costs of such an issuance would be prohibitive compared to the monies generated and would not be a reasonable use of our educational funds.

6. Is the charter school in a district owned facility?

No

7. How many times has the charter school attempted or attained bond proceeds from an authorizer's ballot measure for capital needs?

In the past 10 years there was one voter approved measure by our Authorizer in 2012, however Lincoln did not receive funds from this Bond Measure. (Warm, safe, dry)

8. How many times has the charter school attempted to do a special mill levy override pursuant to 22-30.5-405 for capital needs?

None

9. How many times has the charter school attempted or attained grant funding through a non-BEST source for capital needs?

None in the past 8 years

10. How many times has the charter school attempted or obtained funding through CECFA or another type of financing?

Once in the past 10 years, our current facility was financed in 2013 using CECFA moral ob backing.

11. Charter school enrollment as a percent of district enrollment.

District 15-16 enrollment 86,708/Lincoln 621: 0.71%

12. Free/reduced lunch percentage in relation to the statewide average charter school free/reduced lunch percentage?

Lincoln's 15-16 F/R percentage 22% Statewide average charter school F/R 35.7% (numbers provided by the Colorado League of Charter Schools.)

13. Percentage of PPR spent on non M&O facilities costs.

Total non M&O \$666,002/\$4,059,288.20= 16.4%

14. Unreserved fund balance as a percent of budget.

Lincoln's 2014-15 operational fund carryforward \$1,250,377 vs budgeted 2015-16 budgeted expenses \$4,953,268 = 25.24% Note: This % has increased significantly over the past few years as Lincoln set aside funds in anticipation of growth and BEST matching.

15. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

Jefferson County issued bonds in 2012 to support warm, safe and dry needs within their district school. Lincoln Academy did not receive any proceeds from those Bond issuances.

Up until the 2013-14 school year, charter schools did not participate equally in the mill levy funding from recent Jeffco bond issuances. Lincoln Academy received less than 20% of the Mill proceeds compared to neighborhood schools. As a result, capital funding for improvements and renovations had to primarily be supported out of the PPR funding. Further impact from the Mill Levy discrepancy was the inability to grow our operating fund in a manner that could be used towards future capital needs including warm, safe and dry items.

Starting in 2014-15, Jeffco charter schools, including Lincoln Academy, received a more equitable portion of the Mill Levy. Lincoln utilized these equalizing funds to support: a) raising salaries to a bare minimum needed to be competitive, b) purchase boilers for the school and c) set aside the remainder (40%) to begin a capital fund that could be used to support the BEST grant matching. However, the appropriated funds over the past two years, will not be sufficient for a full BEST grant matching to help support Lincoln's safety needs

As noted above, Lincoln has supported several new capital initiatives in the past two years that have impacted our ability to save for future needs more robustly. These items included several Boilers, upgrade to the kitchen, fire alarm maintenance, fences for children's safety and repair of broken pipes. Costs to Lincoln exceeded \$300,000 for these items.





*Building Bright Futures*

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February 26, 2016

Scott Newell, Director  
Capital Construction Assistance  
Colorado Department of Education  
1580 Logan Street, Suite 310  
Denver, CO 80203

Dear Mr. Newell,

Jeffco Schools fully supports Lincoln Academy Charter School's BEST application to the Colorado Department of Education to mitigate the following problems to ensure the safety of our students:

1. Replace exterior doors and windows that are not functioning as required for building security.
2. Replace emergency lighting and exit signs that are missing or are not functioning.
3. Replace the outdated fire alarm systems in each building with one integrated system that meets current building code.

Our district's Board of Education Ends Policies 4 and 5 ensure safe, sound, and available for use facilities for students and staff. These funds will support this initiative. Lincoln Academy has set aside capital funds for this project over the past two year as a result of the increase of district mill levy funding shared with all the charter schools in Jeffco.

We not only support this project, but are also proud to support Lincoln Academy in their mission to help students attain their highest social and academic potential through an academically rigorous, content-rich educational program in a safe, orderly, and caring environment.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan McMinimee", written over a white background.

Daniel M. McMinimee  
Superintendent

• Facilities Impacted by this Grant Application •

**Arriba-Flagler C-20 - K-12 Safety and Security Upgrades - Flagler ES/MS/HS - 1954**

**School Name: Flagler ES/MS/HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	74,607
Replacement Value:	\$20,897,345
Condition Budget:	\$9,843,203
Total FCI:	47.10%
Energy Budget:	\$26,112
Suitability Budget:	\$1,442,200
Total RSLI:	18%
Total CFI:	54.1%
Condition Score: (60%)	3.64
Energy Score: (0%)	1.98
Suitability Score: (40%)	4.57
School Score:	4.01



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Arriba-Flagler C-20

**County:** Kit Carson

**Project Title:** K-12 Safety and Security Upgrades

**Previous BEST Grant(s) Funded:** 2

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |  |   |
|--|---|--|---|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement        | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement  | <input type="checkbox"/> Fire Alarm         | <input checked="" type="checkbox"/> Lighting       | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade        | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition            | <input type="checkbox"/> HVAC               | <input checked="" type="checkbox"/> Energy Savings | <input type="checkbox"/> Other, please explain: |
| <input checked="" type="checkbox"/> Security | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement        |   |

## General Information About the District / School, and Information About the Affected Facilities:

Arriba-Flagler Consolidated District #20 is comprised of 187 students and is located in Flagler, Colorado, which is 130 miles east of Denver on I-70. The school district was formed through consolidation in 1983, with students living in the Arriba and Flagler communities. There are a total of approximately 800 people living in both communities. The district has 51% students identified as needing free and reduced lunches and approximately 12.5% students are identified as minority. Approximately 16% children ages 5-17 are identified as living in poverty. Over the last five years, the district has averaged an approximate 10% increase in student enrollment.

Overall, the district is considered to be Accredited and meets expectations in academic achievement, academic growth, and closing growth gaps for students, as identified by the Colorado Department of Education Performance Frameworks. The district exceeded the state average of students who were considered to be Proficient and Advanced on the TCAP in 2014. In 2013 and 2014, the district had a 100% graduation rate. Discipline is not comparatively higher than other comparable districts. The district has successfully implemented a district-wide positive behavior intervention and support program, promoting PAWS—Practice Respect, Accept Responsibility, Work for Success and Strive for Safety. In addition, the district implements a random drug testing policy for students in extracurricular activities, which has resulted in a decrease of reports and incidents of drug use.

Though teachers have remained teaching in the district for an average of 16 years, the teacher turnover rate is approximately 16%. Presently the district employs 40 teachers and classified staff district wide. There is a part-time elementary principal and the superintendent is also the high school principal.

All K-12 classrooms are housed in one building located approximately one mile from the I-70 via the first street exit heading north of the interstate. The majority of elementary and high school classrooms are located in the main section of the building constructed in 1952. The cafeteria, music, two vocational classrooms, a pool and an agriculture workshop are located in a section of the building added in 1964. Preschool, kindergarten, first grade and a Title I support classroom are located in an addition built in 2001.

There are 26 entries into the school building. All entries, except for the main visitor's entry remain locked in the school day. There are two main entries into the school utilized by visitors, one in the center of the building (main entrance) and one entry at the north of the building near the gymnasium, that is utilized for after-school events. The building and campus have no security cameras or electronic intrusion systems. Lighting outside the building is nonexistent in some areas and very dim in most. Some light fixtures are nonfunctional, with original fixtures dating back to the dates the building and additions were built, up to 64 years old.

## Deficiencies Associated with this Project:

Though many of these incidents are considered to be more commonplace in urban areas, a culmination of safety and security risks occurring within the last year has heightened safety and security concerns among parents, community members, school staff and students. The Parent Involvement Committee has had discussions regarding these concerns, parent and community members have voiced concerns during public comment at School Board meetings and administration and school staff have

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

received concerns directly from concerned parents, community members and students.

Several deficiencies have been noted in school safety and security for students at Arriba-Flagler. The main entry to the district has aluminum double doors with a standard commercial exit device locked with a hex key. Door locking hardware requiring a key is located on the outside of the doors. Because these doors are the main entry for students and visitors, and the district does not have the resources or manpower to visually monitor these doors for intruders, this poses a significant deficiency in the district's current safety controls. There is line of sight from the administration office to the doors; however, the student services director whose desk is situated with that view has many other jobs throughout the day and it is physically impossible for her to remain at her desk for the entire school day. Additionally, the office is equipped with a metal rolling coil door. However, the rolling mechanism doesn't always function properly and the lock gets stuck, leaving present safety controls at the visitor's window deficient.

Aluminum double doors also exist at the second main entry to the school near the gymnasium, and these doors remain locked during the school day, as all other entries in the building. Staff and administration consistently check the door for propping, as it is nearest the student exit to the parking lot, and students have been known prone to prop the door.

Because preschool to 12th grade students access the entire building in the school day, intermingling does occur and safety issues exist as it is physically impossible to monitor students in all areas at all times. In addition, law enforcement are typically located at the Kit Carson County seat in Burlington, which is approximately 45 minutes away. The town of Flagler does not have a town Marshall, and though the school district is located closer to Limon, which is 30 minutes away, it is under the jurisdiction of Lincoln County. Any security threat that requires an officer response will take at least 30-45 minutes for travel alone. As law enforcement would need to first assess the situation, more time would pass. With no view inside the school, a response from law enforcement could then take more than an hour.

A locker room door located on the east side of the gymnasium is broken, which affects the ability for safe egress and is a security threat as the lock does not work. The district houses a pool, with two sets of double glass doors on the west side of the building with rusty, broken door hardware and the doors do not allow for safe egress or the ability to be securely locked. One remains chained shut as the lock does not function. Daylight can be seen in the space between the doors. The entry doors are also glass aluminum doors and can be locked; however, the hinges and door hardware are rusty and the trim is deficient at the bottom. The doors slide on the concrete floor when opened and the lock is not always operational. These three sets of glass aluminum doors are over 52 years old and the glass panes have been repaired multiple times. Frankly, the doors could be forcefully pushed open, and there would be no need to break the glass if someone tried to break in as they did this last year. Even though the doors remain closed through the school year, this poses a significant deficiency in the school's security and liability controls. The bus garage door has suffered damage to the frame and door from the incident last July and needs replaced.

Presently, there is no way to close off elementary classrooms or high school classrooms in the hallway. This deficiency allows all visitors at after school events to have access to halls where classrooms are located. The district utilizes one sliding gate on rollers that is at least 50 years old. It is very large, heavy and must be physically pushed to the area that one is trying to limit access. There is no locking mechanism on the gate and many students and adults have just pulled open the gate and continued to access the area the district is trying to block.

In addition, there is inadequate lighting surrounding the building, particularly along the north and west sides of the building. District vehicles and the bus garage are located on the west side, and the majority of teachers park their vehicles in this area during school and after hours. Hope Street runs behind campus, and all staff carry flashlights to walk to and from the building at night.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Based upon reviews of the recent experiences identifying possible weaknesses in security controls, completion of the BEST Safety and Security Questionnaire, and consultation with vendors who have provided quotes for proposed upgrades, the Arriba-Flagler Consolidated School District #20 identifies the following controls as a solution for safety and security threats.

- Access Control system (including Video receiver, software, door controller, reader module, 100 access cards, intercom, power supply, installation, programming and training)
- Door replacements for security with exit device in pool area; door replacement for locker room and bus garage
- Replacement of rolling coil door in administration office.
- Installation of two sliding gates at entries to elementary wing and high school wing.
- Installation of 23 cameras inside (hallways, gym, pool) and outside the building with pan/tilt/zoom and some with 360 degree function; camera for door access; video recorder; installation; programming and training
- The central management system for cameras will be located in the administration office and recordings are web-based

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

with multiple abilities for approved access for staff and law enforcement, as necessary.

- Replacement of broken locker room door and bus garage door with hardware.
- Replacement of three sets of double glass doors with hardware leading to the pool.
- Replacement of 25 wall mount lights and five ceiling mount lights outside the building with new fixtures and LED bulbs.
- Installation of three wall mount lights on east and north side of gym.

### How Urgent is this Project?

This proposal outlines deficiencies in Arriba-Flagler's safety and security controls that have already failed. Outcomes from events that have occurred just over the last year could have been much worse. The school building or vehicles could have burned down. Students on the playground could have been harmed. Unwanted visitors could have easily come through broken doors.

As outlined in SB15-213, schools have the responsibility to keep students safe. Therefore, the urgency of this proposal cannot be underrated and there is a pressing need for each of the components outlined in this project. The safety and security of the students and staff in our school is of the utmost importance. The school district's emergency response plan could be compromised if there were breeches in any of these security weaknesses.

Presently, the school district has no means to screen visitors nor monitor the main entry in the manner that is necessary to assure safety in a school district. Deficiencies in doors and locking mechanisms affect safe egress for persons in the building in an emergency situation and prevention from keeping unwanted visitors out. The lack of efficient and effective outside lighting places students, staff and visitors in vulnerable situations leading to accidents and purposeful harm. Any type of safety or security threat requires a staff member to physically check on the situation, placing them in possible harm's way.

It is understood that the proposed safety and security upgrades will not completely control possible security breaches. However, these upgrades are needed to assist the district in prevention, preparedness and response to such possible threats. We already know that emergency response from law enforcement is delayed due to the rural location of the district. The ability for the district to completely remotely lock the front doors or close off corridors is needed to buy time in an emergency. This time could prove invaluable to keep our students and staff safe in an emergency.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

4.1.7 Paths of egress. Replacement of the locker room door and replacement of the two sets of glass double doors in the pool will conform to this standard. Currently, students in the locker room do not have an accessible route out of the locker room. Replacement of this door and repair to the frame will allow for a continuous and unobstructed path of egress. Replacement of the two sets of glass double doors in the pool will make these doors functional and allow for egress.

4.1.9 Security. The proposed project will increase the Arriba-Flagler CSD #20's resistance to and protection from harm, ensuring safety for students and staff, as well as technology and other valuable materials inside the school. The proposed controls will create a much larger degree of separation between these assets and any potential threat.

4.1.9.1 - Video Management Systems (VMS). 4.1.9.1.1- Cameras. 4.1.9.1.2- Closed circuit or IP video recorders. 4.1.9.1.3- All video management systems should be integrated into their local first responder's alert notification system.

The project includes a video management system with installation of IP cameras located in the building aimed to key positions to view entries and corridors. In addition, installation of IP cameras located outside the building will allow for viewing of door entries and high traffic areas in which security may be threatened. Power over Ethernet cabling infrastructure housed in conduit will be utilized. Cameras will include motion activation, pan-tilt-zoom and standard video compression. The school's administration office will house the central video management system in which HD video will be transmitted.

4.1.9.2.1 - Controlled access. Manual.

Replacement of all doors with aluminum doors and panic push bars will result in compliance with these guidelines for manual access. The need for continual access with keys will be minimized. Exit doors at west end of pool will be designed for egress only and will not have entry hardware on outside, limiting entry access to the pool area only from the designated entry doors. Door entry will also be limited to main entry for visitors during the school day.

4.1.9.2.2- Controlled Access. Automated. Acceptable automated controlled access includes: automatic identification card/badge readers.

The installation of two controlled access reader with key tags issued to staff will allow for the main entries to be monitored for access into school.

4.1.9.3.2 - Front door security

The main entry will be equipped with a video entrance system so that staff can monitor and screen incoming visitors. The



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

video entrance system will allow staff to use remote video and audio access control technology for monitoring these visitors. The system will be IP based allowing administrative staff to easily interchange the need to monitor through their existing computer systems. The video entrance system will be within line of sight from the visitor's window at the central administration office.

#### 4.1.9.4 - Door lock / intrusion detection.

Ethernet and electrical cabling will be installed through conduit in order to support the video management and door access systems.

#### How Does the Applicant Plan to Maintain the Project if it is Awarded?

The district budgets \$20,000 per year to capital construction. Of this, the district will allocate \$5,000 for maintenance of the proposed equipment each year, for at least five years. This would allow for replacement of any equipment not covered under warranty, replacement of any additional broken doors, technology upgrades, lighting upgrades and any other safety/security needs that will arise. In addition, the district has dedicated money for a technology coordinator who will monitor the system and ensure quality operations of the video and equipment systems. Key ring access cards will be under strict control of the administration office. Audits will be conducted on a monthly basis for the first year, and then four times per year thereafter to monitor building access. Access reports will be utilized as needed by school administration. The district Parent Involvement Committee, in collaboration with school administration, tasks itself to review overall facilities and will make recommendations for maintenance and upkeep of the system.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

This application is for safety and security and is not for the renovation, reconstruction, expansion or replacement of an existing public school facility.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

#### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$93,636.43	<b>CDE Minimum Match %:</b>	32
<b>Current Applicant Match:</b>	\$44,064.20	<b>Actual Match % Provided:</b>	32
<b>Current Project Request:</b>	\$137,700.63	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		Capital Reserve Fund
<b>Total of All Phases:</b>	\$137,700.63	<b>Escalation %:</b>	0
<b>Affected Sq Ft:</b>	65,550	<b>Contingency %:</b>	6.5
<b>Affected Pupils:</b>	184	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$2	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$1	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$748	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Sq Ft Per Pupil:</b>	356	NA	
<b>District FTE Count:</b>	157	<b>Bonded Debt Approved:</b>	\$516,500
<b>Assessed Valuation:</b>	\$26,312,621	<b>Year(s) Bond Approved:</b>	14
<b>PPAV:</b>	\$167,596	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$1,186,851	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$36,597	<b>Outstanding Bonded Debt:</b>	\$640,000
<b>Free Reduced Lunch %:</b>	52	<b>Total Bond Capacity:</b>	\$5,262,524
<b>Existing Bond Mill Levy:</b>	7.8	<b>Bond Capacity Remaining:</b>	\$4,622,524



• Facilities Impacted by this Grant Application •

**Burlington RE-6J - HS Roof Replacement - Burlington HS - 1970**

**School Name: Burlington HS**

Number of Buildings:	3
All or Portion built by WPA:	No
Gross Area (SF):	88,814
Replacement Value:	\$29,328,791
Condition Budget:	\$22,259,872
Total FCI:	75.90%
Energy Budget:	\$0
Suitability Budget:	\$2,008,600
Total RSLI:	17%
Total CFI:	82.7%
Condition Score: (60%)	3.26
Energy Score: (0%)	0.78
Suitability Score: (40%)	4.42
School Score:	3.72



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Burlington RE-6J

**County:** Kit Carson

**Project Title:** HS Roof Replacement

**Previous BEST Grant(s) Funded:** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Burlington School District is located 178 miles east of Denver, Colorado on the I-70 corridor. The Burlington School district serves a population of 799 students grades pk-12 on three different campuses. The high school facility was built in 1964. The roof, built in 1964, has not been replaced in whole, but has had some repairs during its time; wind has taken part of the roofing system and peeled it away from the building structure. Repairs were made, but the roofing system is in need of replacement. While there are other buildings on the three campuses, the scope of this project is only for the main school facility at the high school. District personnel have done a good job of keeping the facility up and in good shape. With the economic downturn, and a negative factor of approximately \$ 731,080 (for the 2015/2016 fiscal year) the Burlington School District has done its best to prioritize safety and building maintenance needs while continuing to provide a quality education for our students. In November 2014, the tax payers voted to assist the district in addressing security, safety and major building repairs through a mil levy override. This mil levy money will be used as a match for the BEST grant funds. The high school faculty serves a population of 247 students, 65% of whom qualify for the free/reduced lunch program. Students are offered a well-rounded academic program with language arts offered daily along with math, social studies, science, computer science, physical education and music. The music program boasts a marching band and drum line, who perform at many local events. We also host the East Central BOCES East End Center-Based Learning Program (High Needs).

## Deficiencies Associated with this Project:

The roofing on the high school is past its useful life and the manner at which the last roof was applied to the school leaves it susceptible to blow off. In fact in March 2012, a 3,500 square foot roof section on the northwest corner of the school peeled off. According to school district personnel, "The roof peeled back like a sardine can." Fortunately, the roof damage was managed before major interior damage was sustained. Cave Consulting Group investigated the reason for the roof failure and discovered that the tapered EPS insulation that was installed on the concrete deck in hot asphalt was not compatible with hot asphalt. This application resulted in intermittent attachment and therefore made the whole roof system susceptible to failure caused by wind uplift. Along with the eminent possibility of roof failure through wind, at current time the roof leaks in many areas of the school. One of the worst leaks occur in the gymnasium where during a good rain or before we are able to remove snow, water leaks through the west wall and cascades to the gym floor. Our custodian has replied, "Many folks pay good money to have a water wall in their office or home" while this might be true we don't need or want a water wall in our gym. There are many leaks throughout the school that interrupt the educational setting. Our custodial staff have done a remarkable job patching the roof and the leaks, but the time has come to replace the roof. Additionally, the gutter system that provides the roof drainage is leaking and, in some cases, has blown off the building. Currently, the roof drains through gutters and downspouts that discharge onto the sidewalks that surround the school. This condition could pose a hazard to the building's occupants in the winter.

## Proposed Solution to Address the Deficiencies Stated Above:

Due to the inadequate installation of the existing roof, all of the existing roofing will need to be removed down to the

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

structural deck. New insulation and tapered insulation system will be installed, set in hot asphalt. Following the insulation a four ply built up roof will be installed. New sheetmetal, gutter and downspout system and roofing accessories will also be installed as part of the reroofing project. Downspouts that discharge onto sidewalks should be rerouted trenched under sidewalks. The International Building Code, The State of Colorado and The Colorado Department of Education Guidelines will be adhered to in the design of the new roofing system. With the installation of the new roof it will allow Burlington School District to continue the use of the high school for 25+ years to come. We currently service 240 students in the high school and will continue to use the high school building for many years to come.

## How Urgent is this Project?

This project is extremely urgent based on the tenuous attachment of the current roof system to the structural deck. It is difficult to predict if failure is imminent but a reoccurrence of the 2012 roof blow off could occur at any time. Based on the BEST Grant cycle time line, the most realistic time frame for a full replacement is the summer of 2017.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

The design for the new roofing system will conform to the Public Schools Construction Guidelines. 4.1.2 Roofs- The reroofing design will conform with this section for low-sloped roof systems. A graveled built up roof is proposed and positive drainage will be provided.

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

At the project's completion, selected School District personnel will be trained by the roofing contractor to perform simple roof repairs, large roof repairs will be conducted by a competent roofing contractor. The roof will be methodically inspected yearly to determine deficiencies that need to be repaired. School District personnel will access the roof to remove debris from drains, drainage scuppers and other areas on the roof. This will be performed at least two times a year. The proposed roofing system should perform for about twenty five years before the next replacement occurs. The estimated cost to reroof the school at that time will be about \$2,000,000 which amounts to \$80,000 a year from now until then. The district is currently working on building its capital reserve and has begun this process with creating fund 43 and placing \$200,000.00 in the fund during the 2015/2016 school year. This will continue as we finish the creation of the facility maintenance plan. As needs arise though the plan they will be met through the fund 43 dollars.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The facility was built in 1964 and was built to code at that time.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

## FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$1,126,297.50	<b>CDE Minimum Match %:</b>	43
<b>Current Applicant Match:</b>	\$301,202.50	<b>Actual Match % Provided:</b>	21.1
<b>Current Project Request:</b>	\$1,427,500.00	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	General Fund	
<b>Total of All Phases:</b>	\$1,427,500.00	<b>Escalation %:</b>	3

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Affected Sq Ft:</b>	74,500	<b>Contingency %:</b>	5
<b>Affected Pupils:</b>	234	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$19	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$20	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$6,100	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	318		NA

<b>District FTE Count:</b>	688	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$84,486,824	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$122,890	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$1,249,339	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$40,074	<b>Outstanding Bonded Debt:</b>	\$2,255,000
<b>Free Reduced Lunch %:</b>	59	<b>Total Bond Capacity:</b>	\$16,897,365
<b>Existing Bond Mill Levy:</b>	0	<b>Bond Capacity Remaining:</b>	\$14,642,365



Division of Capital Construction

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

For questions 4-11

Only answer the questions which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your school district.

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1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district, charter school, or BOCES.

Since the inception of the negative factor, the Burlington School District has experienced a loss of \$4,627,494. Although the school board and administration are committed to increasing teacher salaries to assist in recruiting and retaining high quality teachers, they have been unable to keep up with the state average teacher salary. Out of 178 districts in Colorado, Burlington's average salary is 160th. The salaries are not competitive with other districts in the state, or districts in surrounding states. As teachers who have lived in the community for years retire, many of the new hires in the district are first year teachers looking for experience. Once the first year teachers have been trained with district resources, a high percentage move on to other districts, who can offer them a competitive salary. During the spring and summer of 2014, the middle school principal made over 200 contacts through job fairs and phone calls to fill seven positions. Five of those positions had been filled the previous spring; those teachers moved on to districts who could offer them more money. The cost of living is high in Burlington; rent is comparable to the front range and when gas prices were at \$2.00 on the front range, the cheapest gas in Burlington was \$2.34. Groceries in Burlington are much more expensive as well.

Once teachers gain the experience needed to find a job that will compensate them at a higher rate, they move on.

Since 65% of the general fund budget is dedicated to personnel costs, the matching contribution greatly affects the district's ability to hire and retain high quality teachers to serve the families of our community.

Additionally, the Burlington School District has been unable to keep up with technology needs or teaching resource needs including text books. Many other districts have moved towards a 1-1 ratio with students' computer access. Burlington Elementary has 74 computers to be shared amongst 367 students; the middle school has 191 students sharing 66 computers and the high school shares 109 computers (including publications and vocational agriculture program computers) for 226 students. The free and reduced rate in the district is 61%; thus, a large majority of students cannot afford access to computers for themselves at home either.

Before the recession and negative factor, the Burlington School Board adopted a textbook replacement schedule. With all of the budget cuts, the district had to abandon their plans to purchase any new textbook series. Sets of new textbooks have not been purchased in almost a decade.

The Burlington School District has not purchased a school bus for the fleet in over 10 years. The mileage on the school vehicles runs from 120,000 to 401,000 miles. Several buses have broken down on athletic competition trips.

The waiver would allow the district to provide students, staff, families and visitors of the building with a safe and aesthetically pleasing environment void of leaks, buckets and dripping distractions. The building would be less drafty and cold and more comfortable without the missing ceiling panels that have become wet and are removed until the leaks cease.

Without the waiver, or a reduction in the matching contribution, the Burlington School District will be unable to work towards, competitive salaries, hiring and retention of high quality teachers, enhancing students' education with learning resources including current technology, and safe and reliable transportation to get the students to school.

2. Please describe why the cost of complying with the match contribution would significantly limit educational opportunities within your school district, charter school, or BOCES.

In order to survive the negative factor, the school board and district administration has already reduced the number of district employees (administration, teachers, bus drivers, custodians, librarians and cooks). All supply and curriculum line items have been reduced significantly. Field trips outside the radius of the city limits have been eliminated, unless private parties donate the money for transportation costs. The capital maintenance budget has been impacted to a great degree, as only essential maintenance projects that could be afforded have been completed.

Compliance with the match contribution would take away 34.17% of the Burlington School District unrestricted general fund budget. The district has made needed cuts to compensate for the negative factor of \$4,627,494 over the last seven years; any further reductions to the budget for any reason would be detrimental to the already financially struggling district.

The cost of the matching contribution would limit the district's ability to hire and retain high quality instructional staff. The district would be unable to provide learning resources, access to technology and transportation to get students to and from school. The distraction of missing ceiling panels, plastic-covered book shelves, cold drafts, dripping water and multiple buckets around the school could be eliminated with the reduction to the match contribution.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants, or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

A severe drought and prolonged recession has limited the leverage ability of agencies and organizations in our community. The community vote supported the district by approving the mill levy override. The local Rotarian chapter, McArthur Senior Citizens Group, Kappa Nu (a service organization), invited the school board to promote the passing of the mill levy override. Taking the current economy and political climate into consideration, this support was

as much as the district could expect from community groups.

4. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

Not applicable

5. The district's median household income relative to the statewide average – The higher the median household income the higher the match.

Not applicable

6. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch the lower the match.

Not applicable

7. Bond Election failures and successes in the last 10 years – The more attempts the school district has had the lower the match.

The Burlington School District requested a mill levy override for the amount of \$600,000 in 2009. It failed 515-526. Another attempt was made 2010 for \$600,000. It was voted down 797-803. In 2011, the district asked for \$600,000 in a mill levy override. It was again voted down, 788 to 966. At that time, the Burlington School Board felt as though the community was sending a message that it was unwilling to support more taxes during a recession and severe drought in eastern Colorado.

In 2014, the school board changed their approach to promote the mill levy ballot issue. The board had a unique opportunity to save the tax payers 2.2 million dollars, including \$173,000 in interest, by paying a 1998 bond four years early. As a result of the 1998 Bonds, the corresponding levy of 7.031 mills generated approximately \$540,000 in revenue each year. Once the final payment had been made on the 1998 Bonds, the school board asked the community to approve a mill levy override which would increase by \$270,068 (in the first full fiscal year annually), to be imposed for a limit of six years, and thereafter, by whatever amounts are raised annually, while simultaneously reducing taxes by ending the 1998 voter approved mill levy resulting in a net tax reduction of \$270,176, through and additional property tax levy at a rate of 3.515 mills.

The mill levy override passed 1,008-671. This corresponding amount of \$260,000 is truly what the district has to offer as matching funds.

8. Bond mill levy relative to the statewide average – The higher the bond mill levy the lower the match.

It has been proven with the election failures (2008, 2009, 2011), and the passage of the reduced mill levy amount in 2014 that the tax payers in the district are not willing to override any more than the 3.515 mills generating \$270,068 annually.

9. The school district's current available bond capacity remaining.

Previous election results indicate 3.515 mills is the amount the community is willing to pay in additional taxes.

10. The school district's unreserved fund balance as it relates to their overall budget.

Not applicable

11. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

Not applicable



• Facilities Impacted by this Grant Application •

**Bayfield 10 JT-R - New ES & ES Renovation to become Primary School - Bayfield ES - 1988**

**School Name: Bayfield ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	51,027
Replacement Value:	\$13,875,602
Condition Budget:	\$6,736,758
Total FCI:	48.55%
Energy Budget:	\$0
Suitability Budget:	\$1,665,200
Total RSLI:	17%
Total CFI:	60.6%
Condition Score: (60%)	3.48
Energy Score: (0%)	1.13
Suitability Score: (40%)	4.22
School Score:	3.77



**Bayfield 10 JT-R**

**New ES & ES Renovation to become Primary School - Bayfield Primary School - 1920**

**School Name: Bayfield Primary School**

Number of Buildings:	3
All or Portion built by WPA:	No
Gross Area (SF):	47,141
Replacement Value:	\$12,771,267
Condition Budget:	\$10,035,842
Total FCI:	78.58%
Energy Budget:	\$0
Suitability Budget:	\$4,905,300
Total RSLI:	6%
Total CFI:	117%
Condition Score: (60%)	3.00
Energy Score: (0%)	0.83
Suitability Score: (40%)	3.10
School Score:	3.04



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Bayfield 10 JT-R

**County:** La Plata

**Project Title:** New ES & ES Renovation to become Primary School

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |  |  |   |
|--|--|--|---|
| <input checked="" type="checkbox"/> New School         | <input type="checkbox"/> Roof                          | <input type="checkbox"/> Asbestos Abatement        | <input type="checkbox"/> Water Systems                |
| <input checked="" type="checkbox"/> School Replacement | <input checked="" type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                  | <input checked="" type="checkbox"/> Facility Sitework |
| <input checked="" type="checkbox"/> Renovation         | <input checked="" type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade        | <input type="checkbox"/> Land Purchase                |
| <input checked="" type="checkbox"/> Addition           | <input type="checkbox"/> HVAC                          | <input checked="" type="checkbox"/> Energy Savings | <input type="checkbox"/> Other, please explain:       |
| <input checked="" type="checkbox"/> Security           | <input type="checkbox"/> ADA                           | <input type="checkbox"/> Window Replacement        |   |

## General Information About the District / School, and Information About the Affected Facilities:

The Bayfield School District 10 Jt-R was founded around 1910 with the consolidation of small schools serving local area ranching communities. The first K-12 school constructed by the District was completed in 1925 on property in the Town of Bayfield.

Bayfield is situated eighteen miles east of Durango where most area jobs and retail establishments are located and where real estate values are significantly higher than anywhere else in La Plata County. For the past few decades the County has experienced robust population growth, with many of the young families attracted to the area locating in Bayfield and commuting to Durango due to Bayfield's more reasonable cost of living and highly regarded schools.

Aging school facilities and steady growth in the Bayfield community through the 1980s and 90s encouraged the District to engage in long-range facilities planning that ultimately led to the construction of three new schools (HS, MS and ES) and the abandonment of the old K-12 facilities by 1997. Enrollment however continued to climb and by 2005 the capacity of the Elementary School (K-5) was no longer adequate, forcing the District to establish a Primary School by moving K-1 students back into the dilapidated buildings that had been vacated a few years prior. By 2008 modular classrooms had been installed to address overcrowding at both the Elementary and the Primary Schools.

When the decision was made in 2005 to move back into the abandoned buildings that are now serving as the Primary School, the District recognized that this action would only be a temporary solution. A new school would need to be built. The District immediately began looking for suitable property, understanding that we were still years away from being able to fund a project of sufficient scope. After years of negotiations and delays the District was finally able to purchase a forty acre parcel in 2012 that is ideally located across the street from the Bayfield Middle School.

Over the past three years the District has assembled diverse advisory and design committees, contracted with architectural and engineering firms for planning and other studies, consulted with teachers and staff, conducted community surveys, and held a public open house to determine the best long-term approach for meeting the District's current facility needs while preparing for inevitable future growth. The result of these efforts has clearly indicated the preference to build a new school on the District's vacant property for grades 3-5, and place grades K-2 into the existing Elementary School after completing improvements to correct the existing health, safety and overcrowding issues.

Enrollment increases over the past decade have presented the District with enormous facility and fiscal challenges that will be difficult to overcome without help beyond what our residents can afford. With these mounting problems we have to do something soon. Nearly every year we need to find more space within our existing facilities for an additional classroom or support program. When we think we have done the best we can, the next year we are forced to do more.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

If overcrowding in our schools is not challenging enough, our current solutions have forced us to utilize antiquated facilities that pose serious health and safety hazards for the children of our community that cannot feasibly be corrected. Yet we continue to pack more children into them. Teachers and administrators have been doing the best they can, but are becoming increasingly frustrated with the poor learning environment dictated by these outdated buildings and the lack of space to operate effectively. Our children are negatively impacted and community stakeholders expect the District to find a solution. Simply installing additional modular classrooms that expose more of our students to the insurmountable health and safety dangers at our current facilities is not an acceptable option.

### Deficiencies Associated with this Project:

PRIMARY SCHOOL (to be vacated)

#### PEDESTRIAN AND VEHICULAR TRAFFIC SAFETY

-The Primary School consists of two main buildings and four modular classrooms located in one of the oldest areas of Bayfield with established development all around it, which severely limits the District's ability to safely manage vehicular and pedestrian traffic. Adequate separation of parent drop-off/pick-up, pedestrian and school bus traffic is impossible to achieve. Parents must use city streets to drop off students or to park when visiting the school. Vehicular stacking on area streets extends well beyond the perimeter of the school grounds.

-The Town of Bayfield has allowed the District to close the street that runs between the two main school buildings while school is in session. This helps with managing the morning and afternoon traffic and provides better safety and security for students routinely crossing the street throughout the day. Unfortunately the barricades are frequently circumvented by vehicles seriously threatening the well-being of students and staff routinely walking between the two buildings.

#### SECURITY

-This multi-building school campus with outdated building layouts and twenty-three access locations poses insurmountable security challenges for the District and local law enforcement. Despite efforts to keep these doors locked and secured, unauthorized access can often be achieved.

- With a few exceptions, a single key operates every exterior and interior door lock on this campus. Anyone with a key has full access to these facilities. The gymnasium has been used by the Town of Bayfield's Parks and Recreation Department since we vacated the school in 1977. Consequently this key has found its way into the hands of many people who are not employed by the District, causing concerns for the safety of our children, and the security of records and other building contents.

-K-1 students must cross a temporarily barricaded city street multiple times each day to attend Specials classes (i.e. music, art, etc.), small group instruction and to access the cafeteria for lunch. While always being led by teachers and staff, this area cannot be feasibly secured against possible outside threats.

-Classroom windows that must be opened for ventilation during hot weather do not have provisions for screens which could allow an intruder access. Wasps, bees and other pests frequently enter through the windows, disrupt class and present health concerns.

-The school has an outdated public address system that reaches all classrooms and other occupied spaces when fully operational, but requires telephones for classroom communication with the office.

-A secure vestibule was built at the front entrance to the main classroom building in 2013, but there is no line of sight for approaching visitors, leaving front office staff vulnerable to anyone who walks through the door.

#### FIRE MANAGEMENT

-The main classroom building has a fire alarm annunciator panel as well as functioning horns, strobes and smoke detectors. However, the non-addressable main panel is across the street in the building that contains the gymnasium, cafeteria and specials classrooms. An alarm in one building does not trigger alarms in the other.

-Fire alarm, security, network, communication and other low voltage wiring that has been added through the years runs through bar-joists in the ceilings creating a "rat's nest" of exposed cables.

-The school does not have a fire suppression system which is in violation of current fire codes. Corridors are not fire-rated and panic hardware is inconsistent. Worn door locks that cannot be repaired are often difficult to operate and could inhibit the mobility of emergency responders throughout the buildings.

#### ELECTRICAL

-Typical of forty to ninety-year-old school buildings, most of the classrooms were originally outfitted with only two electrical

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

outlets, single switch lighting and no data or telephone jacks. The District has done its best over the years to install additional electrical and data receptacles to accommodate new devices and technology, but these efforts have fallen short of eliminating the fire and trip hazards of extension cords that remain prevalent throughout.

-Surface mounted sub-panels necessary for additional electrical circuits have been installed in classrooms and other areas accessible to children.

-Many light switches are poorly placed and lack three-way switching in rooms with multiple entrances.

-Electrical outlets exist at wet locations without GFCI protection.

-There is no exterior emergency lighting as required by code. Interior lighting is not on occupancy sensors and there is no programmable lighting control relay panel.

### BUILDING STRUCTURES

-Originally built in 1925, with additions in 1948, 1958, 1961 and 1972, these facilities do not conform to most applicable codes adopted by the Colorado Division of Fire Prevention and Control, Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools.

-Cracks in exterior walls indicating possible structural failure are regularly monitored by the District's maintenance department. No notable changes have been observed in the past ten years, but the cracks remain a concern.

-The roof structures of these old buildings were not designed to current codes and the District has no record of their designed snow load capacity. Typically at least once each winter snow must be shoveled from the roofs to guard against potential collapse. This is an ongoing safety concern for the buildings' occupants and maintenance personnel working on these roofs, and is a considerable expense to the District.

### SEVERE WEATHER PREPAREDNESS

-The gym roof sheds heavy snow loads right next to the sidewalk where students walk from the busses. The abundance of sidewalks and city streets in use for morning drop-off makes adequate snow removal needs greater than the District can feasibly manage. The gravel parking and parent exit lane area does not drain well and is often covered in large, deep mud puddles. These freeze and thaw on a daily basis throughout winter creating water puddles midday and ice rinks in the morning.

-The city street running through the middle of campus also drains poorly creating similar freeze-thaw problems and slippery conditions in high pedestrian traffic areas. A teacher's aid slipped and fell in the street this winter while escorting students to the cafeteria and missed several days of work while she recovered from her injuries.

-The school has been evacuated twice in the past three years due to gas leaks caused by snow and ice impacts on poorly placed gas line and meter locations.

-The school does not have a suitably constructed designated emergency shelter.

### EDUCATIONAL SUITABILITY

-Overcrowding at this school has forced the District to install four modular classrooms, conduct class in unsuitable spaces and increase class sizes, leaving the school with no designated areas for small group intervention and instruction, Title 1 Reading support, BOCES support services such as Occupational Therapy and Speech Language Services. There are also no conference rooms for IEP meetings, staff meetings or any other private meeting for more than four attendees.

-The District strives to locate grade level classrooms close together to encourage collaboration between grade level teachers and students. The poor layout of these facilities cannot support this kind of collaboration.

-Kindergarten classrooms do not have dedicated restrooms.

-All classrooms lack suitable technology infrastructure, and do not have adequate storage to support the intended educational programs.

-The Library, Music and Art rooms are in a separate building across the street. The Library proportions are poor, and the space lacks the flexibility and quality of a desired 21st Century school library.

-The cafeteria is attached to the gymnasium across the street. It has very few windows, a seven foot ceiling, the lighting is inadequate and the shape of the space does not allow for proper student supervision.

-The gymnasium was originally built by the community in 1948 and has extremely outdated restrooms. Shower and locker areas in poor repair are now being used for storage. The retractable bleachers no longer function and limit physical education programming. Student athletes from the Middle School travel across town to use this facility for basketball and volleyball practices and games due to space limitations and limited facilities at the Middle School.

-Administration offices, nursing area, restrooms, conference, reception and building support areas are generally undersized,



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

poorly located, and in many cases non-existent. The teacher's work area and break room is a combined space shared with the copier, counselor's office, principals' office and directly connected to the front desk. It is the main work space for teaching assistants as well, and this space is not functional for meetings and does not support teacher collaboration.

-Numerous accessibility deficiencies are also present such as stairs, ramps, handrails, guardrails, doorways and casework that are not code compliant. Some of our classrooms are not accessible due to steep ramps and stairs.

### TECHNOLOGY

-The District's focus on application-based technology learning requires every classroom to be equipped with the necessary infrastructure to support this program. As we work each year to expand this capability, the multiple building layout and building construction have made it increasingly difficult and expensive to add the needed data jacks and wireless access points to make adequate progress toward achieving our program goals.

-There is no transient voltage surge protection on the electric service to these facilities which would reduce computer and network component replacement and service costs.

-The lack of sufficient electrical outlets to power our technology needs has led to the widespread use of extension cords in classrooms and offices creating fire safety and tripping hazards.

### HAZARDOUS MATERIALS

-The District's Asbestos Management Plan indicates asbestos containing materials present in floor tiles and exposed structural roof panels. Despite the efforts of the maintenance department to successfully manage this potential hazard, parents, teachers, administrators and community stakeholders remain concerned over the continued occupancy of these buildings, especially by our youngest children.

-High concentrations of radon have been detected in a basement level classroom that has been successfully mitigated with a mechanical ventilation and filter system. Still, many parents do not want their children placed in this classroom.

-Given the age of the buildings the presence of lead based paints are likely, so the maintenance department conducts their work accordingly.

### ENERGY PERFORMANCE

-The exterior building envelope of these facilities are not insulated or weather-tight. The exterior doors are leaky and are prone to sticking. The windows are single pane, drafty, and many are difficult to operate. Fortunately the heating system is powerful enough to warm these drafty buildings on the coldest winter days.

-The operations and maintenance costs of these aged facilities are the highest in the District, yet they are the least functional and offer the poorest learning environment.

### MECHANICAL

-The school does not have a mechanical fresh air distribution or air conditioning system. All ventilation is provided by opening windows and classroom doors for circulation. In the fall and spring months, with windows open and fans running, temperatures in many of the classrooms can exceed ninety degrees making learning very difficult.

-The outdated heating system boilers, pumps, valves, controls and instrumentation are ongoing maintenance items that are very inefficient, can be difficult to repair or replace, and are well beyond their expected service life. One of the boilers in the main classroom building has recently failed and been replaced, which may be an indicator that the other four will also fail soon. Overall the buildings stay warm through the winter, but at extremely high energy and maintenance costs.

### PLUMBING

-The school's plumbing fixtures are old, very water inefficient and are not sized or installed for primary age student use, causing boys to stand on raised platforms to use the urinals and creating trip and fall hazards.

-The gymnasium restrooms that are used by students during physical education and while eating lunch in the adjacent cafeteria have closely spaced fixtures, without toilet partitions.

-None of the restrooms or plumbing fixtures are ADA compliant.

### FOOD PREPARATION AND CAFETERIA

-Due to inadequate kitchen facilities and equipment all meals are prepared off-site and delivered to the school each day. Students must cross a city street to access the cafeteria which has only a seven foot ceiling height and is too small to accommodate the school's enrollment.

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

## EMERGENCY CARE ROOM

-The emergency care area does not offer any privacy and does not have plumbing or a dedicated restroom making it difficult to administer proper care.

## ELEMENTARY SCHOOL (to become Primary School)

### PEDESTRIAN AND VEHICULAR TRAFFIC SAFETY

-Due to the lack of a designated on-site parent drop-off/pick-up and vehicle stacking area, these activities take place in the general parking lot and along both sides of the city streets adjacent to the school property. Mixing of parent and background vehicular traffic while vehicles are backing out into the street at the same time students are trying to cross the street is unavoidable given the current site layout.

-Students walking to school and being dropped off or picked up out on the street do not have sidewalks to use that will get them to the school safely.

-The service loading area and dock are not independent from other traffic and pedestrian walks.

### SECURITY

-The building's outdated layout with 25 exterior doors and modular classrooms makes it extremely difficult for the District to ensure safety of the building's occupants. Many of these doors provide direct access to classrooms.

-The facility has only a minimal, obsolete security and surveillance system with components past their service life.

-The configuration of the front entry does not provide for proper screening of visitors wishing to enter the building.

### FIRE MANAGEMENT

-The school is not equipped with a fire sprinkler. The building's construction type requires a fire suppression system for it to comply with current fire codes.

-The fire alarm panel is not addressable and all alarm system components and devices are past their service life.

### ELECTRICAL

-The lack of adequate electrical outlets in classrooms and office spaces to accommodate the increasing use of electrical devices and technology has resulted in the widespread use of extension cords that pose fire and trip hazards.

-The main electrical service does not have transient voltage surge suppression.

-The exterior emergency lighting is not battery backed as required by code. Interior lighting is not on occupancy sensors and there is no programmable lighting control relay panel.

### BUILDING STRUCTURES

-Cracks developed on some exterior and interior masonry walls a few years after the building was constructed. No notable changes in these areas have been observed by the District's maintenance department since they were initially identified.

### EDUCATIONAL SUITABILITY

-Overcrowding at this school has forced the District to install two modular classrooms, conduct class in unsuitable spaces and increase class sizes.

-The administration area is extremely inadequate and undersized. There is only one conference room that is poorly located, undersized, has no windows and is shared with BOCES. The principal's office is too small for meetings with more than two people. There is no reception area and the office is too small for both the administrative assistant and the attendance secretary. There is also no suitable area to place in-school suspension students.

-The school was designed with fifteen continuous classrooms along one side of a 350 foot corridor. Each of these classrooms has an exterior door for access to the playground and bus loop, but there is no direct route to the playground and bus loop for students and staff occupying other areas of the building.

-The small classrooms lack adequate storage and the casework is not in compliance with ADA.

-Of the seven needed, there are only two classrooms with restrooms large enough for kindergarten use.

-The music room has low ceilings (less than nine feet) and limited acoustical wall coverings.

-The library proportions are not ideal for this space with low ceilings (less than nine feet) and limited natural light (only east

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

facing roof monitors), and the space lacks the flexibility and quality of a desired 21st Century library space.

### TECHNOLOGY

-The District's focus on application based technology learning requires every classroom to be equipped with the necessary infrastructure to support this program. As we work each year to expand this capability, it becomes increasingly difficult and expensive to add the needed data jacks and wireless access points to make adequate progress toward achieving our program goals.

-There is no transient voltage surge protection on the electric service which would reduce computer and network component replacement and service costs.

-The lack of sufficient electrical outlets to power our technology needs has led to the widespread use of extension cords in classrooms and offices creating fire safety and tripping hazards.

### MECHANICAL

-The outdated heating system boilers are very inefficient and have reached their expected service life.

### PLUMBING

-There are no restrooms readily available for students out on the playground or waiting for parent or bus pick-up.

-For use as the District's K-2 facility there are not enough classrooms with restrooms for kindergarten use.

-Many of the facility's plumbing fixtures are not in compliance with the American Disabilities Act.

### FOOD PREPARATION AND CAFETERIA

-The kitchen was sized and equipped to prepare meals for the Elementary School and the Middle School, where the kitchen was inadequate to meet their needs. When the K-1 students moved out of the Elementary School and back into the old Primary School buildings, this kitchen had to prepare those meals as well. Enrollment growth at all three campuses quickly exceeded the food preparation capacity of the kitchen and have since forced the District to serve more expensive and less healthy processed foods to its students.

-The cafeteria is too small to function efficiently for the typical number of occupants.

### EMERGENCY CARE ROOM

-The emergency care room does not have a dedicated restroom and only has space to care for one student at a time.

### ADDITIONAL DEFICIENCY ADDRESSED IN 3-5 SCHOOL SOLUTION

-The Middle School has been challenged for years without a designated on-site parent drop-off/pick-up area. Consequently students are routinely dropped off on either side of the street (East Oak Drive) in front of the school. To make matters worse the street is narrow with little shoulder and no sidewalks or turn lanes which creates a lot of congestion and serious safety concerns both before and after school.

### Proposed Solution to Address the Deficiencies Stated Above:

In 1997 the Primary School buildings were decommissioned due to their insurmountable safety and educational deficiencies. It has now been eleven years (2005) since the District reluctantly moved about seventy of our youngest students back into these rundown old facilities to address overcrowding at the Elementary School. That number has now grown to over 250 students. Facilities assessments conducted by both the District and CDE (FCI of 78.58% and CFI of 117%) clearly indicate that it would be fiscally irresponsible for the District to try to remedy the overwhelming facility and site deficiencies at the Primary School.

Thoughtful studies and the District's facilities master planning efforts have identified a number of temporary and long-term options for dealing with the urgent facilities challenges we face; however, the best District-wide solution is clearly a multifaceted development project that includes building a new Elementary School on our recently purchased property across from the Middle School for grades 3-5, and renovating the building and site at the existing Elementary School for grades K-2 while correcting its safety, overcrowding and educational deficiencies.

Increasing student enrollment has been driving most of the District's facilities challenges for years. Master planning, community stakeholders, advisory committees and the Bayfield Board of Education all agree that it would be irresponsible to



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

build a new school without providing for our inevitable future enrollment growth. Six sections for grades 3-5 will meet our current enrollment needs but are likely to fall short within five years. We have not contracted for any studies that might support future District population growth, but we are compelled to acknowledge the steady growth we have experienced over the past 40 years and are observing in current preschool enrollments. Consequently, our proposed solutions include a seventh classroom for each of these grades. We understand and appreciate that there are limited funds available to the BEST program. Outside of BEST grant funds the District proposes to fully fund these three additional classrooms, and we believe our residents will support it.

We also recognize that a grant award of our amount could potentially leave other districts without the help they need to address their pressing facility challenges. We have polled our residents and have carefully reviewed our chances for a successful bond initiative with our bonding agent. We believe the most we can ask from our voters with a reasonable chance of success is a \$27 million bond. This amount applied to our projects will allow the District match to be increased by four percent, thereby reducing our grant funding request by \$1,428,000. We hope this strikes a balance between voter tolerance and scarce grant funding that gives us the best opportunity for building these projects that our community so desperately needs.

### NEW 3-5 SCHOOL

#### LOCATION AND SITE

The proximity of the new 3-5 Elementary and Middle Schools will offer many benefits including the ability to leverage use of the parking lots, athletic facilities and particularly the gymnasium. The new gymnasium will not only provide for the programming needs of the new 3-5 school, but will also serve as a competitive gymnasium for Middle School practices and games when the Primary School gymnasium is vacated. The gymnasium will have a separate entrance and will be isolated from the rest of the school by locked interior doors. This will allow for community groups to use the gymnasium after hours without being monitored. Space on the property is also being set aside for a potential Boys and Girls Club facility that will have after-hours access to the gymnasium for their activities as well.

A component of the new 3-5 School project will be the widening of East Oak in the area where it runs between the two schools, with sidewalks and a center left turn lane for traffic accessing both schools. The Middle School parking area will be expanded to allow for a parent drop-off/pick-up lane with sufficient vehicle stacking for traffic flow efficiency and overall safety. A signaled crosswalk will also be installed across East Oak for safe pedestrian traffic between the two schools. These improvements should make before and after school traffic for both schools flow more smoothly and safely along East Oak.

The irrigation ditch running through the property will be piped its entire length for the safety of our students and to eliminate any potential for water seepage that could have adverse impacts on the school building, parking or athletic fields from this uphill ditch. The District has water rights from the ditch that will be used to irrigate our water efficient exterior landscaping. Fencing will be constructed to keep students within the playground area and restrict outside access to the playground and potential athletic fields.

The District has worked closely with the Town of Bayfield Marshal's Office and the Upper Pine River Fire Protection District to ensure that our site layout and building design offer the security, visibility and access necessary to provide optimal protection of our students, staff and facilities.

The new school property, surrounded by the Town of Bayfield on three sides, is in the process of being annexed into the Town. Should there be unanticipated delays extending beyond the start of this project, the District is prepared to pay the double plant investment and use fees required by the Town for our utility connections until annexation is completed.

#### PEDESTRIAN AND VEHICULAR TRAFFIC SAFETY

Sidewalks and designated bike lanes leading to the 3-5 School site will provide a safe route for students who walk or bike to school. A separate bus lane will isolate bus traffic from all other vehicle and pedestrian activity. A one-way parent drop-off/pick-up loop separated from the parking area will provide for students to be dropped off at the curb immediately in front of the school with plenty of room for vehicle stacking.

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

## SECURITY

The administrative offices will be situated such that office personnel can observe vehicles entering the grounds and visitors approaching the building. The main entrance to the school will provide for the secure entry of visitors who will be personally greeted and screened before being allowed access into the office or school. Most other exterior doors will be designated for emergency egress use to limit school access locations. A security system will be installed that monitors all building access points, including video surveillance of all interior and exterior areas of concern. This secure educational facility will further provide for the safety of its occupants with an electronic access control system and classrooms with only a single interior point of access.

## FIRE MANAGEMENT

The school site will provide access for fire fighting equipment and hydrants around the entire building perimeter. The facility will be equipped with a wet pipe fire suppression system and an addressable fire alarm and emergency notification system in accordance with state requirements.

## ELECTRICAL

Electrical outlets will be located in classrooms and offices spaces to ensure electrical access from almost any point in the room without the need for extension cords. The electrical, distribution and emergency lighting systems will meet or exceed all current fire, electrical and energy codes. LED lighting will be used throughout and efficiently managed with occupancy sensors and dimmers. Direct and indirect lighting fixtures will be used in all learning areas.

## BUILDING STRUCTURE

The ailing old school buildings dating back to 1925 will be replaced with a modern new educational facility professionally designed and engineered to the CDE Public School Facility Construction Guidelines, and constructed with a durable, low maintenance exterior skin of mostly block, metal and glass. The east/west orientation of the school will enhance the building's solar gain potential.

## EDUCATIONAL SUITABILITY

The new facility is designed with thoughtful consideration of current technologies and pedagogy, and will allow for future advancement in technology and teaching practice. The building is designed within a "pod" concept that allows for better delivery of instructional/emotional support services and small group intervention and enrichment programming. The building design encourages collaborative practice of staff and students alike.

## TECHNOLOGY

The technology infrastructure of the school will include regular data points in classrooms and administrative offices for versatile telephone and computer connection to the network. Wireless access points will be installed to cover all interior spaces and exterior common areas. Touch-screen displays and sound enhancement systems will modernize the classroom learning environment.

## HAZARDOUS MATERIALS

This new school will be built with modern construction materials free from asbestos and lead based paints that pose health concerns for the current Primary School's occupants. Low VOC building materials, adhesives and finishes will contribute to improved indoor air quality.

## MECHANICAL

A high efficiency heating, ventilation and air conditioning system will be installed allowing classrooms to have localized thermostatic control for maximum comfort, including a fresh air circulation system with pollen and allergen removing filters for enhanced air quality.

## PLUMBING

Water-saving plumbing fixtures and faucets will be used throughout. Tankless water heaters will efficiently provide hot water on demand.

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

## FOOD PREPARATION

The kitchen will be sized and equipped to prepare healthy meals for the new 3-5 School and take over responsibility for the meals that need to be prepared and shipped to the Middle School. This will reduce the demands of the existing Elementary School kitchen so that it can go back to scratch cooking the number of meals the kitchen was designed for.

## EXISTING ELEMENTARY SCHOOL (to become Primary School)

### PEDESTRIAN & VEHICULAR TRAFFIC SAFETY

A new designated on-site parent drop-off/pick-up and vehicle stacking area will be added to eliminate the mixing of parent and background vehicular traffic with pedestrians. New sidewalks will be added to ensure that all students have a safe route to and from school. The service loading area and dock will be reconfigured to be independent from public vehicular traffic and pedestrian walks.

### SECURITY

A safe and visibly clear path leading to the school's main entrance will be part of the new administration addition layout, and provided for the secure entry of visitors who will be personally greeted and screened before being allowed access into the office or school. A new security system will be installed that monitors all building access points including video surveillance of all interior and exterior areas of concern.

The addition of an exterior access near the middle of the 350 foot long classroom corridor to the playground, parent drop-off/pick-up and bus loops will provide for much better building access management. Students will also no longer be required to leave the school building for access to the modular classrooms that are being removed.

### FIRE MANAGEMENT

An automatic fire suppression system will be added throughout the facility. The existing fire alarm panel will be upgraded with a new addressable unit and all alarm system components and devices will be replaced as needed.

### ELECTRICAL

Electrical outlets will be added in classrooms and offices spaces as necessary to ensure electrical access from almost any point in the room without the need for extension cords. Exterior emergency lighting will be battery backed as required by code. Interior lighting will be on occupancy sensors and a programmable lighting control relay panel will be added. The main electrical service will be upgraded with transient voltage surge suppression.

### BUILDING STRUCTURE

Cracks in the masonry walls will be investigated more thoroughly by a professional structural engineer and addressed as needed during construction. Since there have been no changes in recent years the cracks are likely the cause of initial building settlement. Additional money will be held in construction contingency to be used for this purpose should more than cosmetic repairs be necessary.

### EDUCATIONAL SUITABILITY

The remodel of this facility is designed with thoughtful consideration of current technologies and pedagogy, and will better allow for future advancement in these two areas. Working within the limitations of the existing building, the new classroom layouts are designed within a "pod" concept that will allow for strengthened delivery of instructional/emotional support services and small group intervention and enrichment programming. The remodel design will be much more conducive to collaborative practice of staff and students alike.

The redesign will include a new corridor that provides direct access to the playground and bus loop by all the building's occupants without having to pass through a classroom. New casework in all the classrooms will be ADA compliant and increase much needed storage capacity that will allow the classrooms to function more efficiently. The new music room location will include higher ceilings and acoustical separation from adjacent learning spaces. The library addition will have windows on three sides, a vaulted ceiling, and the flexibility and qualities of a modern school library. The modular classrooms

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

will no longer be needed and will be removed.

The new administration addition will have a reception area and space for the administrative assistant and attendance secretary to work more efficiently. There will be a dedicated room for BOCES support services and rooms for staff meetings, instruction, small group interventions and in-school suspensions. The principal's office will be large enough for small meetings at a table.

### TECHNOLOGY

Sufficient data points will be added in classrooms and the new administrative offices for versatile telephone and computer connection to the network. Wireless access points will be installed to cover all interior spaces and exterior common areas. Touch-screen displays and sound enhancement systems will modernize the classroom learning environment. Additional electrical outlets and new surge protection will provide for greater safety and dependably.

### MECHANICAL

New energy efficient boilers, related components and controls will be installed to replace the old 1988 boilers, improve temperature control, and reduce energy consumption and maintenance costs.

### PLUMBING

A restroom will be added for convenient student access from the playground and bus pick-up area. Restrooms will also be added to classrooms designated for kindergarten use. Existing non-conforming plumbing fixtures will be replaced with new low-flow fixtures meeting ADA requirements.

### FOOD PREPARATION AND CAFETERIA

The kitchen at the new 3-5 School will reduce the meal preparation requirements at this location so that it can operate more efficiently and transition from serving highly processed food to healthier meals made from scratch. A small addition to the cafeteria will allow it to function more efficiently.

### EMERGENCY CARE ROOM

The new administration layout will include an emergency care room with its own dedicated restroom and space to care for at least two students at a time.

### How Urgent is this Project?

#### NEW 3-5 SCHOOL

Despite every affordable effort being made by the District, with each passing year the state of Primary School facilities has continued to deteriorate. An immediate and permanent solution for abandoning these buildings and the perilous site conditions is crucial for the health, safety and learning of our youngest and most impressionable students. Private preschool enrollments indicate that a seventh kindergarten section will be needed for the 2016/17 academic year, further complicating our challenges there. If new facilities cannot be built in the next one to two years, more of the District's scarce financial resources will need to be diverted to funding the installation of additional modular classrooms and paying for increasing maintenance and operating costs, while safety and educational conditions there only continue to worsen.

#### ELEMENTARY SCHOOL RENOVATION (to become Primary School)

District planning efforts over the past ten years consistently highlight the merits of the existing Elementary School being used for grades K-2, and the new replacement school for grades 3-5. This cannot be achieved without first dealing with the dangerous facility and site safety conditions, lack of educational support facilities and overcrowding that currently exist there, and then making the improvements necessary for the educational requirements of primary age students. This project is an integral requirement for vacating the existing Primary School facilities and must be done in conjunction with the new 3-5 school project to rectify our overwhelming facility deficiency challenges. We have developed an aggressive and realistic project schedule that will provide for the simultaneous construction of both projects so that we will finally be able to vacate the old Primary School facilities during the summer of 2018.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

The District will make certain that all contractors and consultants hired for these projects are well qualified and committed to

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

a quality finished product that will be delivered on time and within budget. They will be chosen through a fair, competitive and transparent selection process that will ensure the best possible value for the District and State.

All of the construction will be done in compliance with all Public School Facility Construction Guidelines, and all design development will be done by licensed architects with appropriate support from licensed professional engineers.

All building permits will be secured by the District, and certificates of occupancy will be used by the appropriate governing bodies.

### STANDARDS

The following codes and standards referenced therein are adopted and promulgated by the Colorado Division of Fire Prevention and Control as minimum standards for the construction and maintenance of all property, buildings and structures of a Board in the State of Colorado:

- 2015 International Building Code (IBC)
- 2015 International Existing Building Code (IEBC)
- 2015 International Mechanical Code (IMC)
- 2015 International Energy Conservation Code (IECC)
- 2014 National Electric Code (NEC)
- 2015 International Plumbing Code (IPC)
- 2009 International Fuel Gas Code (IFGC)
- The National Fire Protection Association Codes & Standards (NFPA)
- 2009 ICC/ANSI A117.1, Accessible and Usable Buildings and Facilities
- The current edition of the Rules and Regulations Governing the Sanitation of Food Service Establishments (as adopted by the Department of Public Health and Environment/Colorado State Board of Health)
- Standards under the Occupational Safety and Health Act of 1970 (P.L. 91-576) or State and local codes. If they are more stringent, these standards will be observed in the design and construction of the project.

### CDE CONSTRUCTION GUIDELINES

The facilities will be designed and constructed in compliance with the 1 CCR 303(1) Public School Facility Construction Guidelines of the Colorado Department of Education Division of Public School Capital Construction Assistance, as adopted 09/02/2015.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

The District makes annual allocations to the Capital Reserve/Capital Projects Fund. Over the past three to five years, the District has transferred an average of \$60K annually into this fund. These amounts are used for capital expenditures and may also be used for any major maintenance that may become needed for any new or renovated facilities, including significant repairs and health and safety concerns identified by ongoing facilities assessments. When this project is completed, the District will continue transferring these funds for ongoing preventative maintenance of systems and infrastructure for the proposed facilities and will comply with the capital renewal requirements of the grant.

District maintenance staff performs periodic school inspections and perform regularly scheduled preventative maintenance. The District also holds preventative maintenance contracts with outside vendors to address a variety of systems, such as HVAC, electrical, plumbing, and elevator maintenance. Daily janitorial maintenance is performed throughout each campus, while extensive cleaning takes place during the summer break.

Over the past five years, the District has spent an average of \$1.3 million annually for maintenance and custodial costs throughout the District. We do not anticipate annual maintenance and custodial costs will increase significantly once these projects are completed due to the fact that the maintenance of the older building requires continued attention due to the age of systems, while the replacement building will have more efficient systems and infrastructure.

The District budgets approximately \$125K annually for natural gas and electricity for four school campuses. These costs are not anticipated to increase significantly with the addition of the new school, as the new building will be much more energy efficient than the building being vacated.

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Future capital renewal plans will continue to address the need to replace District building systems over time. However, ultimate replacement of the facility at the end of its useful life will require resources beyond the District's general operating budget, such as the issuance of general obligation bonds.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

-The Bayfield Primary School was originally constructed in 1925 as a K-12 facility. A gymnasium was built by the community in 1948, with classroom additions constructed in 1958, 1961 and 1972. The campus was abandoned after the completion of a new school in 1997 and then re-established as a primary school in 2005 due to growing student enrollment. Four modular classrooms were added in 2008.

-The Bayfield Elementary School was built in 1988 as a K-5 school to move students out of deteriorating buildings (now used as the Primary School) and into a new facility designed to meet growing student enrollment and the educational and safety needs of the time. A classroom addition was constructed in 1996 and two modular classrooms were added in 2001.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$8,568,488.88	<b>CDE Minimum Match %:</b>	72
<b>Current Applicant Match:</b>	\$27,133,548.12	<b>Actual Match % Provided:</b>	76
<b>Current Project Request:</b>	\$35,702,037.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	Yes
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		2016 Bond Election
<b>Total of All Phases:</b>	\$35,702,037.00	<b>Escalation %:</b>	6
<b>Affected Sq Ft:</b>	124,807	<b>Contingency %:</b>	16.90
<b>Affected Pupils:</b>	647	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$286	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$34	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$252	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$55,011	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	192		NA

<b>District FTE Count:</b>	1,274	<b>Bonded Debt Approved:</b>	\$11,900,000
<b>Assessed Valuation:</b>	\$283,418,772	<b>Year(s) Bond Approved:</b>	12
<b>PPAV:</b>	\$222,551	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$4,430,538	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$65,053	<b>Outstanding Bonded Debt:</b>	\$18,725,000

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<b>Free Reduced Lunch %:</b>	29	<b>Total Bond Capacity:</b>	\$56,683,754
<b>Existing Bond Mill Levy:</b>	5.269	<b>Bond Capacity Remaining:</b>	\$37,958,754



**• Facilities Impacted by this Grant Application •****Durango 9-R - HS Track and Field Replacement - Durango HS - 1976****School Name: Durango HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	248,485
Replacement Value:	\$84,562,759
Condition Budget:	\$22,783,720
Total FCI:	26.94%
Energy Budget:	\$0
Suitability Budget:	\$4,454,500
Total RSLI:	21%
Total CFI:	32.2%
Condition Score: (60%)	3.73
Energy Score: (0%)	3.13
Suitability Score: (40%)	4.49
School Score:	4.04



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**Applicant Name:** Durango 9-R

**County:** La Plata

**Project Title:** HS Track and Field Replacement

**Previous BEST Grant(s) Funded:** 2

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:** We have not previously applied for a grant for this project.

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input checked="" type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input checked="" type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input checked="" type="checkbox"/> ADA     | <input type="checkbox"/> Window Replacement | Install safe track and low-impact athletic field.          |

## General Information About the District / School, and Information About the Affected Facilities:

Durango School District 9-R is a high-performing school district located in western La Plata County in Southwest Colorado. Its seven elementary schools, two middle schools and two high schools serve 4,783 students.

The mission of Durango School District 9-R, an innovative educational system committed to excellence, is to ensure each student develops the skills and attributes for lifelong learning. Through leading instructional models, globally minded learning programs and engaging teaching and learning methods, the district aims to instill in each student the ability to compete and contribute in the global community. Furthermore, the district encourages supportive and safe school environments, guaranteeing equitable educational opportunities for each and every student.

Currently 72% of our high school students participate in sports and extracurricular activities. This includes sports such as football, track and field, rugby and activities like band. Due to the age and safety concerns of the existing DHS football field and track the Durango School District 9-R School Board approved a three phase construction project to create a new multi-use facility for all community youth. The current track has become so deteriorated that DHS can no longer host track meets requiring that the team travel to all meets. Additionally the turf area is compacted to the point that it is unusable and does not meet safety standards; last year a student broke their back during a sports practice.

Currently such a facility does not exist in this community and would be utilized not only by 9-R athletics, physical education classes, band students, and outdoor education courses but by charter and home school students, community partners such as boys and girls club and neighboring districts such as Bayfield or higher education institutes like Fort Lewis College.

When the board of education approved the stadium they dedicated \$900,000 in capital projects funds. Because these dollars were collected from tax-exempt entities that made contributions outside the typical funding structure they cannot be used for anything other than capital projects. The remaining monies will be realized solely through donations, sponsorship's, and gifts.

The estimate for the track and field replacement is \$700,000 each. The synthetic turf comes with a ten year warranty and a life expectancy of 14 years. The water savings alone over 10 years would be equivalent to \$325,000. We plan on maintaining sustainability and upkeep of the track through ticket sales and venue rental to outside entities.

## Deficiencies Associated with this Project:

Durango High School currently has a natural grass athletic field and acrylic track that has aged beyond responsible and reasonable use. Several factors combine to make replacement a priority.

Safety is the primary concern. The facilities are worn to the point where safe use is questionable. The danger has been amply demonstrated in the increase in number and gravity of shoulder, knee, ankle and other injuries to young players over the past several years; in 2014, for example, a young athlete fractured his spine during a game. The foundation under the grass field provides uncertain footing, varying from spongy to as hard (and unforgiving) as concrete. The track has numerous soft spots

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

and tree root incursions as well as an entire section which has been replaced with an alternative (and now cracked) footing, making use even for practices problematic at best. Drainage from the adjacent hill has eroded one end of the field, requiring regular repairs with infill and adjacent trenching. Varying weather conditions couple with the existing hazards in the worn-out field and make the use of the field especially weather-dependent.

Cost is a factor as well: Repairs and grass replacement would need yearly renewal at this point, would be stop-gap at best, and thus would foolishly drain scarce school district resources. Durango 9-R is already among the most poorly funded of Colorado school districts. Spending repetitively to make repairs only hinders and delays the ultimate solution, replacement. Protecting the surface to extend its life has prevented activities other than football from using the field for games and, in some instances, practice as well. A new field, sized more sensibly for additional uses such as soccer and lacrosse, would allow students a safe place to practice without travel and would also bring revenue from home games. Better all-weather footing would allow a longer season for use for many activities and potentially create more revenue sources throughout three seasons.

Finally, facility security is an issue. At this time, access to the bleachers and field for games is available only through the high school building, necessitating additional security and maintenance staffing.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Durango 9-R proposes to replace the existing facility with a new track, a field sized for multi-sport use (football, soccer, lacrosse, band), and new ADA accessible exit. Every student of Durango would benefit from the renovation as many of our athletes come to participate in Demon sports from private, charter and homeschooled, and many more students enjoy coming to the games regularly. The first stage of the renovation is underway, thanks to the seeding funds made available from the School Board, which includes laying down the groundwork for the project and preparing the areas that will be seeing major construction. Then, the second stage will begin immediately realizing full funding, which includes building out the new track and turf field. The remaining monies will be realized solely through donations, sponsorship's, and gifts.

The new playing field will have a G-Max impact force rating of less than 100. Current safety recommendations are to have a surface G-Max of below 120 with an absolute maximum of 160. The current grass field G-Max rating is assumed to be over 200, but the condition of the field makes exact measurements difficult. The new track surface performance will be in accordance with IAAF, NCAA, and NFHS Standards. The surfacing will be applied to Running Track, End zone 'D' areas, Long Jump, Triple Jump, and Pole Vault. All concrete curbs will be replaced with rubber curbs as an added safety measure. It has been proven that many injuries can be proactively avoided by the installation of the new surfaces.

### **How Urgent is this Project?**

With the current conditions of the stadium and track and field, important programs that support student engagement in school could be at jeopardy. If students' safety is at risk, the school Board of Education will be hesitant to continue programs on the track and field in its current state. As research suggests, students who participate in extracurriculars at school, including clubs and sports, are more likely to have good attendance in school, have a lower likelihood of skipping school, and are twice as likely than non-participating students to have a GPA of 3.0 or higher and are more likely to earn a post-secondary degree. These activities lead to positive affects on cognitive skills, attitudes and academic behavior, including enhanced concentration, attention and improved classroom behavior (GAO, 2012). High school athletes are more likely than non-athletes to attend college and get degrees (US Dept. of Education, 2005).

Safety is the highest concern, with athletic injuries increasing in number and seriousness. It is unacceptable that a child could be grievously injured because of facility failure. The deficiency must be remediated in some way immediately, or the facility cannot be used. As mentioned above, repairs at this point would not necessarily provide an adequate solution, and even stop-gap measures would require annual repetition.

Placing the highest priority on proceeding with a solution, Durango School District 9-R board committed \$900,000 in PILT funds to begin preliminary construction in 2015; this included drainage remediation at the north-east end of the field, where a hillside had to be cut, a retaining structure created and drainage installed to direct run-off and rainwater to the adjacent landscaping.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

1.1.3. The Public School Facility Construction Guidelines shall identify and describe the capital construction, renovation, and equipment needs in public school facilities and means of addressing those needs that will provide educational and safety benefits at a reasonable cost.

The track and field at DHS have been shown to be unsafe and have caused injuries to students. A low-impact field and well

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

engineered running track will make the facility safer and prevent many injuries in the future.

4.1.7 Paths of egress. A continuous and unobstructed path of egress from any point in the school that provides accessible routes to an area of refuge, a horizontal exit, or public way. A facility code analysis shall be conducted to determine all code requirements.

The existing stadium area has been without an egress path to the north and east for some time. This deficiency has been pointed out during fire inspections. New track and field venue will have ADA accessible path and gate to the northeast.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

Our current year Capital Renewal budget is \$1,976,182. If we divide that by our approximate enrollment of 4700 students we can see that we are investing more than \$420 per student per year. Our strategy is to maintain the track and field as part of our regular preventive maintenance program. We will also invest money that is generated at the venue from advertising and ticket sales in a fund to be used to replace the field and resurface the track. This renewal will be much less expensive than the initial installation, because grading, drainage and curbing can remain in place. The field is warranted for 10 years but we expect it to last a few years longer due to regular maintenance and cleaning.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The current stadium was built in the late 1990s and both the track and field have reached a state of unacceptable standards with many of the patchwork repairs completed in the past two decades leaving only two or three lanes on the track usable for practice. Additionally the field has become compact and uneven posing safety concerns for the student athletes

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$576,910.01	<b>CDE Minimum Match %:</b>	65
<b>Current Applicant Match:</b>	\$1,071,404.30	<b>Actual Match % Provided:</b>	65
<b>Current Project Request:</b>	\$1,648,314.30	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	General Fund	
<b>Total of All Phases:</b>	\$1,648,314.30	<b>Escalation %:</b>	5
<b>Affected Sq Ft:</b>	147,724	<b>Contingency %:</b>	0
<b>Affected Pupils:</b>	1,030	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$11	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$11	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$1,600	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	143	NA	
<b>District FTE Count:</b>	4,249	<b>Bonded Debt Approved:</b>	

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Assessed Valuation:</b>	\$1,490,216,420	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$350,722	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$950,296	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$57,522	<b>Outstanding Bonded Debt:</b>	\$56,455,000
<b>Free Reduced Lunch %:</b>	29	<b>Total Bond Capacity:</b>	\$298,043,284
<b>Existing Bond Mill Levy:</b>	6.367	<b>Bond Capacity Remaining:</b>	\$241,588,284



• **Facilities Impacted by this Grant Application** •

**Poudre R-1 - Fire Alarm Upgrades at Multiple Facilities - Barton Pre-K - 1957**

**School Name: Barton Pre-K**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	30,530
Replacement Value:	\$7,125,687
Condition Budget:	\$5,171,812
Total FCI:	72.58%
Energy Budget:	\$10,686
Suitability Budget:	\$2,763,800
Total RSLI:	7%
Total CFI:	112%
Condition Score: (60%)	2.88
Energy Score: (0%)	1.77
Suitability Score: (40%)	3.33
School Score:	3.06



**Poudre R-1 - Fire Alarm Upgrades at Multiple Facilities - Cache La Poudre JHS - 1949**

**School Name: Cache La Poudre JHS**

Number of Buildings:	2
All or Portion built by WPA:	No
Gross Area (SF):	73,913
Replacement Value:	\$20,455,519
Condition Budget:	\$12,223,856
Total FCI:	59.76%
Energy Budget:	\$0
Suitability Budget:	\$2,694,800
Total RSLI:	18%
Total CFI:	72.9%
Condition Score: (60%)	3.05
Energy Score: (0%)	2.81
Suitability Score: (40%)	4.41
School Score:	3.59



**Poudre R-1 - Fire Alarm Upgrades at Multiple Facilities - Centennial HS - 1907**

**School Name: Centennial HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	39,967
Replacement Value:	\$13,132,371
Condition Budget:	\$2,345,972
Total FCI:	17.86%
Energy Budget:	\$0
Suitability Budget:	\$3,003,700
Total RSLI:	26%
Total CFI:	40.7%
Condition Score: (60%)	3.35
Energy Score: (0%)	2.71
Suitability Score: (40%)	3.69
School Score:	3.49



**• Facilities Impacted by this Grant Application •**

**Poudre R-1 - Fire Alarm Upgrades at Multiple Facilities - Ft Collins HS - 1995**

**School Name: Ft Collins HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	286,552
Replacement Value:	\$87,536,971
Condition Budget:	\$29,144,938
Total FCI:	33.29%
Energy Budget:	\$100,293
Suitability Budget:	\$1,461,000
Total RSLI:	18%
Total CFI:	35.1%
Condition Score: (60%)	3.75
Energy Score: (0%)	2.19
Suitability Score: (40%)	4.87
School Score:	4.20



**Poudre R-1 - Fire Alarm Upgrades at Multiple Facilities - Fossil Ridge HS - 2005**

**School Name: Fossil Ridge HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	296,375
Replacement Value:	\$97,825,258
Condition Budget:	\$1,337,548
Total FCI:	1.37%
Energy Budget:	\$0
Suitability Budget:	\$780,200
Total RSLI:	38%
Total CFI:	2.2%
Condition Score: (60%)	4.15
Energy Score: (0%)	2.71
Suitability Score: (40%)	4.91
School Score:	4.46



**Poudre R-1 - Fire Alarm Upgrades at Multiple Facilities - Leshar JHS - 1960**

**School Name: Leshar JHS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	93,686
Replacement Value:	\$29,178,661
Condition Budget:	\$14,640,964
Total FCI:	50.18%
Energy Budget:	\$0
Suitability Budget:	\$2,855,700
Total RSLI:	9%
Total CFI:	60.0%
Condition Score: (60%)	3.53
Energy Score: (0%)	2.19
Suitability Score: (40%)	4.33
School Score:	3.85





• **Facilities Impacted by this Grant Application** •

**Poudre R-1 - Fire Alarm Upgrades at Multiple Facilities - Lincoln JHS - 1974**

**School Name: Lincoln JHS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	106,754
Replacement Value:	\$33,438,960
Condition Budget:	\$23,639,746
Total FCI:	70.70%
Energy Budget:	\$37,364
Suitability Budget:	\$8,952,200
Total RSLI:	7%
Total CFI:	97.6%
Condition Score: (60%)	3.27
Energy Score: (0%)	1.67
Suitability Score: (40%)	4.05
School Score:	3.58



**Poudre R-1 - Fire Alarm Upgrades at Multiple Facilities - Lopez ES - 1993**

**School Name: Lopez ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	57,639
Replacement Value:	\$15,523,263
Condition Budget:	\$11,519,604
Total FCI:	74.21%
Energy Budget:	\$0
Suitability Budget:	\$1,982,500
Total RSLI:	12%
Total CFI:	87.0%
Condition Score: (60%)	3.41
Energy Score: (0%)	2.81
Suitability Score: (40%)	4.01
School Score:	3.65



**Poudre R-1 - Fire Alarm Upgrades at Multiple Facilities - Poudre HS - 1962**

**School Name: Poudre HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	274,071
Replacement Value:	\$90,203,510
Condition Budget:	\$47,052,594
Total FCI:	52.16%
Energy Budget:	\$95,925
Suitability Budget:	\$14,550,500
Total RSLI:	7%
Total CFI:	68.4%
Condition Score: (60%)	3.27
Energy Score: (0%)	2.40
Suitability Score: (40%)	4.43
School Score:	3.73



• **Facilities Impacted by this Grant Application** •

**Poudre R-1 - Fire Alarm Upgrades at Multiple Facilities - Rocky Mtn HS - 1973**

**School Name: Rocky Mtn HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	291,858
Replacement Value:	\$87,776,893
Condition Budget:	\$48,368,043
Total FCI:	55.10%
Energy Budget:	\$0
Suitability Budget:	\$3,102,900
Total RSLI:	16%
Total CFI:	58.6%
Condition Score: (60%)	3.64
Energy Score: (0%)	1.98
Suitability Score: (40%)	4.75
School Score:	4.08



**Poudre R-1 - Fire Alarm Upgrades at Multiple Facilities - Traut ES - 1998**

**School Name: Traut ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	50,871
Replacement Value:	\$14,232,417
Condition Budget:	\$6,983,304
Total FCI:	49.07%
Energy Budget:	\$0
Suitability Budget:	\$967,200
Total RSLI:	19%
Total CFI:	55.9%
Condition Score: (60%)	3.92
Energy Score: (0%)	2.81
Suitability Score: (40%)	4.62
School Score:	4.20



**Poudre R-1 - Fire Alarm Upgrades at Multiple Facilities - Webber JHS - 1990**

**School Name: Webber JHS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	122,787
Replacement Value:	\$35,543,971
Condition Budget:	\$15,273,426
Total FCI:	42.97%
Energy Budget:	\$0
Suitability Budget:	\$2,114,600
Total RSLI:	18%
Total CFI:	48.9%
Condition Score: (60%)	3.61
Energy Score: (0%)	2.40
Suitability Score: (40%)	4.75
School Score:	4.06





# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Poudre R-1

**County:** Larimer

**Project Title:** Fire Alarm Upgrades at Multiple Facilities

**Previous BEST Grant(s) Funded:** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |  |   |   |
|---|--|---|---|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof                  | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input checked="" type="checkbox"/> Fire Alarm | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement    | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC                  | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                   | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Poudre School District is a mid-sized, suburban school district located in Larimer County, fifty five miles north of Denver and stretching west to the Continental Divide and north to the Wyoming border. PSD's large geographic area encompasses 1856 square miles, about one-and-one-half times the size of Rhode Island. Students attend 50 school sites in the city of Fort Collins which has a population of 181,000, as well as in neighboring small towns of Wellington, LaPorte, Livermore, Timnath, Red Feather Lakes and Stove Prairie. Over 31% of PSD's student population qualifies for free and reduced lunch benefits and 27% are ethnic minorities. PSD enrolls over 29,500 students.

PSD Facility Services is responsible for coordinates the district's facilities maintenance program and is comprised of Building Maintenance, Custodial Services, Customer Support Center, Outdoor Services, and Utilities & Resource Management. Facility Services operates at an optimal level of efficiency and effectiveness so that all school and support sites are maintained at a functional, comfortable level, providing a safe and healthy environment for staff and students.

Facility Services maintains over 4 million square feet in 73 district buildings sitting on 965 acres: 31 elementary schools, 10 middle schools, 7 high schools, 1 district stadium, 3 other school program sites (early childhood, alternative), 33 portable classrooms, 21 other structures housing administrative and support functions, and 5 storage and covered parking structures. In addition, staff maintain 342 acres of irrigated turf.

## Deficiencies Associated with this Project:

Written in 2007, the current Facilities Master Plan says this about PSD facilities: "During the coming ten years, PSD facilities will require significant school repairs, renovation and additions to address facility deficiencies and other needs. The Facility Condition Audit identifies total repair costs of \$112 million needed during the period. This report identifies \$40M in deficiencies that range from critical to imminent over the next three years and the remaining \$72M which are needed during the ten-year horizon of this plan. Current Operations funding such as yearly general funds, capital reserve funds, and remaining bond funds can all be used to address some of the most urgent needs, but will fall well short of funding the overall ten-year plan." As the 10-year plan comes to an end in 2017, these comments ring very true for Poudre School District--the District is short of funding for repairs and replacement of items that have met their lifespan. Thus, the district is seeking to fund a portion of the costs of fire alarm systems, smoke detectors, and horn and strobe installations that will replace equipment that no longer ensures safe egress from 12 school buildings.

## Proposed Solution to Address the Deficiencies Stated Above:

Poudre School District's solution to outdated life safety equipment in school sites is to replace that equipment in a timely manner. Thus, the District is requesting funding from the Capital Construction Assistance Grant Fund to help us purchase and install up-to-date equipment in 12 school sites as soon as possible. Two schools need smoke detector replacement, 8 schools need horns and stobe installations, and two schools need full fire alarm system replacements,

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

## How Urgent is this Project?

Poudre School District creates its replacement plan on the fire alarm industry's best practices for life cycle replacement. PSD's twelve sites are not at the place where a system would fail tomorrow; however, the District prefers to proactively replace systems rather than have a failure occur that would likely result in higher costs for replacement and possibly cause the loss of use of a facility until a repair is complete.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

The planned Poudre School District fire system upgrades will be designed and will adhere to the requirements outlined in Section 4.1.6 Fire Management of the Public School Facility Construction Guidelines. All purchases of systems as estimated in this grant proposal will meet the codes of the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

In Poudre School District, capital funding is allocated for the maintenance and renewal of operational capital equipment. Poudre School District has a long range plan for such maintenance, with a matrix that defines priorities and projected life cycles of each system and the plan for replacement. This plan includes industry best practice life cycle timelines, as well as timelines for staff to perform regular assessments of the condition of the equipment. This matrix allows PSD to determine scheduled replacements and plan for them, rather than have failures occur.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

n/a

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

## FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$309,089.54	<b>CDE Minimum Match %:</b>	71
<b>Current Applicant Match:</b>	\$756,736.46	<b>Actual Match % Provided:</b>	71
<b>Current Project Request:</b>	\$1,065,826.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	Yes
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	2016 Bond Election	
<b>Total of All Phases:</b>	\$1,065,826.00	<b>Escalation %:</b>	3
<b>Affected Sq Ft:</b>	1,719,101	<b>Contingency %:</b>	10
<b>Affected Pupils:</b>	10,902	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$1	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$0	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$98	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	158	NA	
<b>District FTE Count:</b>	27,359	<b>Bonded Debt Approved:</b>	\$120,000,000

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Assessed Valuation:</b>	\$2,850,805,497	<b>Year(s) Bond Approved:</b>	10
<b>PPAV:</b>	\$104,200	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$18,201,832	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$57,248	<b>Outstanding Bonded Debt:</b>	\$215,727,067
<b>Free Reduced Lunch %:</b>	32	<b>Total Bond Capacity:</b>	\$570,161,099
<b>Existing Bond Mill Levy:</b>	11.061	<b>Bond Capacity Remaining:</b>	\$354,434,032

• Facilities Impacted by this Grant Application •

**Limon RE-4J - K-12 Locker Room Renovation Supplemental - Limon K-12 - 1923**

**School Name: Limon K-12**

Number of Buildings:	2
All or Portion built by WPA:	No
Gross Area (SF):	136,614
Replacement Value:	\$44,585,046
Condition Budget:	\$23,308,392
Total FCI:	52.28%
Energy Budget:	\$0
Suitability Budget:	\$2,034,700
Total RSLI:	14%
Total CFI:	56.8%
Condition Score: (60%)	2.82
Energy Score: (0%)	2.40
Suitability Score: (40%)	3.67
School Score:	3.16





# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Limon RE-4J

**County:** Lincoln

**Project Title:** K-12 Locker Room Renovation Supplemental

**Previous BEST Grant(s) Funded:** 3

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** Last year (2015) we were short listed but the project was not funded.

## Project Type:

- |  |  |  |  |
|--|--|--|--|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof                          | <input type="checkbox"/> Asbestos Abatement        | <input type="checkbox"/> Water Systems                     |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm                    | <input type="checkbox"/> Lighting                  | <input type="checkbox"/> Facility Sitework                 |
| <input checked="" type="checkbox"/> Renovation | <input checked="" type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade        | <input type="checkbox"/> Land Purchase                     |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC                          | <input checked="" type="checkbox"/> Energy Savings | <input checked="" type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security              | <input type="checkbox"/> ADA                           | <input type="checkbox"/> Window Replacement        | water savings  |

## General Information About the District / School, and Information About the Affected Facilities:

Limon is a small rural district that is on the eastern plains along I-70. The community of Limon has always been supportive of the school and the programs in the school. Limon has a strong tradition of being the best in what ever they have done. This has given the community great pride in their school and students. Limon has had a long history of strong athletics, but many people do not know that they have also been one of the top academic schools also. Limon has always scored well on the State's assessments and have been a high achieving district. Limon has had several Boettcher Scholarship winners over the last several years. Limon's Industrial Arts and Music programs are also very strong and both of these always take top placements in competition.

We received a BEST grant in 2013 to replace and consolidate the classroom wings of the school and renovate the existing gyms. The new addition was completed successfully and our students and staff are enjoying their new environment. Unfortunately, due to calculation errors and escalation during the project, some of the renovation work in the gym was unable to be completed within the project budget.

One of the area's that the facilities of Limon schools needs were their locker rooms. When the original plans for the BEST Grant was being developed, it was obvious that the locker rooms needed work. Since Limon chose to keep their current athletic facilities, they thought this would help in getting the BEST Grant in that Limon would not have to build a new gym and locker rooms. That is why we had renovation of gyms and locker rooms as part of the grant. The locker rooms, especially the shower area, because of Limon's hard water need faucets and shower heads replaced. The walls of the showers has been a concern since they are not stable and have had work done to them to keep them in place. This is a safety concern because the walls of the showers could fall over if a student fell into them or if they pushed on them too hard. This is a concern that we have for the students of Limon, but also for other schools since visiting teams also use these locker rooms for our home contests.

## Deficiencies Associated with this Project:

Receiving the BEST Grant three years ago, we were unable to renovate the locker rooms that we had in our original master plan. The locker rooms are out dated and are in need of renovation and repair. The locker room portion of the original BEST Grant budget was moved to an alternate in order to stay within the budget. The free standing wall is the most critical issue that needs addressed in the locker rooms. The maintenance staff has put angle iron across the top to anchor it to a more secure wall. But the wall still moves several inches when someone pushes on it. The wall should not have been installed this way and there is no simple method to brace the top end of the freestanding wall. Removing the wall, the best solution, then creates the need build back up to date, code compliant showers. The lighting fixtures that are in place have aged because of all the moisture that is in locker rooms from the showers. They are rusted and are not the type of light fixtures that should be used in a locker room. The lights and ceiling should be replaced together to create the correct ceiling system for a locker room environment. The locker room floors have been painted over the years and in some areas the paint will

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

not stay and is bubbling up by the end of each year. The locker room floors would need to be striped to clean concrete and treated with an appropriate floor finish for these wet areas. The boiler system has been run at lower than designed temperatures since the mixing valve has not functioned properly, so to keep water temperature at a safe level the boiler has run lower. This has caused premature wear for the boiler and as a result it is on its last leg and the mixing units that supply cooler water are not working. We were expecting to fix this problem, along with the locker room issues with the BEST grant. The existing locker rooms do not meet ADA or ANSI A117.1 code requirements. Toilet areas do not have a handicapped stall with the 5' turning radius and required grab bars. Sinks are missing protective cover over drainage piping and mirrors and other accessories are not installed at correct height. The showers are gang style showers and do not comply with accessibility code requirements.

### Proposed Solution to Address the Deficiencies Stated Above:

Demolition of the current shower area's and tear up concrete floors to put in new drains and water lines. Install new masonry interior walls and new concrete and resinous floors. The ceilings will be replaced with gypsum/drywall along with new light fixtures that are made for a high humidity area. Installing new sinks and toilet accessories that are ADA compliant. We will also change a girls locker room to a boys locker room and add an exit door to the hallway for easy access to an outside door. New lockers and seating that will make this space more usable. All new electrical will be added to the locker rooms for both maintenance and safety. Design fees and construction fees have been included to complete the scope of work. Complete cost estimate breakdowns are provided in the attached "Locker Room Estimate\_updated 2-17-16" spreadsheet, Estimate Detail tab.

With the grant funds granted the following renovations will be completed by the District and project team:

1. Removing and replacing the concrete slabs in the new shower and new toilet fixture areas to include new in-ground and in-wall plumbing.
2. Installing new individual showers, to replace open shower bay - to addresses ADA, ANSI A117.1 and accessibility code requirements.
3. Installing new hard lid ceiling over wet areas, and moisture resistant, cleanable grid ceiling over remaining areas – to improve clean ability and prevent future building health issues in these spaces.
4. Installing new lighting with occupancy sensors and GFI receptacles – to reduce energy use.
5. Installing new floor finishes in the form of resinous flooring, sealed concrete and abrasive carpet to replace painted concrete.
6. Installing lockers, toilet compartments & accessories – to address and improve ADA accessibility.
7. Replacement of all fan coils in each of the four locker rooms
8. Replacement of boiler and add 2 mixing valves – to allow the boiler to run at its design temperature and safely provide hot water.
9. Moving existing electrical boxes outside of new hard lid ceiling to address code related requirements.

### How Urgent is this Project?

The free standing masonry walls in the shower room are a safety concern and in need of complete demolition. They need to be replaced with wall that are designed and structurally correct for the locker rooms. The lighting fixtures have weathered because they are not the correct fixture for a locker room along with the ceiling tiles that are the same. The individual deficiencies in the locker rooms are only able to be maintained to minimally support the function of the locker rooms for the present. The most efficient and effective way to correct all the deficiencies is with a complete scope of work completed as a single project. This is not only an outdated area of the school facility, but one that is also a safety issue as this area continues to age. The biggest safety issue in the locker rooms is a wall in the shower area that is not stable. The maintenance staff has tried to keep it in place by adding straps to the other existing walls that are already there. When a person pushes on the wall it can move several inches and if pushed to hard it could fall over. This is in a place where students are not always monitored while they are in there. The drop ceiling with the tile has deteriorated because of the moisture and this is not a good area to have this for a ceiling. The tiles in the ceiling absorb moisture and this can cause molds and other health problems. The maintenance staff struggles with ceiling tile replacement. Ideally this area would be constructed with an epoxy painted drywall ceiling, especially over the wet areas.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

Article 4, 4.1 and 4.1.1. This project will correct and replace deficient floors, ceilings and walls. Replace and recoat floor surfaces with a better slip resistant coefficient more cost effective for maintenance. Replace interior freestanding masonry

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

walls with fully anchored masonry walls. Replace failing drop grid ceiling with gypsum/drywall hard lid ceiling appropriate for wet environment. Replace ceiling lights in grid ceiling with appropriate lights in hard lid ceiling: energy efficient to comply with Article 4.4.4.4 lighting with occupancy sensors and to meet Article 4.1.3.1. Relocate and remove multiple electrical junction boxes in plenum ceiling space to code compliant (Article 4.1.3.2) with designated compliant O&M access through hard lid ceiling. Installing new individual showers, to replace open shower bay - to addresses ADA, ANSI A117.1 and accessibility code requirements. Replacement of all fan coils in each of the four locker rooms to conform with applicable sections of 4.1.4.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

The district maintenance staff will maintain the locker rooms by having a summer cleaning and maintenance of showers and bathroom fixtures each summer, this will also be done at breaks during the school year. The locker rooms and gyms are swept and cleaned daily during the school year. We also hope that the students that use these will help in maintaining a newly renovated locker room.

The district will appropriate \$5,000 a year to meet the replacement of fixtures. With tight budgets in today's school we will realistically also have to go to the tax payers at that time to ask them to pass a bond to help with such costs, unless school funding has improved by then. Limon's negative factor is around \$500,000, this is money that the district does not receive because of the cut in funding from the State.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The gyms and locker rooms were built by the school district and met all standards at the time it was built.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$1,183,659.75	<b>CDE Minimum Match %:</b>	35
<b>Current Applicant Match:</b>	\$30,350.25	<b>Actual Match % Provided:</b>	2.5
<b>Current Project Request:</b>	\$1,214,010.00	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$18,046,347.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$6,973,015.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		General Fund
<b>Total of All Phases:</b>	\$26,233,372.00	<b>Escalation %:</b>	10
<b>Affected Sq Ft:</b>	6,360	<b>Contingency %:</b>	5
<b>Affected Pupils:</b>	491	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$191	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$6	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$185	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$2,473	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	13		NA

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>District FTE Count:</b>	481	<b>Bonded Debt Approved:</b>	\$6,973,015
<b>Assessed Valuation:</b>	\$78,067,434	<b>Year(s) Bond Approved:</b>	13
<b>PPAV:</b>	\$162,302	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$651,789	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$43,939	<b>Outstanding Bonded Debt:</b>	\$8,548,015
<b>Free Reduced Lunch %:</b>	38	<b>Total Bond Capacity:</b>	\$15,613,487
<b>Existing Bond Mill Levy:</b>	10.275	<b>Bond Capacity Remaining:</b>	\$7,065,472

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

For questions 4-11

Only answer the questions which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your school district.

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES.

Limon School District RE-4J, like every district in the State has been hit hard with cuts in funding. The voters approved an increase in taxes to renovate gyms and locker rooms and build a new K-12 building. The purpose of the BEST Grant was to update all the facilities and not have to go back to the tax payers again. There are two main educational area's that we need to address are outdated textbooks and computers. These are the things that we need to provide a quality education for the students of Limon. Our bus fleet is getting to a point that we have to do something.

2. Please describe why the cost of complying with the match contribution would significantly limit educational opportunities within your school district or BOCES.

Limon School District RE-4J has had to cut staff, programs, reduce classroom resource budgets and other significant decisions to do the best for the students of Limon. If funds were to be used as a match for capital purposes, further cuts would be necessary, likely resulting in additional program and resource cuts.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants, or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

Limon School District RE-4J has asked a lot of the community with our BEST project, already passing a bond to fund our original match. We received GOCO funds to help with the playground for the elementary. The playground budget was cut because of increased costs. We have talked with our DOLA representative and they do not fund locker rooms.

4. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

5. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

6. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

7. Bond Election failures and successes in the last 10 years – The more attempts the school district has had, the lower the match.

8. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

9. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

While the remaining bond capacity is \$5,581,499, we just passed a bond for the original BEST project in 2013 at our statutory limit, and it would be challenging to get the tax payer's to support another tax increase at this time for what is essentially the same project.

10. The school district's unreserved fund balance as it relates to their overall budget.

11. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

In our original design we did not have enough square footage for circulation. The initial grant square footage miscalculated the total required square footage to deliver the programmed spaces identified. In spite of every program space being maintained at or below the size indicated in the application, and an efficient double-loaded circulation strategy being used for the final design, the total gross square footage of the school was 8,800sf larger than calculated in the original grant application at \$200/sf, the original grant request would have been at least an additional 1.76M. Instead we are requesting a cash grant to complete what in our opinion was a crucial component of the original project, and providing a small additional match in accordance with our capacity to so with our current financial situation.





• Facilities Impacted by this Grant Application •

**Limon RE-4J - K-12 Partial Roof Replacement - Limon K-12 - 1923**

**School Name: Limon K-12**

Number of Buildings:	2
All or Portion built by WPA:	No
Gross Area (SF):	136,614
Replacement Value:	\$44,585,046
Condition Budget:	\$23,308,392
Total FCI:	52.28%
Energy Budget:	\$0
Suitability Budget:	\$2,034,700
Total RSLI:	14%
Total CFI:	56.8%
Condition Score: (60%)	2.82
Energy Score: (0%)	2.40
Suitability Score: (40%)	3.67
School Score:	3.16



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Limon RE-4J

**County:** Lincoln

**Project Title:** K-12 Partial Roof Replacement

**Previous BEST Grant(s) Funded:** 3

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Limon is a small rural district that is on the eastern plains along I-70. The community of Limon has always been supportive of the school and the programs in the school. Limon has a strong tradition of being the best in what ever they have done. This has given the community great pride in their school and students. Limon has had a long history of strong athletics, but many people do not know that they have also been one of the top academic schools. Limon has always scored well on the State's assessments and have been a high achieving district. Limon has had several Boettcher Scholarship winners over the last several years. Limon's Industrial Arts and Music programs are also very strong and both of these always take top placements in competition.

## Deficiencies Associated with this Project:

Deficiency:

•The west gym is a pre-manufactured metal building with a low slope standing seam metal roof. The roof has been an ongoing maintenance issue and there are multiple leaks reported. The leaks have been exasperated when the new addition was constructed in 2015. As structural standing seam metal roofs age, the seals in the seams of the roof panels dry out and fail which results in ongoing leaks which are nearly impossible to remedy with maintenance alone. It is recommended to install a new roof over the existing metal roof. With a new gym floor under this roof we have concerns of a leak ruining the floor.

## Proposed Solution to Address the Deficiencies Stated Above:

Solution:

- Install a new roof over the existing corrugated metal roof. The work will include the following:
  - 1.Remove all abandoned equipment and patch the openings.
  - 2.Install 4" tall 16 gauge Z metal perpendicular to the slope fastened into the existing purlins every 24".
  - 3.Infill between the Z metal with 3 1/2" polyisocyanurate insulation, cut around the flutes of the metal deck. Install 1/2" plywood deck to Z metal and fully adhere 60 mil EPDM.
  - 4.Replace the existing gutter and downspout system.
- The International Building Code, The State of Colorado and The Colorado Department of Education Guidelines will be adhered to in the design of the new roofing system.

## How Urgent is this Project?

Urgency:

•This project is urgent as the school has exhausted all of their maintenance options for this roof and the roof continues to leak which is a disruption to the learning environment. Based on the BEST Grant cycle time line, the most realistic time frame for a full replacement is the summer of 2017

## How Does this Project Conform with the Public School Facility Construction Guidelines?

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

- The design for the new roofing system will conform to the Public Schools Construction Guidelines.
- 4.1.2 Roofs- The reroofing design will conform to this section for low-sloped roof systems. A fully adhered EPDM roof is proposed and positive drainage is already built into the roof structure

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

Limon School District Re-4j maintenance staff will check roof routinely and make sure the roof is clear of obstacles or material that could cause damage to the roof. The district will try and appropriate \$18,500 to help maintain the roof. We would like to have a line item in the district budget for facility needs, with the negative factor for our school is \$500,000, that would help with facilities but all areas' of the school.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The gym was built by the school district and was to code at that time.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$277,192.98	<b>CDE Minimum Match %:</b>	35
<b>Current Applicant Match:</b>	\$30,799.22	<b>Actual Match % Provided:</b>	10
<b>Current Project Request:</b>	\$307,992.20	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	General Fund	
<b>Total of All Phases:</b>	\$307,992.20	<b>Escalation %:</b>	3
<b>Affected Sq Ft:</b>	15,500	<b>Contingency %:</b>	10
<b>Affected Pupils:</b>	491	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$20	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$18	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$627	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	32	NA	

<b>District FTE Count:</b>	481	<b>Bonded Debt Approved:</b>	\$6,973,015
<b>Assessed Valuation:</b>	\$78,067,434	<b>Year(s) Bond Approved:</b>	13
<b>PPAV:</b>	\$162,302	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$651,789	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$43,939	<b>Outstanding Bonded Debt:</b>	\$8,548,015
<b>Free Reduced Lunch %:</b>	38	<b>Total Bond Capacity:</b>	\$15,613,487

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

Existing Bond Mill Levy: 10.275

Bond Capacity Remaining: \$7,065,472

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

For questions 4-11

Only answer the questions which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your school district.

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES.

Limon School District RE-4J has been hit hard by the budget cuts over the last several years, like all districts in the state. We are currently looking to upgrade textbooks and computers. These are two areas' that have been neglected over several years and if we spend money from the general fund for a new roof we would not be able to upgrade computers or purchase new text books.

2. Please describe why the cost of complying with the match contribution would significantly limit educational opportunities within your school district or BOCES.

Limon School District RE-4J has had to cut staff, programs, reduce classroom resource budgets and other significant decisions to do the best for the students of Limon. If funds were to be used as a match for capital purposes, further cuts would be necessary, likely resulting in additional program and resource cuts.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants, or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

Limon School District RE-4J has asked a lot of the community with our BEST project, already passing a bond to fund our original match. We received GOCO funds to help with the playground for the elementary. The playground budget was cut because of increased costs.

4. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

5. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

6. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

7. Bond Election failures and successes in the last 10 years – The more attempts the school district has had, the lower the match.

8. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

9. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

While the remaining bond capacity is \$5,581,499, we just passed a bond for the original BEST project in 2013 at our statutory limit, and it would be challenging to get the tax payer's to support another tax increase at this time for what is essentially the same project.

10. The school district's unreserved fund balance as it relates to their overall budget.

11. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

In the last several years we have seen an increase in the number of leaks that we have in the gym roof. We were fortunate in getting the gym floor sanded down and repainted this year. This is an area of concern since the roof is developing more leaks.





• Facilities Impacted by this Grant Application •

### Valley RE-1 - Caliche K-12 Wastewater Supplemental - Caliche PK-12 - 1974

**School Name: Caliche Pre-K-12**

Number of Buildings:	2
All or Portion built by WPA:	No
Gross Area (SF):	87,725
Replacement Value:	\$26,030,843
Condition Budget:	\$10,933,302
Total FCI:	42.00%
Energy Budget:	\$30,704
Suitability Budget:	\$2,345,200
Total RSLI:	16%
Total CFI:	51.1%
Condition Score: (60%)	3.17
Energy Score: (0%)	1.93
Suitability Score: (40%)	4.39
School Score:	3.66



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Valley RE-1

**County:** Logan

**Project Title:** Caliche K-12 Wastewater Supplemental

**Previous BEST Grant(s) Funded:** 2

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                     |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework                 |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                     |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input checked="" type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement | Wastewater Treatment Facility                              |

## General Information About the District / School, and Information About the Affected Facilities:

RE-1 Valley School District has a unique and diverse school community. We have a proud history of farming and ranching, and are located on the Northeastern Plains. Our schools serve the students of Sterling, Atwood, Crook, Iliff, and Padroni, for a total of 2,118 K-12 students.

Caliche is the rural school 20 miles to the north of Sterling that requires the new plant described in this proposal. Caliche serves the communities and the farming and ranching families surrounding Crook, Iliff, and Padroni. The adjoining buildings at Caliche provide education for Early Childhood preschool with funding from Colorado Preschool Program and Early Special Education, K-6, 7,8 and 9-12.

The school at Caliche is home to students who are award winners at the state and national levels in FBLA, FFA, and athletics. These activities provide rich civic experience for the families surrounding the school. The building also serves as a community center when needed by the surrounding communities. The operation of a wastewater system at Caliche Schools is a necessity since there is not a municipal wastewater system in the geographical area. The district was awarded a BEST Cash Grant for FY2013-14, but due to unanticipated requirements and testing from CDPHE has caused the solution to escalate in complexity and cost since the grant award; and beyond the reach of the grant reserve. Therefore, we are requesting your additional assistance to supplement our current grant.

## Deficiencies Associated with this Project:

At this time the wastewater being released into the water retention lagoon is not completely clear as it should be. The performance of the current Case/Cotter package plant aeration unit is not working to the needed standard that requires removal of all bacterial products. Our current aeration system is not efficient in processing wastewater during peak periods of use. The plant does not have a mechanism to waste or recycle sludge properly.

Sludge refers to the residual, semi-solid material left from the sewage treatment process. Fresh sludge is passed to an aeration chamber where it is decomposed by aerobic bacteria, resulting in liquefaction and reduced volume of the sludge. After digesting for an extended period, the result is called "digested" sludge. Part of the settled material, the sludge, is returned to the head of the aeration system to re-seed the new wastewater entering the tank with microorganisms that start the digestion process again. Because our plant cannot keep up with the digestion at peak periods, an excess of sludge fills up the clarifier tank and requires pumping off of excess (not fully digested) sludge for disposal by a company such as Waste Management, Incorporated. When the excess sludge is pumped out, along with the sludge go the microorganisms needed to process the newwaste entering the system. There is no evidence that we have harmed the groundwater table, but left uncorrected and increased loading limits greatly increased the original design. The current system was not designed to meet current standards for total nitrogen treatment standards of 10mg/L. CSPHE was not comfortable with the small amount of data used to design the wastewater treatment plan when submitted in November 2014. The plan had previously not had a discharge permit and therefore had no records of influent and effluent from the existing plant. CDPHE requested additional information to support the date, which was provided via a 24 hour continuous sampler. The information received increased the loading from the original design requiring a change in the treatment process. After the original grant award, despite good

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

diligence and planning in the original application, the additional testing required by CDPHE added complexity and substantial cost to the project.

## **Proposed Solution to Address the Deficiencies Stated Above:**

The district has done its due diligence from the original award. Due to the additional regulations from the Colorado Department of Public Health and Environment and the delay of sample testing, the project has increased in complexity and cost since the 13-14 award. Olsson Associates has used the sampling data to develop a 95% confidence interval of loading parameters for the treatment facility and submitted this information to Smith & Loveless to determine the impact to the wastewater treatment facility. The information from Smith & Loveless indicated a substantial increase in cost due to the loading changes identified in the new sampling. The new loading increased the treatment time required to meet the discharge limits, thereby requiring additional facilities and increasing construction costs. With the new data and stage of the project, the district and Olsson Associates is confident the additional supplemental request will get this project completed.

## **How Urgent is this Project?**

The School District will continue with construction in June, to continue with the original project of which when awarded was urgent. Due to the delay from CDPHE, the original site application was submitted over a year ago and one year has been spent acquiring water quality data and review of information by CDPHE. The district and Olsson Associates finally received approval from CDPHE regarding the loading for the wastewater treatment plant and adjusted the schedule accordingly (January 27, 2016). Olsson Associates has been working with Smith & Loveless to insure the new proposed plant will meet the discharge requirements by CDPHE of which is an 84% cost increase from the original proposal.

## **How Does this Project Conform with the Public School Facility Construction Guidelines?**

The project will bring School District RE-1 Valley's wastewater system into conformity with current regulations and standards. 3.13. Sanitary school facilities that comply with Colorado Department of Public Health and Environment (CDPHE), Consumer protection Division, 6 CCR 1010-6 "Rules and Regulations Governing Schools."

3-201 Facilities, approved by the Department, shall be provided and maintained for the treatment and sanitary disposal of sewage.

3-206 In all new schools and schools modifying existing sewage disposal systems or expanding their usage beyond the design capacity of the sewage disposal system, plans shall be submitted to the Department for review and approval in accordance with provisions of Sections 25-8-702 and/or 25-10-105 C.R.S. prior to construction.

## **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

The wastewater plant will require daily attention to monitor and record daily wastewater flows as well as attend to operations of the plant. On a regular schedule screens will be cleared and sludge removal/disposal will be a regularly scheduled duty (maximum every 30 days) at the wastewater plant. Aerators, pumps and electrical controls will be serviced by the School District RE-1 Valley maintenance department or service contractors under their direction. Upkeep will be funded through the district maintenance department budgets. Recording daily wastewater flows will be a new duty; however, other plant operation costs are budgeted and occur with the current wastewater plant operations. A certified wastewater operator advises and directs district staff to perform needed maintenance and facility care.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The wastewater facility was built new and met standards in 1974. Today the wastewater facility does not adequately process wastewater safely nor does it meet current regulations.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

## **FY15-16 Charter School Capital Construction Allocation from the State:**

<b>Current Grant Request:</b>	\$195,189.50	<b>CDE Minimum Match %:</b>	45
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## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Current Applicant Match:</b>	\$159,700.50	<b>Actual Match % Provided:</b>	45
<b>Current Project Request:</b>	\$354,890.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$554,510.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$226,490.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	Capital Projects Fund	
<b>Total of All Phases:</b>	\$1,135,890.00	<b>Escalation %:</b>	0
<b>Affected Sq Ft:</b>	87,725	<b>Contingency %:</b>	30
<b>Affected Pupils:</b>	288	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$4	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$0	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$4	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$1,232	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	305	NA	
<hr/>			
<b>District FTE Count:</b>	2,057	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$194,477,100	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$94,544	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$3,683,212	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$40,739	<b>Outstanding Bonded Debt:</b>	\$23,919,990
<b>Free Reduced Lunch %:</b>	48	<b>Total Bond Capacity:</b>	\$38,895,420
<b>Existing Bond Mill Levy:</b>	10.65	<b>Bond Capacity Remaining:</b>	\$14,975,430

• Facilities Impacted by this Grant Application •

**Plateau Valley 50 - PK-12 RTU Replacement - Plateau Valley ES/MS/HS - 1959**

**School Name: Plateau Valley ES/MS/HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	101,613
Replacement Value:	\$27,347,503
Condition Budget:	\$9,097,697
Total FCI:	33.27%
Energy Budget:	\$0
Suitability Budget:	\$4,772,900
Total RSLI:	20%
Total CFI:	50.7%
Condition Score: (60%)	3.54
Energy Score: (0%)	2.27
Suitability Score: (40%)	4.09
School Score:	3.76



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Plateau Valley 50

**County:** Mesa

**Project Title:** PK-12 RTU Replacement

**Previous BEST Grant(s) Funded:** 1

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** Need to give more technical information on project and estimated cost savings. Also need more tech. specs. and show the urgency of the project.

## Project Type:

- |  |   |  |   |
|--|---|--|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement        | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input checked="" type="checkbox"/> Lighting       | <input type="checkbox"/> Facility Sitework      |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade        | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition              | <input checked="" type="checkbox"/> HVAC    | <input checked="" type="checkbox"/> Energy Savings | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security              | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement        |   |

## General Information About the District / School, and Information About the Affected Facilities:

The Plateau Valley School district has approximately 320 PK - 12 students in our local community school and approximately 120 in an alternative high school that is part of a Job Corps facility. This is the only alternative high school like this in the state of Colorado, or in the United States. There are a little over 170 Job Corps centers in the United states, but none, other than the Collbran Job Corps Center have a certified high school on campus.

Academically we are an average school district with average growth and performance on any standardized measures we have to compare us to other schools in the state or nationally.

We have a CPP program for our 3 and 4 year old students and a PK - 12 building. The alternative school is housed at the Job Corps site about a mile from the PK - 12 school. We offer typical educational opportunities for a small school with a few exceptions. We have a genius hour in the middle school, and a legobot program in the elementary and middle schools. At the high school level we have an agricultural program, a FIRST robotics program, drama program and also offer many in house AP courses for our students. We also have art, music and physical education for our K-12 students, which is becoming more unusual as more schools are dropping arts and physical education programs.

The affected facility is the PK-12 school and 45,600 square feet of it will be involved in this project. This is the core of the community school that was built in 1959. For the age of this facility it is in very good shape because we have a great facility and maintenance team and have always had the philosophy of maintaining what we have so we put a lot of effort and money into capital projects and preventative maintenance.

## Deficiencies Associated with this Project:

The building dates to 1959 for the original construction with several additions to the building over the years. Additions occurred in 1983, 1989, 1996, and 2007. The original 1959 building is about 41,260 ft<sup>2</sup>. The 1983 shop building is 4340 ft<sup>2</sup>. The school is comprised of classrooms, administration area, gymnasium, lower level locker rooms, cooking kitchen, cafeteria and ancillary spaces (mechanical rooms, electrical rooms, etc.) The area of the concern for this assessment is the original 1959 building including the gymnasium and the 1983 building which includes the auto shop and the wood shop areas.

We have 26 old heating units that are in classrooms that need to be replaced, 2 old heating units in the shop areas that need to be replaced and 2 large roof top units for our gym that need to be replaced. The classroom and gym units were installed in 1991 and the shop units were installed in 1983. All of these units had a life expectancy of 15-17 years, so they have all outlived their life expectancy by far. The CO<sub>2</sub> levels in these rooms were recently measured and many of the rooms had levels between 735 and 2000, well over the recommended levels.

## Proposed Solution to Address the Deficiencies Stated Above:

Heating, ventilating and air-conditioning

The system will be generally be composed of packaged rooftop heating and cooling units over each space that is served by



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

them.

### MECHANICAL/ELECTRICAL NARRATIVE

The system will be comprised of roof-mounted, packaged heating and cooling units. These units will have economizer dampers, barometric exhaust, gas heating, DX cooling and supply fan. Controls will include a programmable room thermostat and CO2 sensor for Demand Controlled Ventilation (DCV). Each of the existing 27 fan coils/condensing units serving the project area will be removed along with the duct-work, piping and controls. The existing gym makeup air units will be removed along with all roof mounted duct-work. Each space that has an existing fan coil (quantity of 27) will receive a new, nominal three (3) ton packaged rooftop as described above. Supply air will be distributed to each space from the rooftop units by steel duct-work built according to SMACNA standards and ceiling-mounted diffusers and grilles. Duct-work will be insulated as per the 2015 International Energy Conservation Code (IECC). The gymnasium will be served by a nominal 30 ton, packaged heating/cooling rooftop unit with gas heating, economizer dampers, filters, 100% powered exhaust, supply fan and controls. The supply fan will have a VFD for speed control using a single zone VAV control sequence.

A fabric duct system will distribute the supply air to the gymnasium from the new rooftop unit. The wood shop and auto shop will each be served by a nominal five ton, packaged heating/cooling rooftop unit with gas heating, economizer dampers, filters, barometric exhaust, supply fan and controls. Supply air will be distributed by steel duct-work and duct mounted grilles.

Natural gas will be piped to each packaged roof top unit. A direct digital control (DDC) building automation system (BAS) will be designed to control and monitor all aspects of the building mechanical system.

### Electrical:

The electrical service in this area is a 120/208 volt 1200 amp service with branch panels located in several different locations. The existing condensing units will be disconnected and the branch circuits will be removed and replaced with #8 wire and the existing breakers will be replaced with 40 amp breakers. The fan coil branch circuits will be removed.

We looked at a solution using larger units that would heat numerous rooms using the boiler, but the quotes we got back were prohibitive for our district. We will be reducing staff this year due to Revenue decreases and the school board was very hesitant about dipping too deep into reserves when we can see even worse financial times on the horizon.

Below is the cost breakdown for the entire project?

\$30,000 Bighorn Engineer

\$19,180 Roof Patch

\$554,600 HVAC units total:

27, 3 ton units old classes \$335,500

1, 30 ton unit old gym \$91,700

2, 5 ton unit shops \$26,000

control units \$101,400

\$34,365 Electrical for HVAC install

\$97,000 Plumbing for HVAC

The following is for ceiling demo and replacement and light demo and replacement.

\$95,640 Ceiling demo and replacement

\$28,760 LED lights for replacement

\$10,800 Electrical for LED light replacement

\$870,595 Grand total with Ceiling and light demo and replacement and all units (27 classroom, 1 gym, 2 shop).

\$957,655 Grand total with 10% contingency.

### How Urgent is this Project?

A stated before we have 27 old heating units that are in classrooms that need to be replaced, 2 old heating units in the shop

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

areas that need to be replaced and 2 large roof top units for our gym that need to be replaced. The classroom and gym units were installed in 1991 and the shop units were installed in 1983. All of these units had a life expectancy of 15-17 years, so they have all outlived their life expectancy by far. The CO2 levels in these rooms were recently measured and many of the rooms had levels between 735 and 2000, well over the recommended levels. We also have rooms that the heating unit will stop working when it's cold outside and students as young as 3 and 4 year old's come to school with a classroom that is in the low 50s. In the fall and spring these same rooms will often times be about 80 degrees.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

The main two areas of the guidelines this project addresses are 4.1 Health and safety issues and 4.1.4 Mechanical systems. I will address each separately, even though they are closely related.

4.1 Health and safety issues: At this point this project is a true health and safety issue. As stated earlier the CO2 levels in many of the rooms are at levels that are well above the recommended levels. Many rooms are above 735 ppm with the highest level recorded at 2,000 ppm. The room temperatures are also a huge concern with many rooms recording temperatures in the mid to low fifties when the unit fails during the night. In the fall and spring temperatures have reached temperatures above 80 degrees in these rooms with failing systems. At this point teachers are opening windows to cool down the rooms, which in turn creates a security issue.

4.1.4 Mechanical systems: This also relates to the 4.1 issues and health and safety. 4.1.4.1 Healthy building air quality is obviously a huge issue with the present 25 plus year old units.

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

For the last 5 years we have averaged over 2.6% of our budget for preventative maintenance and capital projects. We have a roof rotation plan, have purchased a new boiler, got rid of all the remaining asbestos in the building, replaced the carpet in most of the building, installed new high efficiency lights throughout the building and built security entrances at the main building entrances. We have done all of this while also trying to maintain the old HVAC units that need to be replaced.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The core of the building was built in 1959. It has been maintained very well so the quality of the building is in very good shape. We actually just finished up a project to remove the remainder of the asbestos and replace the carpet. The building is structurally sound and has at least 20-25 years left in it's life expectancy. The units to be replaced are all about 27 years old. The life expectancy of the present units was between 15 and 17 years, depending on the unit, so they have far outlived their expected useful life.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

## FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$494,139.15	<b>CDE Minimum Match %:</b>	69
<b>Current Applicant Match:</b>	\$494,139.15	<b>Actual Match % Provided:</b>	50
<b>Current Project Request:</b>	\$988,278.30	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	General Fund and Grants	
<b>Total of All Phases:</b>	\$988,278.30	<b>Escalation %:</b>	4
<b>Affected Sq Ft:</b>	45,600	<b>Contingency %:</b>	10

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Affected Pupils:</b>	306	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$22	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$21	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$3,230	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	149		NA

<b>District FTE Count:</b>	424	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$158,232,040	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$373,189	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$1,936,348	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$52,837	<b>Outstanding Bonded Debt:</b>	\$2,535,000
<b>Free Reduced Lunch %:</b>	27	<b>Total Bond Capacity:</b>	\$31,646,408
<b>Existing Bond Mill Levy:</b>	2.396	<b>Bond Capacity Remaining:</b>	\$29,111,408

## BEST School District and BOCES Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

For questions 4-11

Only answer the questions which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your school district.

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1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES.

We are asking for the match to be reduced from 69% to 50% or from \$660,781.95 to \$478,827.50. Dollar wise this is \$181,954.45, or approximately 5% of our entire revenues for the 2015-16 school year. Over 5% of any school district budget would be significant. A 5% loss to the Denver Public Schools budget would be approximately \$13,702,296. When you look at it in this light you realize the formula adversely affects small schools because the percent we lose has a huge impact on education, just as over \$13 million dollars would adversely affect DPS.

2. Please describe why the cost of complying with the match contribution would significantly limit educational opportunities within your school district or BOCES.

The difference in match we are asking for is \$181,954 or \$568 per student. Again, if you look at cost per pupil it has a huge impact on small districts. If the BEST board had to charge large districts \$568 per student it equates to millions of dollars of impact. That is the same impact the students of Plateau Valley School will feel if we do not get a 19% less match. We are still willing to pay 50% of the match, which cannot be lost in this thought. We have skin in the game.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants, or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

We have taken a great deal of time to write other grants for other projects and have been successful. The efforts put into getting other projects done has enabled the students of Plateau Valley Schools to compete with students from anywhere in the world. We have received grants for Preschool funding, asbestos removal and improving technology in just the last 24 months.

This year we also wrote and received a Mesa County Federal Mineral Lease Grant (FML) to cover \$297,000 of the project.

4. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

I feel using Per Pupil Assessed Valuation is a component that should not be included in the match formula. Again, this adversely affects small districts, especially ones with gas and oil in the community. I will make two points concerning this issue. First gas and oil is a very fluid source of funding, going up and down greatly, year by year. Secondly, the funding formula for small schools does not give us any more money for higher assessed value per student.

5. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

This factor will change dramatically in our community in the next few months. With gas prices falling, the gas and oil industry is laying people off as I write this. Again, this is why something like this is a false sense of a district's ability to match a grant. Size should be the main factor. The bigger the district, the easier it is to have millions of dollars available for projects. Research will show economy of size is a huge factor in entities' ability to function.

6. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

This factor does have an impact on the General Fund. The higher the free and reduced percentages, the more money a district receives per pupil. We have many families that would qualify for free and reduced meals, but they will not apply because they feel it's a "government handout".

7. Bond Election failures and successes in the last 10 years – The more attempts the school district has had, the lower the match.

We passed a Bond 10 years ago to add on to our 55 year old building. We have not attempted another, as we have taken care of our old building and we have maintained it so it should last another 20-30 years. I feel districts that have not passed Bonds because they have maintained their facilities should not be penalized.

8. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

9. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

We do have some Bonding capacity, but as I stated in #7, we do not need a new building. Districts that have a great maintenance program and a history of taking care of what they have should not be penalized for doing preventative maintenance on their buildings.

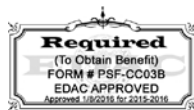
10. The school district's unreserved fund balance as it relates to their overall budget.

This again is a poor choice of numbers to use. Small districts have to have a higher percent of the General Fund in reserves than larger districts just to operate. If we have a roof that needs replaced it may cost over \$800,000 or almost 22% of our entire new Revenues. This \$800,000 roof would have next to no impact on larger districts.



11. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

This is not an extenuating circumstance, but I feel the point must be made we are hoping to match with a 50% match. This is a significant match, considering a 50% match would be 10.9% of our entire Revenues for the 2015-16 school year. A dollar per dollar comparison with DPS would mean if DPS matched any grant with 6.2% of their revenues it would amount to almost \$30,000,000. Small districts are getting the short end of this matching system.





**• Facilities Impacted by this Grant Application •****Montrose County RE-1J - MS Replacement - Columbine MS - 1960****School Name: Columbine MS**

Number of Buildings:	2
All or Portion built by WPA:	No
Gross Area (SF):	75,145
Replacement Value:	\$23,897,105
Condition Budget:	\$16,584,948
Total FCI:	69.40%
Energy Budget:	\$26,301
Suitability Budget:	\$3,128,500
Total RSLI:	20%
Total CFI:	82.6%
Condition Score: (60%)	2.66
Energy Score: (0%)	1.83
Suitability Score: (40%)	3.58
School Score:	3.03



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Montrose County RE-1J

**County:** Montrose

**Project Title:** MS Replacement

**Previous BEST Grant(s) Funded:** 8

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** 2013 BEST Grant Cycle. The state facility assessment did not fully support the project. It was noted that our project did qualify, but there were several more requests than funding.

## Project Type:

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School                    | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input checked="" type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation                    | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition                      | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security                      | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Montrose County School District (MCSD) RE-1J is located in rural southwest Colorado, covering 1,121 square miles and has a population of just under 41,000 citizens (USCB 2015). MCSD was initially founded in 1883 and consolidated with other smaller districts in 1962. Since that time there have been several new initiatives that the district has implemented. MCSD currently provide services beyond the scope of just education in the four core areas. Additional services include behavioral/emotional/physical health, extra curricular activities, student safety and preparing students for post-secondary education or the workforce. MCSD currently serves any student 3 years of age to adulthood through our continuum of services from early childhood to adult education. Since Oct. 2015, MCSD has been putting plans in place for a STEM (Science, Technology, Engineering and Mathematics) initiative. This initiative will transform the learning process for our students and their achievements.

The Montrose County economy has not rebounded as fast as Colorado's overall, with the county experiencing a higher than state average of unemployment rate and lower wages. Montrose is a community with a current unemployment rate of 9.5% as compared to the state at 3.5% (BLS, Nov. 2015) and a median household income of \$45,718 compared to the state at \$58,433 (USCB 2015). Wages continue to lag behind statewide wages. The average weekly wage of a Montrose County resident is \$879.19 compared to statewide \$1,123.71. That calculates to \$6.11 less pay for every hour of work performed (CDLE). These economic indicators are indicative of MCSD's 3,241 or 53% of students that qualify for free and reduced lunch. The daily economic struggles of this community are evidenced by the 40% of families who rely on subsidized food programs. Given this hardship, there would be no way Montrose could pass a bond election high enough to cover the cost of the entire project. The only way to be able to do so is with the help of the BEST Grant. MCSD has and will continue to seek funding for this project in the form of grants. If awarded the grant, the district would market the BEST Grant through collaborations with our community and seek a bond issuance in November 2016.

There are encouraging indicators in the community, as well:

\*Graduation rates are increasing, and the number of graduates and adults seeking post-secondary education and/or training continues to rise

\*Median sale price of homes has increased in the last year. The average homeowners have lived in their home for at least 5 years, and 85% of residents both live and work in Montrose County (city-data.com, 2015)

MCSD consists of 2 HS, 3 MS, 6 ES, 3 ECC, 2 charter schools, and 1 blended learning academy as well as District Offices, Maintenance and Warehouse facility. Columbine Middle School (CMS) is definitely not equal to any of the schools in our community, as it is one of the oldest buildings in our district and is UNSAFE. It needs to be replaced with a safe facility that our students, staff and community can be proud of. There are numerous safety hazards and health concerns that exist at CMS, along with concerns relating to facility security.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

MCSO utilizes a work order/repair processing system. In a 12-month period, 178 maintenance requests were submitted for CMS. This represents 14.83 requests per month for CMS alone. The current MCSO maintenance staff consists of 8 employees who take care of 20 campuses. MCSO buildings totals 715,319 square feet plus grounds. The 2015-16 Maintenance Discretionary Budget totals \$352,100 for MCSO repairs. Maintenance prioritizes their budget based on health and safety issues. Unfortunately, due to these constraints, the district does minimal preventative maintenance and is struggling to stay status quo. The goal of MCSO is to make sure every school in the district is safe and healthy for students, staff and the community.

### Deficiencies Associated with this Project:

This grant application addresses the deficiencies of Columbine Middle School (CMS). The Statewide Facility Assessment FCI values for CMS show the main building constructed in 1960 scoring 77.01%, with an overall campus FCI of 69.40%. The main issues with the CMS campus and main building are safety hazards, overall security and health concerns. Additionally, this school has educational suitability issues.

CMS was constructed in 1960 with additions in 1986 and 2008, thus making CMS one of the oldest active schools in MCSO. The 1986 addition was for a band room, weight room and storage. The 2008 construction was a stand-alone classroom building to meet the needs of the growing student population. The school district has taken all the steps within their means to maintain this campus facility throughout its 56 years of existence. To replace or upgrade the systems in the school and bring all the deficiencies up to current codes and standards would be cost prohibitive. The district assembled a group of staff, parents, community members and design professionals (architect, engineers and contractors) to identify every deficiency at CMS. The following specific deficiencies focus on the highest needs and those that pose the greatest risk to students and staff at this site.

#### A. STRUCTURE:

The majority of the building is composed of non-combustible masonry walls with a wood frame roof system (Type III B Construction). Based on the structural assessment from DOWL Engineering (February 2016 report), we found reference to concrete grade beams that span pile caps. No specifications for the piles were included. As was typically done in our area and in other schools in the early 60's, wooden piles were used for this purpose. Per the DOWL report, the soils at this site are fine-grained (silt, clay and fine sand) and have a seasonal shallow ground water table. It is our experience that when dry, these fine grain soils are firm and can support light loads. However, when saturated, these low density soils are very weak and compressible, even collapsible. The report also states while CMS' load bearing walls are performing satisfactorily, the original construction is approaching its design life and its remaining life should be an important factor if the existing structure is being considered for restoration. Interior floor slabs throughout have had significant settling (up to 6") creating various trip hazards. Signs of soil movement on the exterior of the school include large cracks in the entrance steps, cracks in the flat work adjacent to the brick planter at the entrance, and settlement/tilting of the brick planter. Some areas of the supporting foundation and brick veneer have visible cracks. MCSO Risk Management has several Incident Reports for students and staff from these trip hazards. This has also caused plumbing, electrical and mechanical failures addressed in the categories below.

#### B. FIRE SAFETY:

Throughout the building, narrow corridors and classrooms do not have fire rated separation. In an attempt to improve air quality conditions, portions of the transom windows have been removed between corridors and classrooms, which increases the danger of flame spread. The classroom doors and frames are original to the 1960 construction and are not fire rated. The narrow corridors cause congestion during passing periods and emergency drills. Although the fire alarm system was retrofitted in 2004, it does not meet current code. Most areas in this school lack required illuminated exit signs and emergency lights. Another fire code infraction includes using extension cords due to insufficient electrical outlets throughout the classrooms. Inadequate storage forces combustible items to exceed allowable fire code heights. In the event of a fire, with this Type III B Construction and no fire sprinkler system, it is likely someone would be injured.

#### C. PLUMBING:

The waste and vent piping system are original to the 1960 construction. Bighorn Consulting Engineers, Inc.-Mechanical, Plumbing and Electrical Assessment (January 12, 2016) states that due to the settling of the concrete floor slabs over the years, this system has had substantial damage requiring significant repairs. The entire waste piping system is in need of

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replacement. Due to the settling of the foundations over the years, the plumbing system has had significant maintenance due to pipe blockages, leaking and plugged conditions. CMS experience monthly sewage backups which flood the girls and boy's locker rooms. When the original cast iron lines are snaked, half the snake brings back mud indicating they are rotted through. This is an ongoing problem. The main sewer pipe leaving the building has roots through it and despite regular treatment and maintenance, back-ups are common. These issues pose significant health concerns and causes disruption in the school day for the students and staff. The domestic water heaters have reached the end of their life cycle and are in need of replacement as well. Sections of the domestic galvanized water pipe system has been redone. In 2001 a project to install new main copper piping overhead was necessary due to the settling issues and numerous leaks. The entire system could not be replaced due to access issues, so much of the galvanized pipe system remains. Holes are frequently cut in the walls throughout the school to repair leaks in these original pipes. While the district does their best to repair the affected areas, there are concerns regarding mold issues. Reviewing the history of Pinnacol Assurance Assessment Reports, CMS has had numerous water damage issues. Based on these reports and survey results, there are areas defined as Priority 1, that indicate locations where building materials and water damage have at least one additional positive indicator suggesting mold may be present. Recommended indicators to note during mold assessments include: suspected growth, musty odor, water damage and dampness. There are several documented statements from staff and parents over the years, regarding physical and health concerns they were experiencing while they were situated in the building. There has been mold at various times throughout all areas of the building. The MCSD Maintenance Department has done mold investigation and/or remediation each time water damage is visible.

### D.ELECTRICAL:

Bighorn's assessment also states the remaining original electrical system should be considered for replacement due to its antiquated equipment and failing underground service capabilities. In 2002 our Electric COOP required CMS to change transformers, prompting the necessary replacement of our main service panels. We were unable to address the main wire feeds to the sub panels with this update because of rusted conduit and wire length issues. Some of the underground branch feed wires from these panels have shorted and failed due to slab movement. Another cause for concern is that these panels date back to the original construction, are at full capacity and have lost their UL listing. Also in the original wiring, branch circuits and feeders were run under the slab in rigid metal conduit. Much of this pipe has rusted away leaving circuits ungrounded and subject to damage. Part of the purpose of the grounding is, if there is a ground fault to where one of the hot conductors shorts out, or there is a breakdown of wire insulation, the grounding conductor should safely take that current back to the source and cause the breaker to trip. If not grounded, the breaker may not trip. This scenario does present potential safety issues to students and staff related to electrocution. This also has the potential at any point to cause a loss of power to major parts of the building. Breakers do trip where classrooms share a single circuit, causing disruption of instruction time. This occurs two to three times a year causing computers and instructional projectors to shut down. It can take from 1 to 2 hours to address this issue which disrupts the daily lesson plan. These shared circuits severely limit the ability to meet the changing needs for the current or future curriculum demands.

### E.MECHANICAL:

Most of the current mechanical system is original to the 1960 construction and in various states of operation. Classroom pneumatic thermostat controls no longer work and their fresh air intakes are inoperable. Therefore, teachers must operate their heat ventilator manually. With no mechanical supply of fresh air, they must open the window above the ventilator. This is difficult to manage during the year and another cause of poor indoor air quality. This entire section of the heating system is very erratic. Classroom temperatures can range from 42° to 52° in some, while others can be 80° to 90°. The principal and staff state that when you walk into a classroom at CMS during the winter months, be prepared to see students and staff wearing their winter coats or just tee shirts as these heaters operate haphazardly. This is a daily classroom condition that affects students and staff 5 months out of a school year November – March (U.S. Climate Data). Hot water piping for these units has also been rerouted due to sinking slabs.

The heating and ventilation air handlers serving the cafeteria and gymnasium also have original pneumatic control systems that are no longer manufactured. As parts for these systems are no longer available, it would be necessary to have them custom fabricated. Finding qualified service personnel for repair of these systems is extremely difficult. Given the age of these controls and equipment the potential for failure is high. Repairs would likely be very costly and could create lengthy system shut downs. The four 1991 atmospheric Burnham boilers supply the heating source for the above-mentioned systems. These boilers are inefficient and are near the end of their functional life. With no air-conditioning in the original building except for

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two computer labs, classroom temperatures can range from 85° to 90° in August and early September. The 1986 north addition is serviced by rooftop swamp coolers and heating units. This equipment is also at the end of its service life and are in need of replacement. None of the schools' mechanical equipment effectively supports indoor air quality for students or staff. CO2 testing has been performed to get an indication of indoor air quality. The American Society of Heating, Refrigeration, Air Conditioning and Engineers (ASHRAE) suggests that CO2 should not exceed 650 ppm above background levels. The background level, taken outside at CMS was 450 ppm. The lowest level on the interior was 1250 ppm with a high count of 1850 ppm. CO2 levels from 1000 ppm to 2500 ppm can cause drowsiness and concentration issues. These levels indicate poor indoor air quality and raise health concerns regarding student and staff performance.

### F.ASBESTOS:

Due to the fact that CMS was built in 1960, Asbestos Containing Building Materials (ACBM) were used throughout. Plateau, Inc. (Professional Engineering & Industrial Hygiene Services) conducted a thorough assessment and investigation of CMS' ACBMs. Plateau's report not only defines quantity and location of all the ACBMs within this school, it also highlights some of the ACBMs that currently present immediate hazards to the occupants. The materials of concern are:

1. Floor Tiles: Vinyl asbestos floor tiles (VATs) and asbestos containing mastic. The VATs and the asbestos containing mastic make up approximately 86% of the floor covering. In cases where these materials become worn, degraded or broken they present a hazard to occupants, as is the case at CMS. Inspection of these VATs reveals that in numerous locations they have degraded to the point of being considered friable. Friable ACBM have the potential for releasing fibers into the air. According to regulations, the inspection indicates that approximately 5% of the VATs should be considered "damaged or significantly damaged" and the remaining should be considered "having a potential for significant damage". The useful lifespan of VATs is 20 to 30 years. CMS' VATs are 56 years old. An EPA Study indicates elevated asbestos levels as a consequence of regular floor maintenance activities (EPA/600/SR-95/121 Airborne Asbestos Concentrations during Buffing, Burnishing and Stripping of Resilient Floor Tile). The floor slabs that have settled significantly, in many areas up to 6 inches, have caused cracking of the slab and subsequent failure of the VATs placed thereupon. According to Plateau, Inc. a large portion of these tiles are in a condition in which they can no longer be managed in any other way than removal.

2. Thermal Systems Insulation: Thermal systems insulation (TSI) consists of friable asbestos containing materials used for thermal systems insulation and fire protection. This material has been identified around piping within the boiler room and some remaining piping in the attic of the building. Additional friable asbestos insulation has been identified within the fire doors/partitions at the entries to the mechanical rooms. The damage noted by Plateau, Inc. possibly exposes students and staff to asbestos fibers and has been given an assessment of "damaged or significantly damaged thermal system insulation ACBM".

3. Other ACBM: ACBM has also been identified in the kitchen and cafeteria area associated with the wall surfacing systems. This is a high traffic area so the safety of students and staff is a concern.

Plateau, Inc. completed an Asbestos Survey for Demolition of Columbine Middle School dated January 18, 2016 to gain accurate cost for removal.

### G.SECURITY:

Due to an outdated layout, the building is not secured. While MCSD has made attempts to improve this school's security, deficiencies still remain. The way the building functions makes it difficult to monitor visitors. Building security is a high-priority for the district as it presents serious safety concerns. The administration area lacks line of site supervision. A camera with limited view angles and an electronic lock is far from sufficient for a secure main entrance. We have nine other exterior doors to maintain secure as well. Camera quality is poor and overall coverage is approximately 60%. Due to inadequate mechanical equipment causing poor indoor air quality, the exterior windows of the classrooms are often opened to supply fresh air. This presents a security and safety concern. The interior hallway and corridor layout is of poor design and is very challenging to supervise and secure. Interior classroom doors are not able to lock from the inside. They must be locked from the hallway, if necessary, causing a safety issue for the teacher and students in the classroom. The doors also do not have vision glass that allows line of sight into the corridors during emergencies. CMS is 2 blocks away from Highway 550 so it could be an easy target for criminals passing through on the road and having a secure school is of paramount importance.

### H.ROOF:

CMS has 8,960 square foot of EPDM roof membrane over the gym, stage and choir room. The roof is in need of replacement as it is beyond its design life. Maintenance and outside contractors spend a great deal of time combating leaks throughout



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each school year. These continuing leaks have caused the need to abate mold contamination on numerous occasions. Events have been canceled due to these water leaks during school and after hours because of continuous slip hazards. This year, during a boys' basketball game, officials had to stop play and cancel the game because the leaks were so severe. Trash cans are placed under the leaks to prevent damage to the gym's hardwood floor. Leaks cause distractions during class time, not only from dripping noises, but also from custodial and maintenance personnel that must contain these leaks immediately to minimize damage and the potential for mold growth. The community has also been impacted by these deficiencies as many outside community events scheduled at CMS have been cancelled due to frequent leaks and unsafe conditions.

### I. KITCHEN:

This is the district's only remaining food serving line fueled with natural gas. The gas supply can surge and the pilot light shuts down periodically due to outdated equipment. This causes the kitchen staff to re-light the pilot to keep the serving line operational. The location of the pilot light has limited access causing the staff to be in unsafe positions. This puts them at risk for injury. The gas surges have caused excessive heat at this food serving line, making it too hot to touch, which compromises student and staff safety. This outdated equipment does not have built in safeguards or thermostat temperature controls.

As noted earlier in Section D Electrical: Kitchen appliance circuits have lost their protection and grounding. Since these circuits are not grounded, the breaker won't trip. This causes a hot/energized line presenting a high probability for electrocution.

The food store room is not in the kitchen area. With food stored outside the kitchen, there is no way for personnel to ensure food safety or security, as contamination from unauthorized persons could happen.

### J. EDUCATIONAL SUITABILITY:

All of the deficiencies noted in A-I above, have a negative impact on the learning and teaching environment. Current classroom conditions are not conducive to effective 21st Century learning. The facilities electrical and technological infrastructure does not support today's demands. This limited capacity will restrict what we can offer our students and community moving into the future. Classrooms having little natural light, poor temperature control and virtually no fresh air systems, do not promote a nurturing learning environment. Exterior windows are often opened for air movement during warmer seasonal months. As mentioned earlier in Section E Mechanical, during the winter months, the classroom temperatures range from 42° to 90°. In an attempt to increase air quality, transom windows have been removed causing further distractions from noise pollution. These poor conditions can cause students to become drowsy and unfocused.

CMS does not have any designated science labs in the main building and this affects student learning. The students cannot run chemistry experiments standard to the curriculum. The science classes are held in regular classrooms, making it much more difficult to do labs because of the deficiencies. The science classrooms in the building lack proper infrastructure and instrumentation. With the need for specialized educational programs, many of the smaller classrooms serve multiple and often conflicting uses. For the S.T.E.M. education model the following classrooms are not code compliant. The computer lab, at 750 square feet, is too small for research projects and effective class instruction. CMS' wood shop is not fully code compliant and is separated from the main building, thus causing concern related to safety and security.

### K. SITE:

1. Access: The student, staff and public access at CMS is haphazard and is dangerous. The bus loop entrance runs through a parking lot shared by staff and the City of Montrose's Rotary Park. The area encompasses the school playground, the school bus drop off/pick up, food service and warehouse deliveries, maintenance personnel, and ADA guest access. Students have to cross in front of the bus traffic as well as parent and staff traffic. The parents drop off for students is also shared with staff parking. This loop entrance is only 40' from the bus loop entrance and causes considerable traffic and pedestrian congestion. These entrances do not function well with the adjacent intersection of 12th Street and Park Avenue. So much so, that the City of Montrose submitted and was awarded a grant for improvement through the Federal Safe Route to School's Program. The City of Montrose's grant application is only for the intersection of 12th Street and Park Avenue does NOT improve the school's site/bus and student drop off loops as mentioned above. While this City improvement will help, it does not address all the safety concerns in this entire area as noted above.

2. Site drainage: As overall site drainage is inadequate; potholes have developed thus causing undermining of the pavement. This cannot be properly fixed without an engineered design and major rework. The paving on the school grounds is at end of



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its life expectancy, resulting in numerous safety hazards for students and staff. Significant movement, both up and down, has caused the concrete sidewalks and stairs that access the building to shift, which is resulting in numerous cracks and trip hazards. Without removal of the existing perimeter concrete and an engineered storm water management plan, these deficiencies will continue to get worse. As noted in the 2013 Master Plan, the main electrical transformer sits in the middle of a drainage path beside the bus loop. Consistent maintenance is required to keep this area free of dirt and debris, as water and snow can build, up and enter the building. All of the above factors present immense safety concerns.

### L.AMERICANS WITH DISABILITIES ACT OF 1990 (ADA):

CMS is not ADA compliant. We understand that we are grandfathered in regarding this deficiency. Montrose middle school students with handicaps have no choice but to attend Centennial Middle School. Handicapped parents and community members that want to attend events and student functions at CMS are forced upon an extra burden to access the school. If parked at our one designated handicap space, it would be necessary to travel 245' to access the gym. And, once in the gym, there is no ADA access to the rest of the school. In order to access the school, including the administration offices and the only ADA restroom, it would be 885' to the back door of the school. Due to this limited ADA access, special accommodations need to be made in advance in order to allow access thru the locked gate. From the back door it would be another 172' and two interior ramps to get to the ADA restroom and administration office area. In addition to the above mentioned deficiencies, one would have to navigate all of the exterior and interior trip hazards. From the gym, access to the locker rooms is by two sets of stairs, there is no ADA access.

CMS was the Red Cross location for our community to serve as an evacuation shelter in the case of a community wide emergency or disaster. Red Cross has decided not to utilize CMS as one of its shelters because it lacks some of the basic access requirements. Red Cross requires the facility to meet certain criteria, one of which is accessibility to the shelter for those that have functional and access support needs.

### M.ENERGY:

MCS D has an energy management plan that is currently in place through participation with the Governor's Energy Office—Energy Service Companies (ESCO). MCS D entered into a contract with McKinstry to perform energy retrofits throughout the district, with the exception of CMS. It was found that performing any retrofits to CMS would not be fiscally responsible due to the multiple deficiencies the building presents. CMS' building uses 50% more energy than Centennial Middle School, which is 40% larger and is supplied with air conditioning. This is due to the age and deficiencies as note within this grant application. Energy consumption at CMS is wasteful and a burden on the district's budget.

### Proposed Solution to Address the Deficiencies Stated Above:

MCS D's solution for addressing the deficiencies at this campus began in the 2006-2007 school year. Issues of overcrowding, and the already poor condition of this facility prompted the necessity to plan for the future. In 2006, the district assembled a group of staff, parents, community members and design professionals to address these issues. The groups' decision was to construct a stand-alone building that would complement the attachment of a new school. The 9,988 square foot eighth grade wing was approved for construction and completed in 2008. The eighth grade wing was funded by a sales tax initiative.

In 2015 MCS D formed another team of parents, staff and community members with design and construction professionals (Grey Wolfe Architectural, FCI Constructors, Inc. and NV5) to develop a plan, formulate budgets and review options. This team carefully studied current building capacities and desired program relocations in order to determine a responsible path for the future. A comparison study with cost analysis was completed to determine the correct course of action for the district and community. Based on input from the design team and reasonable assumptions, FCI Constructors developed hard costs for two options. Option one, a complete renovation with an addition to address current deficiencies and program needs came in at a hard cost of \$21,729,663. Option two, a newly constructed facility attached to the 2008 eighth grade wing, explained above, at a hard cost of \$30,328,122. The design team concluded that option one would be an inappropriate use of funds as the physical limitations of the building (load bearing walls are near the end of design life, unrated narrow corridors, poor security layout, educational suitability, ADA access) would not adequately address the numerous deficiencies and challenges the design and reconstruction would present.

With the District's 2013 Facilities Master Plan identifying CMS as the primary concern, also summarizing replacement as the best option, the planning team agreed unanimously to pursue option two. The team further reviewed and updated facility

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assessments confirming this course of action is in alignment with the district's long-range goals. The development of the 68,958 square foot conceptual design will meet current program needs with the flexibility to meet the academic requirements for a 21st century education. MCSD has invested the necessary time and resources to ensure the accuracy of every aspect of this grant proposal. Based on the conceptual design, input from the committee and reasonable assumptions, FCI Constructors developed hard costs for construction. NV5 has reviewed all grant documents for accuracy, as well as assisting MCSD with formulating accurate soft cost numbers related to this project.

A new building would address all of the deficiencies related to health, safety, security, and the educational environment. The impact of this proposed school replacement would not only be felt at the middle school level, but will help the district implement a more stream-lined educational delivery model that will impact the entire district population for generations to come.

A.STRUCTURE: The new building will be designed in accordance with an up-to-date Geotechnical soils report. Supported by an engineered foundation and floor system that will span the test of time.

B.FIRE SAFETY: The new building will be constructed of a Type II non-combustible. The facility will also be fully-sprinkled with adequate egress and fire separations throughout. Corridors will be properly sized and constructed for building safety.

C.PLUMBING: The new building will meet all plumbing code requirements and eliminate sewage backups and water system leaks.

D.ELECTRICAL: With a new electrical system, the school will have adequate electrical circuits to meet current and future curriculum demands.

E.MECHANICAL: The new building will meet the high performance requirement with a mechanical system that will provide adequate fresh air to every space. The specified mechanical system will be efficient and will provide safe, proper ventilation while maintaining the building temperatures.

F.ASBESTOS: There will be no asbestos-containing materials associated with this project.

G.SECURITY: The main entry will be secured by a vestibule leading through the administrative offices and the remaining entries will be secured throughout the day. The project will provide both passive and active security. Passive security features include clear view by administration to visitors entering the building. Active security features including electronic locks on all doors, at all entrances. There will be an intercom system which allows for ample communication in emergency situations. Security cameras will be installed. Architectural designed floor plan that addresses practical supervision to further ensure student, staff and visitor safety.

H.ROOF: The roof design will be reviewed by the district's roof consultant (Armstrong Group, Inc.) and designed accordingly for longevity and performance.

I.KITCHEN: Food preparation and associated facilities equipped and maintained to provide sanitary facilities for the preparation, distribution and storage of food will be designed as required by Colorado Retail Food Establishment Rules and Regulations.

J.EDUCATIONAL SUITABILITY: The new building will be constructed with long-term sustainable technology infrastructure. The facility will be built with sufficient data cabling and/or conduit and power infrastructure to allow for maximum flexibility as technological systems are upgraded and replaced in the future. Educational suitability will be greatly improved through better indoor air quality, temperature control, consistent lighting, and proper and suitable classroom size. The building will have adequate natural light and sufficient acoustical separation.

K.SITE ACCESS: A new site design has parent drop off and visitor parking accessed from 12th Street. The Bus loop drop off and staff parking will be accessed from South Mesa Ave. New sidewalks and crosswalks will improve and promote pedestrian connectivity for students walking to school. This separation creates safer pedestrian, traffic and fire lanes along with access provided around the building. The new design will incorporate a plan to effectively manage site drainage.

L.ADA: The new facility and site will meet the American with Disabilities Act, providing accessibility throughout to physically disabled persons.

M.ENERGY: The new building will meet the requirements of the High Performance Certification Program, providing a new, easy to maintain, low-cost facility with a life expectancy well beyond 50 years.

### How Urgent is this Project?

It is also very important to note that MCSD would not be able to address this very large problem on its own, without the help of the Best Grant Program. The design and construction of the building will follow best practices for modern, school design and construction.

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The urgency to address and correct the deficiencies at CMS is critical. Our students, staff and community are currently in a facility that is not a healthy nor safe environment. Our facilities staff has done the best it can with temporary repairs and “Band-Aids” to keep the building open. However, these solutions do not provide an adequate learning environment for middle school students in our district. We fear a catastrophic event related to any one of our thirteen deficiencies noted, is something that could become a reality in the near future.

Failure is defined as “the action or state of not functioning”. Deterioration is defined as “the act or process of becoming worse”. From these definitions, it could be said that Columbine Middle School in Montrose has already failed.

Based on the findings, through the assessments, it has been determined that CMS is at the end of its useful life. All necessary measures can and will be taken to keep this school functioning in the best manner possible until a new school can be built. Without a major investment in the near future to address the urgent and imperative needs, the buildings’ integrity and the safety of its occupants is seriously compromised. It is evident that there are significant deficiencies due to the age of the various systems affecting this building. These include, but are not limited to, the following: structural, fire protection, plumbing, electrical, mechanical, safety and security.

Failure of the various systems exist. The educational inadequacy is something CMS students have had to deal with for many years. This 56 year old building just isn’t the place for modern instruction of middle level learners.

If the project is not funded, CMS will be forced to continue to maintain this existing unsafe, inefficient and costly building. It is unknown how long the 56 year old building can maintain its integrity. Some of our most urgent concerns relate to the following:

A.STRUCTURE: Due to the current slab movements posing potential exposure to asbestos fibers through VAT fractures, the urgency is high.

B.FIRE SAFETY: The combustible nature of the roof system with non-rated corridors and no sprinkler system pose significant risks. The urgency is high.

C.PLUMBING: With sewage backups and water system leaks occurring more frequently, addressing the plumbing deficiencies is a high priority.

D.ELECTRICAL: In order to keep up with technology and curriculum demands, the unsafe antiquated electrical system should be replaced within the next year.

E.MECHANICAL: Maintenance of the current mechanical system is costly and can create lengthy shut-downs. Without the ability to perform effective repairs on the system, it is only a matter of time before the current mechanical system fails. The mechanical system needs to be replaced as soon as possible.

G.SECURITY: The building layout and overall security system causes this application to be very urgent due to deficiencies in safety and security.

H.ROOF: Approximately 20% of the roof system is deemed as somewhat urgent as the roof will continue to deteriorate with each passing year.

J.EDUCATIONAL SUITABILITY: With the poor indoor air quality due to high CO2 levels, it is non-conducive to a quality learning environment. This should be addressed very soon.

K.SITE: Correcting these deficiencies is urgent in order to address the safety of our students and staff with traffic and pedestrian congestion. Construction of the new facility will include storm water control facilities (e.g., detention ponds with controlled outlet structures) to manage the quality and quantity of storm water runoff from the roof and the site.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

A building replacement project will provide solutions to all of our deficiencies and conform to the Public School Facility Construction Guidelines as outlined below.

#### **A.STRUCTURE:**

4.1.1 Sound building structures. Each building should be constructed and maintained with sound structural foundation, floor, wall and roof systems. All building structures shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30 and ANSI S12.60, Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools.

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4.5.2 When determining if a facility should be replaced, the cost to rehabilitate versus the cost to replace should be evaluated.

The district will meet all the requirements listed in 4.1.1, 4.1.1.1 and 4.5.2.

### B.FIRE SAFETY:

4.1.6 Fire Management. Building fire alarm and emergency notification systems in all school facilities shall be designed in accordance with state requirements. Exceptions include unoccupied very small single story buildings, sheds and temporary facilities where code required systems are not mandatory and the occupancy does not warrant a system. All fire management systems shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30. 4.1.6.1 types of fire alarm notifications systems.

4.1.6.1.1 Internal audible and visual alarms.

4.1.6.1.2 External alarm monitoring and dispatch via internet/modem, telephone, radio, or cellular monitoring systems.

4.1.6.2 Types of fire suppression systems.

4.1.6.2.1 Fire hydrants.

4.1.6.2.2 Static fire water storage tanks.

The district will meet all the requirements listed in 4.1.6, 4.1.6.1, 4.1.6.1.1, 4.1.6.1.2, 4.1.6.2, 4.1.6.2.1 and 4.1.6.2.2.

### C.PLUMBING:

4.1.5 A potable water source and supply system that complies with the Colorado Primary Drinking Water Regulations, 5 CCR 1003-1, the Environmental Protection Agency's Safe Water Drinking Act, and the International Code Council's 2015 International Plumbing Code.

The district will meet all the requirements listed in 4.1.5.

### D.ELECTRICAL:

4.1.3 Electrical and distribution systems. Safe and secure electrical service and distribution systems designed and installed to meet the national Fire Protection Association 70: National Electrical Code (2014), and ASHRAE 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings.

4.1.3.1 Energy use intensity should not exceed the U.S. Department of Energy (DOE) building benchmarks, and shall conform to ASHRAE Standard Benchmark Energy Utilization Index (October 2009).

4.1.3.2 Emergency lighting shall operate when normal lighting systems fail in locations and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

The district will meet all the requirements listed in 4.1.3, 4.1.3.1 and 4.1.3.2.

### E.MECHANICAL:

4.1.4 Mechanical Systems. A safe and efficient mechanical system that provides proper ventilation, proper sound levels and maintains the building temperature and relative humidity. The mechanical system shall be designed, maintained and installed utilizing current State and Federal building codes, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

4.1.4.1 Healthy building indoor air quality (IAQ) through the use of the mechanical heating, ventilation and air conditioning (HVAC) systems or operable windows and by reducing air infiltration and water penetration with a tight building envelope.

4.1.4.2 Mechanical systems shall comply with: ASHRAE Standard 62.1-2013 Ventilation for Acceptable Indoor Air Quality, ASHRAE 90.1-2013 Energy Standard for Buildings except Low-Rise Residential Buildings, and ASHRAE Standard 189.1-2014 Standard for the Design of High Performance Green Buildings.

The district will meet all the requirements listed in 4.1.4 and 4.1.4.2.

### F.ASBESTOS:

4.1.8 Facilities with safely managed hazardous materials. Potential hazardous materials in building component, which are identified in the Asbestos Hazard Emergency Response Act (AHERA) report, may include: asbestos, radon, lead, lamps and

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devices containing mercury. Additional hazardous materials may include: science chemicals, cleaning chemicals, blood-borne pathogens, acid neutralization tank for science departments, and bulk fuel storage (UST/AST) management that may be stored by the occupant.

4.1.8.1 Public schools shall comply with all AHERA criteria and develop, maintain, and update an asbestos management plan, to be kept on record at the school district. This should include building survey of the exterior of the building, and identification of all friable, non-friable, and trace asbestos materials. Reference regulation Number 8, Control of Hazardous Air Pollutants, 5 CCR 1001-10.

4.1.8.2 All new facilities and additions shall conduct radon testing following completion of construction within nineteen months after occupancy as required by Colorado Department of Public Health and Environment, 6 CCR 1010-6.

4.1.8.3 Lead based paint. All schools shall conform to the regulations adopted by the Colorado Air Quality Control Commission governing the abatement of lead-based paint from target housing (constructed prior to 1978) and child-occupied facilities, reference C.R.S. 25-5-1101.

The district will meet all the requirements listed in 4.1.8, 4.1.8.1, 4.1.8.2 and 4.1.8.3.

### G.SECURITY:

4.1.9 The degree of resistance to, or protection from, harm. It applies to any vulnerable and valuable assets; such as a person, building or dwelling. Security provides a “form of protection where a separation is created between the assets and the threat.” These separations are generically called “controls” and sometime include changes to the asset or the threat. These separations and degrees of resistance can be achieved through several models and techniques.

4.1.9.1 Video Management Systems.

4.1.9.2 Controlled access.

4.1.9.2.1 Manual and 4.1.9.2.2 Automatic.

4.1.9.3 Front door security.

4.1.9.4 Door lock / intrusion detection.

4.1.9.5 Event alerting and notification (EAN) system.

4.1.9.6 Secure sites should include the following:

4.1.9.6.1 Locations to avoid.

4.1.9.6.2 Location of utilities.

4.1.9.6.3 Roof access.

4.1.9.6.4 Lighted walkways.

4.1.9.6.5 Secured playgrounds.

4.1.9.6.6 Bollards at main entrances and shop areas with overhead doors.

4.1.9.6.7 Signage.

The district will meet all the requirements listed in 4.1.9, 4.1.9.1, 4.1.9.2 and 4.1.9.2.1, 4.1.9.2.2, 4.1.9.3, 4.1.9.4, 4.1.9.5, 4.1.9.6, 4.1.9.6.1, 4.1.9.6.2, 4.1.9.6.3, 4.1.9.6.4, 4.1.9.6.5, 4.1.9.6.6 and 4.1.9.6.7.

### H.ROOF:

4.1.2 Roofs. A weather tight roof that drains water positively off the roof and discharges the water off and away from the building. All roofs shall be installed by a qualified contractor who is approved by the completion of the roof. The National Roofing Contractors Association divides roofing into two generic classifications; low-slope roofing and steep-slope roofing. Low-slope roofing includes water impermeable, or weatherproof types of roof membranes installed on slopes of less than or equal to 3:12 (14 degrees). Steep slope roofing includes water-shedding types of roof coverings installed on slopes exceeding 3:12 (14 degrees).

The district will meet all the requirements listed in 4.1.2, 4.1.2.1 and 4.1.2.2.

### I.KITCHEN:

4.1.11 Food preparation equipment and maintenance. Food preparation and associated facilities equipped and maintained to provide sanitary facilities for the preparation, distribution and storage of food as required by Colorado Retail Food Establishment rules and Regulations 6 CCR 1010-2.



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

The district will meet all the requirements listed in 4.1.11.

### J. EDUCATIONAL SUITABILITY:

4.2 Technology, including but not limited to telecommunications and internet connectivity technology and technology for individual student learning and classroom instruction.

4.2.2 Educational facilities with standard based wired and wireless network connectivity.

4.2.4 External internet service provider (ISP) connection and internal wide area network (WAN) connections meeting or exceeding recommended guidelines of the state education technology education director's association (SETDA) broadband imperative, and devices meeting or exceeding recommended specifications according to the most current version of technology guidelines for the partnership for assessment of readiness for college and careers (PARCC) assessments.

4.2.9 Building shall be constructed with long-term sustainable technology infrastructure. Facilities should be built with sufficient data cabling and/or conduit and power infrastructure to allow for maximum flexibility as technological systems are upgraded and replaced in the future. A plan for technology lifecycle review intervals should be put in place for review at 2-4 year intervals.

4.2.11 Connectivity standards.

### BUILDING SITE REQUIREMENTS:

4.3 Functionality of existing and planned public school facilities for educational programs, particularly those educational programs for which the State Board has adopted state model content standards. Capacity of existing and planned public school facilities, taking into consideration potential expansion of services for the benefit of students such as full-day kindergarten and preschool- and school based health services and programs.

4.3.1 Minimum occupancy requirements.

4.3.2 Other rooms.

The district will meet all of the requirements listed in 4.2, 4.2.2, 4.2.4, 4.2.9, 4.2.11, 4.3, 4.3.1 and 4.3.2.

### K. SITE ACCESS:

4.1.13 A site that safely separates pedestrian and vehicular traffic and is laid out with the following guidelines:

4.1.13.1 Physical routes for basic modes (busses, cars, pedestrians, and bicycles) of traffic should be separated as much as possible from each other. If school are located on busy streets and/or high traffic intersections, coordinate with the applicable municipality or county to provide for adequate signage, traffic lights and crosswalk signals to assist school traffic in entering the regular traffic flow.

4.1.13.2 When possible, provide a dedicated bus staging and unloading area located away from students, staff, and visitor parking.

4.1.13.3 Provide an adequate driveway zone for stacking cars on site for parent drop-off/pick-up zones. Drop-off area design should not require backward movement by vehicles, and be one-way in a counterclockwise direction where students are loaded and unloaded directly to the curb/sidewalk. Students should not have to load or unload where they have to cross a vehicle path before entering the building. It is recommended all loading areas have "No Parking" signs posted.

4.1.13.4 Provide well-maintained sidewalks and a designated safe path leading to the school entrance(s).

4.1.13.5 Building service loading areas and docks should be independent from other traffic and pedestrian crosswalks. If possible, loading areas shall be located away from school pedestrian entries.

4.1.13.6 Facilities should provide bicycle access and storage.

4.1.13.7 Fire lanes shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507.30.

The district will meet all the requirements listed in 4.1.13, 4.1.13.1, 4.1.13.2, 4.1.13.3, 4.1.13.4, 4.1.13.5, 4.1.13.6 and 4.1.13.7.

### L. ADA:

4.1.13.8 Playground shall comply with the American with Disabilities Act and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.

Although not specifically outlined in the Public School Facility Construction Guidelines, the district will comply with all current ADA codes to make the facility accessible in addition to meeting all the requirements of 4.1.13.8.



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

## M.ENERGY:

4.4 Building performance standards and guidelines for green building and energy efficiency. Section 24-30-1305.5 C.R.S., requires all new facilities, additions, and renovation projects funded with 25% or more of state funds to conform with the High Performance Certification Program (HPCP) policy adopted by the Office of the State Architect (OSA) if: the new facility, addition, or renovation project contains 5,000 or more building square feet; and the project includes an HVAC system; and if increased initial cost resulting from HPCP can be recouped by decreased operational costs within 15 years, and in the case of a renovation project, the cost of the renovation exceeds 25% of the current value of the property.

The district will meet all the requirements of 4.4.

4.4.1 High Performance Certification Programs.

4.4.1.1 Leadership in Energy and Environmental Design (LEED) for schools. Reference LEED 2009 for Schools New Construction and Major Renovations.

4.4.1.2 Colorado Collaborative for High Performance Schools (CO-CHPS).

The district will meet the requirements of either 4.4.1.1 or 4.4.1.2. If LEED is selected, the project will target LEED Gold certification. If CO-CHPS is selected, the project will target CO-CHPS built certification.

4.4.2 Renewable energy strategies.

4.4.3 Energy management plan.

4.4.3.1 Energy programs assist with creating a culture of energy efficiency within a school. Reference Energy Star Guidelines for Energy Management to help develop a plan.

4.4.4 Other energy efficient options.

4.4.4.1 ENERGY STAR Labeled HVAC/mechanical systems.

4.4.4.2 Windows, doors and skylights.

4.4.4.3 Building Envelope.

4.4.4.4 Lighting.

4.4.4.5 Commissioning, retro commissioning and re-commissioning.

4.4.4.6 Measurement and Verification.

4.4.4.7 Landscaping.

The district will meet the requirements of 4.4.2, 4.4.3, 4.4.4 if these systems are recommended by the design team and sustainability consultant of the new building project. Most items outlined in 4.4.2, 4.4.3 and 4.4.4 will automatically be required for LEED or CO-CHPS which the district has committed to following.

## **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

MCSD believes in a strong preventative maintenance program. This commitment is evident in the fact that many of the original buildings systems still function even though they are well beyond their life expectancy. Operations and maintenance training will begin early in the construction process. This will allow maintenance personnel more time to gain the necessary information and training associated with the new building systems. We also believe that cross training is important to the overall well-being of the facility, so our custodial staff will also be trained on the basic maintenance requirements.

The district budgets for maintenance and repairs are in two different funds: General and Capital Reserve. The budget line items for maintenance and repairs in the General Fund are considered to be operational types of costs, and in 2014-15 fiscal year was 9.1% of the General Fund. These line items include employee salary and benefits, supplies, purchased services, maintenance contracts and small equipment. Per Board policy, the district continues to allocate \$298 per pupil into Capital and Insurance Reserve Funds, even though this is no longer required by state law. The Capital Reserve budget is for major capital projects, repairs to buildings, building equipment, and land improvements. Capital Reserve costs for maintenance projects have been \$200,000-\$300,000 a year for the past 3 years.

The district is prepared to continue to budget the Capital Reserve allocation, as well as the same operating costs historically budgeted in the General Fund for maintenance of facilities.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:

This was built as a new middle school school in 1960 for Montrose County School District.

**FOR CHARTER SCHOOL APPLICANTS ONLY:** Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$12,492,021.53	<b>CDE Minimum Match %:</b>	63
<b>Current Applicant Match:</b>	\$21,270,198.81	<b>Actual Match % Provided:</b>	63
<b>Current Project Request:</b>	\$33,762,220.34	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	Yes
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		2016 Bond Election
<b>Total of All Phases:</b>	\$33,762,220.34	<b>Escalation %:</b>	12.5
<b>Affected Sq Ft:</b>	78,944	<b>Contingency %:</b>	19.65
<b>Affected Pupils:</b>	501	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$428	<b>Does this Qualify for HPCP?</b>	Yes
<b>Soft Costs Per Sq Ft:</b>	\$53	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$375	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$67,390	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	158		NA
<b>District FTE Count:</b>	5,682	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$475,548,432	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$83,694	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$4,964,106	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$45,128	<b>Outstanding Bonded Debt:</b>	\$5,920,000
<b>Free Reduced Lunch %:</b>	51	<b>Total Bond Capacity:</b>	\$95,109,686
<b>Existing Bond Mill Levy:</b>	1.729	<b>Bond Capacity Remaining:</b>	\$89,189,686

• Facilities Impacted by this Grant Application •

**Swink 33 - Swink Abatement and Security Upgrades - Swink K-12 - 1955**

**School Name: Swink K-12**

Number of Buildings:	5
All or Portion built by WPA:	No
Gross Area (SF):	110,246
Replacement Value:	\$31,326,689
Condition Budget:	\$15,600,598
Total FCI:	49.80%
Energy Budget:	\$0
Suitability Budget:	\$3,624,800
Total RSLI:	19%
Total CFI:	61.4%
Condition Score: (60%)	3.06
Energy Score: (0%)	0.94
Suitability Score: (40%)	4.06
School Score:	3.46



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Swink 33

**County:** Otero

**Project Title:** Swink Abatement and Security Upgrades

**Previous BEST Grant(s) Funded:** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |  |  |
|--|---|--|--|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof               | <input checked="" type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                     |
| <input type="checkbox"/> School Replacement  | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting                      | <input type="checkbox"/> Facility Sitework                 |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade            | <input type="checkbox"/> Land Purchase                     |
| <input type="checkbox"/> Addition            | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings                | <input checked="" type="checkbox"/> Other, please explain: |
| <input checked="" type="checkbox"/> Security | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement            | Kitchen Equipment Replacement                              |

## General Information About the District / School, and Information About the Affected Facilities:

Swink School District is the hub of the Swink community! Besides hosting school events, the campus is used for community or family gatherings weekly. The school is the only facility able to host large gatherings, especially with a cooking facility. In the month of January, the school was in use 28 of 31 nights and every weekend day. Our school is used by the Town Recreation League for practices and games. We are proud of the number of volunteers helping our school system and feel fortunate to be able to give back by allowing frequent civic and private campus use.

We are leaders in the SE region, many times serving as the host site for the entire southeast region for state and regional workshops, be they educational, agricultural or governmental in nature. Both Democratic and Republican County caucus meetings are held at the school. This spring, one of three CDE sponsored safety trainings will be held here.

The District supports approximately 380 K-12 students, on one campus located in southeast Colorado. Our primary kids are purposely in daily contact with our secondary students. In recent years, the District has been awarded several academic awards multiple times: "Accredited with Distinction", "National Title I School", Healthy Schools Champion and "John Irwin School of Excellence". Swink provides a 1:15 student to teacher ratio, or less, in all classes. High school students are able to access the local Junior College and take on campus concurrent classes from our instructors and via telepresence. Many graduate with enough credits for an AA degree. Recognizing the need to prepare our students for 21st Century Skills, we are dedicated toward a technology emphasis which includes teaching Coding and Robotics, flipping classrooms, and providing Wi-Fi access and devices for all students. Our graduating classes of approximately 25 students earn over \$1,000,000 in scholarships each year due to their academic, activity and volunteer achievements. From 6 a.m. to 9 p.m. our facilities are busy as 90% of our students participate in extra-curricular activities. Sports and Academic teams compete at most regional play-offs and many times at state contests. Students take advantage of music, art and drama programs.

There is noted pride in our facilities, which are well maintained. We are fortunate to have a maintenance crew that can handle most of our repair needs. Our students respect the effort that has been placed in building and maintaining our school campus by refraining from vandalism and graffiti. It is understood in our District that excellence begins with our facilities and ends with our students.

Our student count has slowly declined in recent years, but careful planning and saving has allowed us to continue to invest in our campus. We have been able to provide two new facilities in the last ten years. Now, we are being diligent in our efforts to replenish our reserves and Capital Construction funds, so we can continue to be strong financially.

Swink's current goal is to be proactive in the health and safety of our staff and students. Like any rural community sometimes we are too trusting and know we need to change this mindset. We seek this grant to complete four projects with these goals in mind: 1) abate and replace asbestos tile in our kitchen/multi-purpose area, 2) replace unsafe kitchen equipment, 3) improve access control in multiple areas, and 4) update our camera security system. One time "Small Rural Schools" funding has made it possible for us to provide our BEST grant match.

Application for this BEST grant and planning for school security and safety has been a community effort. Our parents and Accountability Committee have been active in surveying our community and providing input into this issue. We have sought

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

input from our local law enforcement and state resources. Our administration is facilitating the review and redesign of our District Crisis Plan.

### Deficiencies Associated with this Project:

Swink School District has four specific deficiency areas that we would seek to remediate with funds from this BEST grant request. Our kitchen and multi-purpose room have a deteriorating tile floor which contains asbestos in the tile and mastic. The kitchen contains two key pieces of equipment which are unable to safely meet the needs of our kitchen preparation team and require significant maintenance. The current access points into the school have no controls to limit or monitor access, resulting in a significant safety gap for our students and staff. We have two main entrances which remain unlocked all day, and multiple other areas which are not monitored and allow for unknown access. Our security camera system is insufficient to meet the safety needs for monitoring of our campus.

1. Kitchen/Multi-Purpose Room Floor: Our preparation and serving kitchen has a floor that is cracked and coming up in approximately one-third of the area. Because of the presence of asbestos in the tile and mastic, any damage to the floor becomes an immediate concern for hazardous material exposure. As the floor deteriorates, more of the asbestos containing material is exposed, which we are unable to address without a professional abatement team. The multi-purpose floor contains the same types of materials, and is also confirmed to have asbestos. Due to the heavy use in this room by the school and the community, any damage to the tile floor is a health hazard for exposure.
2. Range and Refrigeration/Freezer Unit: Maintaining the proper temperature when food is being cooled, as well as heated, is a concern for our food safety. The oven does not heat evenly. Two of the stove burners do not light and cannot be used, resulting in cooking pans being shuffled between working and non-working units, which results in a longer and more uneven cooking process. Additionally, either side of the refrigeration/freezer unit often quits working and requires frequent repairs. When this occurs, we must determine how long the food was kept without proper temperature and if it should be transferred for storage or discarded. This puts the welfare of our students and staff in jeopardy as the degree of risk for food contamination is greatly increased both immediately before and during the time periods when the unit is not operating.
3. Access Controls: Our primary entrance doors (the Main Vestibule, located on the front of the building, and our Corridor Vestibule, located at the rear of the building adjacent to the multi-purpose room and Elementary wing) are currently secured during non school hours only via lock and key. The Main Vestibule is partially in sight of the main office; however, the Corridor Vestibule is away from the office and has no visual monitoring. Additionally, we have two other doors which provide student ingress/egress into portions of the campus buildings which must remain locked due to the lack of visual control in these areas. However, students routinely prop open these doors and allow others access into the main building (via the "Senior Door" in the Secondary wing) and our New Gym building, which we are unable to monitor. Our staff is unable to provide any control of who is entering and exiting the building in these locations which results in a significant safety concern. Additionally, we have an interior set of doors into our Elementary wing which are secured via a floor bolt system only and remain open except during community events in the multi-purpose room. If an intruder were to enter the building during school hours, there is no control limitation to this wing of our building, which puts our youngest students at the most risk. Similarly, two sets of metal doors into the Secondary wing remain open and allow unrestricted access to this portion of the building as well.
4. Camera Security: Swink currently has 28 cameras installed both inside and outside our buildings. Our New Gym has no camera monitoring and we can't control and use "teachable instructional moments" for students who make poor actions that cause damage. For example, the panic bars on the doors are continually broken because students jump and use their feet to kick open the door. There are parking lot blind spots and community and student vehicles have had tires punctured, fender-benders not reported and other vehicle tampering. There are three key areas on the interior of the main building that are not monitored. Due to the lack of adequate coverage, certain areas of our property, as well as access points to our school, are not monitored. This coverage deficiency results in a safety hazard to all of our students, staff and campus visitors because we do not have information as to what is happening on our campus.

### Proposed Solution to Address the Deficiencies Stated Above:

To adequately address the current safety and security deficiency issues we feel we have chosen the most financially responsible solutions. Our Swink team has worked closely with our owner's representative, NV5; our architect, Hangar 41; and multiple other contractors and vendors to narrow down an efficient and effective solution to the challenges we currently face in providing a healthy and safe environment for our students, staff, and community.

1. Kitchen/Multi-Purpose Room Floor: We plan to remove and abate the existing asbestos tile and mastic utilizing qualified abatement professionals. TEM clearance tests will be conducted as applicable and all State permitting and clearance



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

processes will be followed. We will replace the tile once removed with a durable and affordable vinyl composition tile which will allow the flooring to last for many years to come.

2. Range and Refrigeration/Freezer Unit: We propose to replace the deficient units with equivalent equipment, as determined by a professional kitchen equipment supplier. We have researched the existing model numbers and determined which equivalent units will meet our needs.

3. Access Controls: For our Main Vestibule and Corridor Vestibule access points, we plan to address the lack of secure, visual access at these doors by installing a video intercom/remote door control system which will connect to the main office. This intercom will allow our staff and administrators to see and hear all requests to enter the school, as well as remotely unlock the door. Additionally, the doors will have timed locks so that before school and during passing periods (Corridor Vestibule) the doors will have unrestricted access, allowing our campus to maintain its open feel. Our other exterior doors, the Senior Door and New Gym access door, will be provided with timed locks and perimeter monitoring. As with the vestibule doors, the timed locks will allow ingress of our students into necessary sections of the building. However, the perimeter monitoring will allow for our office staff to be notified if unauthorized entry occurs. For our interior Elementary Security Doors, we plan to install hollow metal security doors, with all appropriate panic hardware and a magnetic hold open system. This will be tied into a panic button at the main office which can remotely trigger the door closure and restrict access into the Elementary wing should a security situation arise. However, the door will still allow for emergency egress as required by code. The existing security doors into the Secondary wing of the building will be wired to this panic button also. In the event of a lockout/lockdown situation which occurs in the main portion of our building, our office staff can restrict access of an intruder into our Elementary and Secondary education wings until emergency responders arrive.

4. Camera Security: Our existing camera equipment and monitoring system will be replaced with equipment that is functional and integrates into a comprehensive video monitoring system. New cameras will be added to provide coverage in previously missing areas. Portions of the system will be tied to applicable perimeter monitoring (at the Senior Door and New Gym access) for central viewing in the main office. This system will be an IP based system to allow for remote access as needed.

### How Urgent is this Project?

There is significant urgency to all the deficiency items we are seeking to address with the assistance of this BEST grant.

1. Kitchen/Multi-Purpose Room Floor: The floor in our kitchen is already deteriorating and poses an immediate hazard to our students, staff and community. Although our maintenance team strives to maintain the floors as best as they can, due to the nature of a high-occupancy kitchen, continued deterioration occurs. Our multi-purpose room is in better condition than the kitchen, however, it still contains hazardous asbestos containing materials which cannot be removed without professionals. Damage to the floor is starting to occur in this area also, which allows for even more unhealthy exposure.

2. Range and Refrigeration/Freezer Unit: The deficiencies which are currently occurring with both of these pieces of equipment will continue. Routine maintenance and reactionary repairs are rapidly reaching the point where these types of repairs will be unable to keep up with the issues that continue to occur. At that point, our kitchen will no longer be functional and we will be unable to provide an adequate lunch program for our students.

3. Access Controls: There is no access control to provide for safe, secure, and monitored ingress into the school. While our staff does the best they can to limit the locations of available access points, the nature of our building layout(s) and needs of students dictate that we cannot maintain security at all times and still allow our school to function. There is an immediate urgency because we currently have no method of addressing this concern with our current setup.

4. Security Cameras: The lack of coverage in certain areas, both interior and exterior, allow for gaps in our current security monitoring. This is a critical concern in the event of a security situation and exposes the existing deficiency in the system.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

Our current BEST grant application scope meets multiple aspects of the Public School Facility Construction Guidelines 1 CCR 303(1).

Hazardous Materials: Section 4.1.8 Facilities with Safely Managed Hazardous Materials.

-Section 4.1.8.1 AHERA Compliance. Our school has identified Asbestos Containing Materials (ACM) in our kitchen and multi-purpose room floor tile and mastic. After abatement, we will have removed this hazardous material to benefit the safety of our educational and public communities. We will work with our environmental consultant to update and maintain a current AHERA plan for any remaining hazardous materials.

Safety and Security: Section 4.1.9 Security



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Section 4.1.9.1 Video Management Systems (VMS).

-Section 4.1.9.1.1 Cameras. Our existing cameras will be replaced as needed and new cameras added to increase the quality and coverage of our current system. New cabling will be run as needed to meet the requirements of Section 4.1.9.1 and camera functionality will be as required.

-Section 4.1.9.1.2 Closed circuit or IP video recorders. Our central location will be within the administration office and provide recording and monitoring.

Section 4.1.9.2 Controlled access.

-Section 4.1.9.2.1 Manual.

oSection 4.1.9.2.1.1 Limited entryways. Our new access control plan will limit public/unauthorized access to two monitored locations.

oSection 4.1.9.2.1.2 Locked exterior doors with panic hardware. Existing hardware will be replaced to meet these guidelines, where required.

-Section 4.1.9.2.2 Automated. Faculty will be provided with keys to access the secure vestibules, as well as the exterior office door. Student access will be controlled through the front office via the secure vestibules, so no additional verification is required.

Section 4.1.9.3 Front door security.

-Section 4.1.9.3.1 Building vestibules. The existing building provides for two secured vestibules as needed for access control.

-Section 4.1.9.3.2 Video entrance systems. The new system will meet the requirements of this system, including 4.1.9.3.2.1 and 4.1.9.3.2.2.

-Section 4.1.9.3.3 Line of Sight. The main office is located away from both entrances. Therefore, visual verification of people accessing the building will be via a video intercom system, as well as security cameras.

Section 4.1.9.4 Door lock/intrusion detection. The new access controls implemented at the four intended control points will meet the requirements of this section.

Section 4.1.11 Food preparation equipment and maintenance. By replacing the ACM tile and mastic and current deficient equipment, the kitchen and multi-purpose room will meet the standards of this section.

### **How Does the Applicant Plan to Maintain the Project if it is Awarded?**

Swink School District takes a proactive approach to maintaining our campus. Routine cleaning, maintenance and inspection are completed daily to ensure student and staff safety and that our equipment and facilities have a maximum life span. We will continue this approach with the equipment purchased and improvements completed with this BEST grant. We strive to ensure a long life for our students, through safety precautions, and for our facilities, through consistent cleaning and maintenance.

There will be no need to budget for or maintain controls of the asbestos mastic and tile in the kitchen and multi-purpose floor once it is abated. It will finally be gone! The new kitchen and multi-purpose room floor will be maintained on the same routine as the rest of our facility tile floors: 1) floor will be stripped and scrubbed once a year during summer vacation, 2) 5 to 6 layers of wax are applied after the scrub with more applied mid-year if needed for protection, 3) bi-monthly buffing maintains floor wax and sheen, 4) daily cleaning happens for health and safety assurance. The General Fund Maintenance Supply line item will continue to budget funds for floor maintenance and cleaning based on current supply costs.

Our new kitchen equipment will be cleaned on a daily basis. Through daily use this equipment will be under constant surveillance for wear and tear. Any maintenance and repair needs will be reported immediately to our maintenance staff and either fixed by our team or contracted out for needed repairs. Quarterly routine inspections are conducted by our maintenance crew on all electrical and cooling equipment. Couplings and plug-ins are also inspected. The Swink School District budget will continue to reflect the current rate of funding for purchased service and supplies for kitchen maintenance, but we anticipate that we will not use all of these monies due to the new equipment durability. Maintaining this yearly funding amount should be sufficient for several years.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

It is our plan to require our door manufacturer/company to provide training and assistance for our staff on inspection and maintenance of our new door security system. Routine door maintenance will become part of our proactive approach to our facility plan. We also know that we will need to instruct students and staff on a consistent basis on proper use of this new door equipment and hardware.

Currently, we budget significant funds for maintenance and repairs of our old camera system. Funds for purchased service for our new camera equipment will continue to be budgeted for in our General Fund, with a shared budget for access control maintenance. As the equipment ages, more funds will be designated for camera equipment repairs. Our maintenance staff inspects camera equipment on a routine basis. Office staff will daily watch and report issues through screen monitoring.

Swink School District will continue to build and maintain a Capital Construction Capital Projects fund that will insure replacement of kitchen equipment, door replacement and camera upgrades when we anticipate the end of their useful life. We also have a District Policy that requires a minimum amount of money be put into this fund on a yearly basis. Eight of the past 10 years we have exceeded this transfer amount. District procedure requires that our operating reserves be maintained at four times our monthly operating expenses. This insures that funds are available for the unanticipated crisis needs. A yearly facility needs plan is made for the coming year in April, as well as for three year and five year projections. District budgets are made with these plans as a basis.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The five buildings on the one campus of the Swink School District reflect the decade of their original construction and subsequent additions. The original building was constructed in 1955. The multi-purpose room and kitchen of this facility are still currently being used and shared by both the elementary and secondary students. The lunchroom also serves as a multi-purpose room for the school and community, and includes a stage area. The original floor tile is in place but is missing, cracking and lifting in several places. It contains asbestos tile and mastic, as confirmed by a recent sampling. Part one of this grant request seeks to abate and replace that tile in the kitchen and multi-purpose room. Having exposed asbestos flooring in our food preparation and lunchroom areas is a health concern for all.

The second part of this grant requests funds to replace two pieces of kitchen equipment: a range and refrigeration/freezer unit. Both were purchased new and installed during a 1960's construction project. The oven does not heat evenly. Two of the stove burners do not light and cannot be used; thus, cooking pans are shuffled between working and non working units. These faulty operating areas make food preparation a safety concern as proper cooking and heating temperatures are difficult to maintain. Maintaining the proper temperature when food is being cooled, as well as heated, is also a concern for our food safety. Either side of the refrigeration/freezer unit quits working and requires repairs bi-monthly. When this occurs, we must determine how long the food was kept without proper temperature and if it should be transferred for storage or discarded. This puts the welfare of our students and staff in jeopardy as the degree of risk for food contamination is greatly increased both immediately before and during the time periods when the unit is not operating.

Part three of our grant request seeks assistance to implement access controls for the two main buildings of our campus. Currently all of the doors to the main building and gym are locked during school hours except three, which are unlocked for students, staff and public to enter and transfer between buildings. A fourth door is locked from the outside but because it is located in the well used, secondary student hallway it is often propped open by students. In 1996, an addition was made to the secondary education section of the original building. This addition relocated the office area that centrally served both the elementary and secondary wings of the school. That meant that these four "high risk" doors are out of direct sight of the office. The layout of the school allows for those who enter to duck into various parts of the building without checking into the office or being seen. Being unable to monitor and control who enters our building puts our students and staff at risk for violence and unwanted disruption. Four years ago, when we began to evaluate and plan for safety and security we recognized today's need to lock and monitor all of the doors. That has caused us to seek BEST grant funds to provide access controls at these primary doors and monitor them from the centrally located office via a video intercom apparatus, a timed-lock system and/or an open door alarm. Besides securing the outside door entrances we are requesting BEST grant funds to provide an additional level of door security on three of our inside hallway doors. Currently we have three sets of double doors in our

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

hallways that can be manually closed and locked via a master key. We manually close these doors when we want to limit access to parts of our building during school and community events. For safety, we want to be able to close and secure these doors from the office area in the event of a safety emergency. Due to the remote location of our school and lack of local law enforcement, the response time for help is approximately 25 minutes. Having these interior doors serve as another barrier for intrusive acts will improve student and staff safety. Two sets of existing doors are metal and provide adequate security, but one set of doors will need to be replaced as they are in poor condition to provide security and do not meet current codes. This extra interior door security, combined with exterior door monitoring and security will greatly reduce our current safety risk of unwanted intrusion.

Fifteen years ago Swink began to purchase and install security cameras. These have been replaced and added to as funds allowed. Thus the system is pieced together and doesn't always interface properly. The camera models are old and the resolution is poor, at best. Placement of the cameras is not at optimal points. Our students and community know that our system is unreliable and with this knowledge they are not deterred from making poor behavioral choices, as evidenced by our recent increase in incidents that occur in areas that are not monitored. Not having a workable and effective video monitoring system is jeopardizing the safety of our students and security of our facility. Asbestos testing was completed for all areas where cameras would be installed, with negative results for ACM.

The Swink School campus has grown and been remodeled over the years as the needs of our students, teachers and staff have changed. We are eager to address the current needs for safety and security, which we are unable to achieve without BEST assistance.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$164,816.52	<b>CDE Minimum Match %:</b>	34
<b>Current Applicant Match:</b>	\$84,905.48	<b>Actual Match % Provided:</b>	34
<b>Current Project Request:</b>	\$249,722.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		General Fund Reserves and Small Rural Schools Fund
<b>Total of All Phases:</b>	\$249,722.00	<b>Escalation %:</b>	5
<b>Affected Sq Ft:</b>	60,545	<b>Contingency %:</b>	16
<b>Affected Pupils:</b>	381	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$4	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$3	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$1	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$655	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	159		NA
<b>District FTE Count:</b>	366	<b>Bonded Debt Approved:</b>	\$2,500,000
<b>Assessed Valuation:</b>	\$17,506,164	<b>Year(s) Bond Approved:</b>	07
<b>PPAV:</b>	\$47,831	<b>Bonded Debt Failed:</b>	

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Unreserved Gen Fund 13-14:** \$1,693,342

**Median Household Income:** \$48,795

**Free Reduced Lunch %:** 43

**Existing Bond Mill Levy:** 11.645

**Year(s) Bond Failed:**

**Outstanding Bonded Debt:** \$1,985,000

**Total Bond Capacity:** \$3,501,233

**Bond Capacity Remaining:** \$1,516,233

• Facilities Impacted by this Grant Application •

**Haxtun RE-2J - ES Playground Replacement - Haxtun ES - 1962**

**School Name: Haxtun ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	33,993
Replacement Value:	\$9,245,078
Condition Budget:	\$6,126,266
Total FCI:	66.27%
Energy Budget:	\$11,898
Suitability Budget:	\$2,666,500
Total RSLI:	9%
Total CFI:	95.2%
Condition Score: (60%)	3.23
Energy Score: (0%)	1.93
Suitability Score: (40%)	3.85
School Score:	3.48



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Haxtun RE-2J

**County:** Phillips

**Project Title:** ES Playground Replacement

**Previous BEST Grant(s) Funded:** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |   |  |
|--|---|---|--|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems                     |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework                 |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase                     |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input checked="" type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security              | <input checked="" type="checkbox"/> ADA     | <input type="checkbox"/> Window Replacement | Playground refurbishment                                   |

## General Information About the District / School, and Information About the Affected Facilities:

The Haxtun RE-2J School District is located on the northern edge of the town of Haxtun, in Phillips County in northeastern Colorado. The district serves the local community, as well as outlying families. Haxtun is a Statutory Town with a population of 946 (per the 2000 Census). The original school building was constructed in 1964, which now houses the preschool and elementary. The building expanded with a gymnasium addition in 1976 and a high school addition in 1989. In 2014, the district was awarded a BEST grant for a middle school Addition/Elementary remodel which was completed in December of 2014. The RE-2J District administrative offices are located within the high school wing of the facility. The 2014-2015 enrollment is a total of 331 students PK-12th Grade. Once the changes to the buildings were completed, the District determined that the existing playground surface and equipment present an unsafe environment for students. In order to improve life safety for PreK-fifth grade students, the outdoor areas need to be addressed. The latest revised CDE Statewide Facility Assessment assigned an FCI score of 63.89% to Haxtun Elementary School and a CFI score of 95.7%. Haxtun High School was assigned an FCI score of 42.90% and a CFI score of 59.0%. This grant application will only address the deficiencies of the preschool and elementary school playgrounds with the inclusion of life safety. The primary concern is the lack of a suitable surface to safeguard students from injury, as well as the lack of ADA compliant equipment. Now the current surfacing and equipment are becoming less and less feasible to simply maintain and require replacement. All of the district facilities have been well-maintained by a small staff with limited resources. B.E.S.T. grant funding would be specifically directed towards improved safety and providing healthier outdoor environments for students.

## Deficiencies Associated with this Project:

Elementary playgrounds are no longer safe. Surface has broken up. Equipment has deteriorated. District funding has gone towards teaching staff and curriculum, and little is available for repair/replacement of playground. Chain link fencing is old and wearing to the point that younger students can easily get arms and legs caught beneath and between sections.

## Proposed Solution to Address the Deficiencies Stated Above:

Replace existing resilient surface and playground equipment with safer alternatives. Equipment will be handicapped accessible. Sidewalks will be widened, a concrete curb poured under fencing to raise it above surface, and fence will be replaced. A gate will be added where there is not one now to add to security of the area.

## How Urgent is this Project?

The surface and equipment are already failing and replacement should begin within one year. Injuries to students (broken arms, legs, bruising) have occurred due to inadequate surface cushioning and missing portions of the surface. Playground equipment is broken and unsafe. Improvements should be made before the start of the 2016-17 school year.

## How Does this Project Conform with the Public School Facility Construction Guidelines?



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

4.1.13.4 - Provide well-maintained sidewalks and a designated safe path leading to the school entrance(s). Sidewalk adjacent to playground is used for bus loading/unloading. Because it is narrow, and gravel spills onto sidewalk from playground that sits high than sidewalk, it is treacherous. Buses park right next to the sidewalk and during both the morning and afternoon, the narrow space is crowded and unsafe for students and adults monitoring them. The fencing separating playground from the sidewalk bordering public street is old and bent, creating risks of cuts and scrapes when students get limbs caught underneath it. At the front of the playground, there is an opening large enough to drive a snowblower or maintenance vehicle through, but there is no gate to secure the area.

4.1.13.8 - Playgrounds shall comply with the Americans with Disabilities Act and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30.  
None of the playground equipment in the elementary playground is ADA compliant.

2.1 - Facilities with preschools shall comply with Rules Regulating Child Care Centers (Less Than 24-Hour Care) 12 CCR 2509-8 and shall comply with the Colorado Department of Public Health and Safety's Regulations Governing Child Care, 6 CCR 1010-7. Preschool playground surface is deteriorating due to sun, heat and cold, as well as use by students and community members. The chain link fence that separates the pre-school playground from delivery driveway and elementary playground is dangerous. It is bent and we are unable to repair it in such a way to keep students from getting arms and legs caught under it.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

The servicing and maintaining of an aging playground requires a lot of attention due to the year-around use of the outdoor area by students and their families. The district realizes that it will increased use if a new surface and structures are added, and plans to use savings to insure the sustainability of funds for preventive maintenance planning. Approximately \$5000 annually is projected to be needed for continued maintenance of facility systems and grounds, and will be reflected in our maintenance department budget. There are other costs associated with preventive maintenance. Which will be funded by the maintenance department budget with the labor provided by district maintenance staff.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Playground originally was constructed in 1960 with a tarmac surface. Poured rubber surface installed in 2004, but weather and use have destroyed surface, making it unstable and dangerous, as well as unhygienic. Frequent injuries occur when students fall on inadequate surface, and equipment is hard to replace/repair due to age and cost. None of structures are ADA Compliant.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$197,960.49	<b>CDE Minimum Match %:</b>	37
<b>Current Applicant Match:</b>	\$116,262.51	<b>Actual Match % Provided:</b>	37
<b>Current Project Request:</b>	\$314,223.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	General Fund	
<b>Total of All Phases:</b>	\$314,223.00	<b>Escalation %:</b>	0
<b>Affected Sq Ft:</b>	9,000	<b>Contingency %:</b>	10

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<b>Affected Pupils:</b>	140	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$35	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$25	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$10	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$2,244	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	64		NA

<b>District FTE Count:</b>	288	<b>Bonded Debt Approved:</b>	\$3,250,000
<b>Assessed Valuation:</b>	\$29,866,442	<b>Year(s) Bond Approved:</b>	13
<b>PPAV:</b>	\$103,523	<b>Bonded Debt Failed:</b>	\$1,055,000
<b>Unreserved Gen Fund 13-14:</b>	\$1,355,242	<b>Year(s) Bond Failed:</b>	07
<b>Median Household Income:</b>	\$44,688	<b>Outstanding Bonded Debt:</b>	\$3,385,862
<b>Free Reduced Lunch %:</b>	33	<b>Total Bond Capacity:</b>	\$5,973,288
<b>Existing Bond Mill Levy:</b>	11	<b>Bond Capacity Remaining:</b>	\$2,587,426

• Facilities Impacted by this Grant Application •

### Holyoke RE-1J - JrSr HS Life Skills Classroom Renovation - Holyoke Jr/Sr HS - 1975

**School Name: Holyoke Jr/Sr HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	119,400
Replacement Value:	\$37,809,241
Condition Budget:	\$21,188,128
Total FCI:	56.04%
Energy Budget:	\$41,790
Suitability Budget:	\$2,425,600
Total RSLI:	16%
Total CFI:	62.6%
Condition Score: (60%)	2.95
Energy Score: (0%)	2.14
Suitability Score: (40%)	4.10
School Score:	3.41



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Holyoke RE-1J

**County:** Phillips

**Project Title:** JrSr HS Life Skills Classroom

**Previous BEST Grant(s) Funded:** 3

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School            | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security              | <input checked="" type="checkbox"/> ADA     | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Phillips County is located on the beautiful high plains of Northeastern Colorado. Situated less than 30 minutes south of Interstate 76 and I-80, the county's eastern border presides next to Southwestern Nebraska. The county is only 150 miles (approximately 2-2.5 hrs) from Metro Denver and major U.S. trade corridors. Haxtun, Paoli, Holyoke and Amherst are the towns located in Phillips County. The total county population in 2010 equaled 4,442. Holyoke is the county seat and the heart of Phillips County and is a progressive but peaceful place to enjoy life. It is home to half of the county's population at 2,261, making it the largest populated community in the county. In 2007, the median family income was \$39,430. Holyoke is located at the crossroads of US Highway 6 and 385 in northeast Colorado, approximately 180 miles from Denver, and is the heart of Phillips County. The community is a rural community of 2,200 citizens who make their living in agriculture or agriculture-related and support businesses. Residents are justly proud of their prosperous, progressive city, located in one of the best farming areas of the state.

Agricultural production is the primary industry in Phillips County, with Holyoke being home to approximately 160 businesses, with a high per capita income from agriculture. This is largely attributable to the development of irrigation during the past 30 years for the production of cash crops such as beats, beans, corn and wheat.

Residents and visitors alike praise the community's well-kept appearance and visitors are impressed by the beautiful lawns and trees in the city. Holyoke has excellent health care facilities including a hospital, clinic, nursing home and assisted living facilities, as well as an airport. Holyoke School District Re-1J covers approximately 540 square miles and educates 600 students K-12. The district has two school buildings, a K-6 facility and a 7-12 facility. The school also operates an alternative school supporting students in grades 7-12 who are in need of a different method of instruction due to individual circumstances. Facilities have long been a source of pride in the community and have recently undergone several improvements in thanks to BEST grants and matching funds from a successful mill levy override election in 2010. The mill levy was extended by voters through 2020, passing with 67% of the vote.

Holyoke is proud of its diversity. The district is one of the few ethnically diverse school districts in Northeastern Colorado with 46% of its students Hispanic and 53% Caucasian, and 25% of the overall school population receives direct services in our ESL program for English Language Learners. Nearly half of the school population is eligible for free or reduced price meals. The district appreciates diversity and believes in providing the most diverse experiences for students as well which include full-time art, music and PE programs K-12, the most choices for sports in the region, plays, a television studio, and a full Career and Technical Education program and service clubs. Holyoke is a place that is inclusive of all students and we are very proud of our school.

Because we are inclusive of all students, we are looking at the best way we can support students who have profound and severe learning disabilities. Research has shown that students with these levels of disabilities benefit greatly from life skill based learning and the extended Colorado Academic Standards. We believe that a life skills classroom will greatly help our students at this level.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

### Deficiencies Associated with this Project:

Sometimes when we write for grants it is hard to balance out the two requirements that Colorado schools need. This grant accomplishes both by addressing health and safety concerns as well as improving educational opportunities. This is a health and safety issue. We have students with severe intellectual and emotional issues who belong at the secondary level in classrooms with students who are in kindergarten. This is because we do not have adequate facilities at Holyoke Junior/Senior High to support students with severe educational and physical needs. We also have students who have toileting needs not being changed in a physically safe environment or one that is adequately ventilated or clean for bodily fluids. The town of Holyoke is small, safe, has top notch medical facilities, entertainment, is the county seat for all governmental support, and a school district that is very inclusive. If you had a student with a profound, severe disability this would be an ideal place to raise him or her. Due to this, Holyoke has attracted a substantial number of students with severe significant special education needs for a rural district. The disabilities for these students range from cerebral palsy to Angelman's Syndrome to children who are non-verbal autistic with limited physical abilities. One of the other things that is terrific about our community in Holyoke is that we have an expectation that we serve ALL students and that ALL students receive the support and service that they require, no matter their gifts or limitations. Unfortunately, the present design of our Elementary school building, built in 1954, is not equipped to meet the needs of our growing population of students with severe significant special education needs. Currently, these students are instructed in a very traditional classroom that is not conducive to addressing their health, academic, daily living skill, social-emotional, behavioral and gross motor needs. Deficiencies in building facilities compromise the ability of school personnel to design instruction for these students in alignment with the Colorado Alternate Academic Achievement Standards and further compromise the ability of school staff to implement specialized instruction and related services to meet IEP goals for students. For example, all students have self-care as one of their goals but do not have access to their own adequate bathroom or area in which to practice self-care skills, currently they have no privacy from other students, have no kitchen to work in and no facilities in order to perform daily living tasks like sorting, doing, and folding laundry.

Currently, Holyoke School District does not have a significant support needs classroom. Teachers are struggling to assist students in making progress toward or meeting their goals that are aligned with the Colorado Alternate Academic Achievement Standards. Because of limited facilities, several students with severe significant special education needs did not advance with their same grade level peers to the Jr/Sr High School this school year and stayed at the elementary school. This is not in true spirit with our school or our community and we've been asked to come up with a life skills program at Holyoke Junior/Senior High that supports these students. While this has not been mandated by the Office of Civil Rights or through any other form of advocacy, we believe that we have a moral and ethical obligation to support our students with any type of educational assistance they may need.

In response to this, our Shared Leadership groups, our school board and administration tasked our special needs department along with principals in both buildings to set up a collaborative process with the Colorado Department of Education's special education unit as well as our NEBOCES to come up with the best way to support these students. The answer from consultants with CDE, from NE BOCES and from experts in the field clearly points to the fact that we need a contemporary facility in which we can support these students. We have excellent staff- 1 significant support need special education teacher, 11 one to one paraprofessionals and 2 special education generalist that support our students on a daily basis, but they do not have adequate facilities. For example, at this time due to the classroom being very traditional, paraprofessionals do not have adequate space to change student diapers and are forced to do so in the general school bathroom while other students wait outside or even worse, having to change student diapers behind a screen in the class with very poor ventilation. Health and student welfare are a major concern. Occupational therapists are working in the presence of other students within the traditional classroom in an attempt to provide services to their students, and even more worrisome is the fact that we have students with severe and profound disabilities who may also have a serious behavioral issues at the 8th grade level spending significant amounts of time with kindergarten students who have their own profound disabilities. A major health and safety issue for the district. These students need to be able to transition to the junior high/high school to a contemporary facility which is conducive and safe to the kind of learning that they need. Furthermore, this alleviates what many would consider a very overcrowded severe needs classroom that students are currently required to use. Right now, we have 11 adults and 10-15 students working in and around each other in one classroom that is a little under 900 square feet. The right thing to do is to invest district money to provide these students with an appropriate environment that maximizes their ability to learn and function at school, even if it's not traditionally at the level general education students might perform. If we can leverage

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

district facility mill levy money with BEST funding we can create a high quality classroom that provides genuine and positive learning experiences for children with disabilities. Students with these kinds of disabilities face tremendous challenges and need support that a traditional classroom cannot provide.

### Proposed Solution to Address the Deficiencies Stated Above:

The Holyoke School District is attempting to address the health and safety concerns as well as create a state of the art, current research-based facility for a Significant Special Needs classroom that focuses on a life skills theme for our district's high needs special education students. In order to facilitate this process and ensure that we have an accurate picture of the technical side of a two room renovation as well as the importance of ensuring that we are compliant with ADA standards, the district contracted with BCER Engineering for a Life Skills Classroom Study. The reason the district is working with BCER is because they have done all the other engineering and facility work in the high school since the addition of the junior high in 1998. We have done lighting retrofits and HVAC upgrades with the assistance of BCER Engineering and feel that they know our building well enough to give us an accurate picture of truly renovating an area of the school correctly. Here are the areas that will solve the issue of our need for a Life Skills Classroom and provide us with a solid foundation of which we can look at contracting out work. Due to the technicality of this situation we will be forced to look at a series of contractors if this grant is awarded to get this job done correctly. Due to our geographic isolation, there are no companies in the area that can accurately quote the work that needs to be done without having a project manager, such as BCER in place to facilitate the process. All work will be done with competitive bidding.

### PROJECT SCOPE

Remodel existing Holyoke High School rooms 220 and 221 to become new Life Skills rooms to include the following. Refer to Partial Floor plan indicating the preliminary layout for the rooms.

#### Life Skills Classroom

- Instruction space.
- Built-in storage cabinets.
- Lower casework with sink.
- Washer/dryer.
- Carpet flooring at instruction space.
- VCT flooring at storage, washer/dryer space.
- 2'x4' acoustical ceiling.
- 8'x4' markerboard.
- Door connection to Life Skills Apartment.

#### Life Skills Apartment

- Residential entry door from corridor.
- Kitchen area to include upper and lower casework, oven, 2 burner range, double compartment sink, countertop microwave oven, and refrigerator.
- Carpet flooring.
- VCT flooring at kitchen area.
- 2'x4' acoustical ceiling.
- Door connection to Life Skills Classroom.

#### Unisex Restroom

- Accessible toilet with wall grab bars.
- Wall mounted lavatory.
- Hand held shower.
- Floor drain.
- Epoxy flooring.
- Ceramic wall tile on all walls, floor to ceiling.
- Hard gypsum board ceiling.
- Unisex restroom to be accessible from both the Life Skills Classroom and the Life Skills Apartment.

### MECHANICAL SYSTEMS

The existing classrooms are served by two-pipe fan coil units. Classroom 220 has a dedicated fan coil unit and Classroom 221 is served by a fan coil unit which also serves Art 228. The fan coil units were installed



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

during a remodel of the building in the late 1990's.

### MECHANICAL DEMOLITION

The fan coil unit in Classroom 220 will be removed in its entirety including all existing distribution and controls. The branch ductwork from the fan coil unit in Art 228 will be removed and the distribution in room 221 capped. The existing branch heating/cooling piping to the fan coil unit will be left for extension to a new unit. The existing outside air intake for the fan coil unit will remain and be reused for a new unit. The branch exhaust ductwork from the exhaust fan in room 224 will be removed and capped at the main.

### HVAC

A new fan coil unit will be installed above the ceiling of Classroom 220. This fan coil unit will be sized to service both the Life Skills Classroom and the Apartment. New distribution ductwork will be provided and routed to new ceiling mounted air diffusers. Outside air will be connect to the return air side of the fan coil unit and connect to the existing roof hood. The outside air quantity will be balanced to the code required outside air requirements. The return from the fan coil unit will be ducted from filter return air grilles. New Heating/Cooling piping will be connected to the existing piping and routed to the new fan coil unit. New direct digital controls will be provided for the fan coil unit and connected to the existing building automation system. A new temperature sensor will be installed in Classroom 220.

For the new restroom, a new roof mounted exhaust fan will be installed. New exhaust distribution ductwork will be routed to an exhaust grille from the toilet room as well as an exhaust grille from each classroom to relief the outside air being brought into the rooms.

A 4" diameter duct will be routed from the clothes dryer up through the roof to a gooseneck.

A residential style hood will be installed over the range with an exhaust duct up through the roof to a gooseneck.

### PLUMBING SYSTEMS

The existing plumbing will be modified to accommodate the required needs of the Life Skills Classroom, Apartment, and Restroom.

### PLUMBING DEMOLITION

The existing sink in Classroom 221 will be removed. The hot and cold water piping will be removed back to the nearest main and capped. The existing waste piping will be removed down to below the floor and capped. The existing vent through the roof will be removed as it is not large enough for the required plumbing fixtures.

### PLUMBING

Waste piping for the new fixtures of adequate size does not appear to be deep enough to accommodate the location of the new Restroom. As such, new waste piping will be routed out the North side of the building and connect to the waste piping exterior to the building which also serves the Toilet rooms located on the North side of the Gymnasium. The floor of the building will need to be sawcut, removed, and patched to accommodate the new waste piping. Exterior to the building, the sidewalk on the North side of the building will also need to be removed and replaced as well as the turf to reach the existing waste piping. The location of the existing waste piping is estimated to be 180 feet from the location of the new Restroom. New waste piping will be routed to the new plumbing fixtures indicated on the preliminary floor plan.

A new 3" vent through the roof will be provided and new vent piping connected to the new plumbing fixtures indicated.

1-1/2" Cold water piping for the new fixtures will be connected to the existing 2" cold water main piping located to the East of the Classroom in Commons 227. New cold water distribution piping will be connected to the water closet, lavatory, hand held shower, sink in the classroom, double compartment sink in the Apartment, washing machine, and an ice maker box at the refrigerator.

1-1/4" Hot water piping will be routed from the new restroom back to the boiler room and connect at the existing domestic water heater storage tank to provide adequate capacity for the shower. A 3/4" recirculating hot water pipe will be run adjacent to the hot water piping and be connected to the existing recirculating pump with a balancing valve. Hot water distribution piping will be connected to the water closet, lavatory, hand held shower, sink in the classroom, double compartment sink in the Apartment and the washing machine.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

A residential garbage disposer will be provided at the double compartment sink in the apartment.

### ELECTRICAL SYSTEMS

Holyoke Junior/Senior High School has two existing classrooms that are to be remodeled and converted to a Life Skills Classroom with Laundry facilities, a Unisex Restroom, and a Life Skills Apartment with a kitchen appliances. The existing Lighting, Power, and Fire Alarm systems will need to be modified to accommodate the remodel.

### ELECTRICAL DEMOLITION

Ten existing 2' X 4' lay-in fluorescent luminaires along with the associated light switches and ceiling mounted wireless occupancy sensors are to be disconnected and removed from the remodel area. The existing branch circuit wiring for the lighting is to remain for reuse and connection to the replacement lighting. The existing power receptacles along the north, east, and west walls of the proposed Life Skills Classroom are to remain in place. All other wall mounted power receptacles in the remodel area are to be disconnected and removed. The existing ceiling mounted Fire Alarm Horn/Strobes are to be disconnected and removed from the existing classrooms. And the Fire Alarm Magnetic Door Hold Open device at the north room door is to be disconnected from the Fire Alarm System and 120V power and removed. These devices are to be reused in the remodel.

### LIGHTING

The Life Skills Classroom and Laundry Area are to be provided with six of the existing 2' X 4' lay-in fluorescent luminaires are to be installed in the grid ceiling. This lighting is to be switched On and Off with an SPST (single pole single throw) switch located at the entry door to the Laundry area.

The Unisex Restroom is to be provided with a 3ft. long wall mounted fluorescent vanity light located above the sink mirror.

This light is to be switched On and Off with three-way switches located at each door. The Life Skills Apartment is to be provided with (3) 6" diameter recessed downlights with compact fluorescent lamps located in the ceiling of the kitchen area. The luminaires are to be switched On and Off with an SPST switch located on the north kitchen wall.

The Life Skills Apartment living area is to be provided with power receptacles that have the top outlet wired to be switched for plug-in lamps. The switched receptacles are to be located with one on the north wall and a second one located on the south wall and these receptacles are to be switched with an SPST switch located at the entry door. In addition, the living area is to be provided with (4) of the existing 2' X4' fluorescent luminaires in the grid ceiling and these will be switched with an SPST switch located at the entry door.

### POWER BRANCH CIRCUITS

The Life Skills Classroom is to be provided with (1)20A, 120V duplex power receptacle to be installed in the new south wall and connected to the existing power receptacle circuit in this room.

The Laundry area is to be provided with the following power receptacles:

- (1)20A, 120V duplex GFCI (ground fault circuit interrupter) receptacle to be mounted above the counter and adjacent to the sink.

- (1)20A, 120V duplex GFCI receptacle for the Washer.

- (1)30A, 120/240V-3P-4W grounding type NEMA 14-30R receptacle for the Dryer.

The Unisex Restroom is to be provided with (1)20A, 120V duplex GFCI (ground fault circuit interrupter) receptacle to be mounted at +42" A.F.F. adjacent to the sink.

The Life Skill Apartment is to be provided with (6)20A, 120V duplex power convenience receptacles to be installed on the north, west, and south walls and spaced at 12ft. on center. One of these receptacles on the north and south walls are to be wired with the top outlet switched for plug-in lamps.

The Apartment Kitchen area is to be provided with the following power receptacles:

- (1)30A, 120/240V-3P-4W grounding type NEMA 14-30R receptacle for the Oven.

- (1)20A, 120V duplex GFCI receptacle for the Microwave to be mounted above the counter.

- (1)20A, 120V duplex GFCI receptacle for the Garbage Disposal to be mounted under the sink and an SPST switch mounted above the counter adjacent to the sink.

- (1)50A, 120/240V-3P-4W grounding type NEMA 14-50R receptacle for the Range.

- (1)20A, 120V duplex receptacle to be mounted in the cabinet above the range for the hood exhaust fan and light.

- (1)20A, 120V duplex GFCI receptacle for the Refrigerator.

A new 100A, 120/240V-1PH, 18 pole panelboard with 100A-2P main breaker in a recessed type NEMA 1

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

enclosure is to be installed in the south wall of the Laundry area. This panel is to contain circuit breakers for the new circuits being added in this remodel. Each of the power receptacles is to be provided with branch circuit wiring from this panel. The new panel is to be fed with 100A wire in EMT conduit from the existing wireway and 112.5kVA transformer located in the Electrical Room #102 located approximately 200 feet east of the remodel area.

### FIRE ALARM SYSTEM

The (2) existing Fire Alarm Horn/Strobes are to be installed in the ceilings of the Life Skills Classroom and in the Laundry area and reconnected to the Fire Alarm System.

The existing Fire Alarm Magnetic Door Hold Open Device is to be installed at the door into the Laundry Room and it is to be connected to the Fire Alarm System and the existing 120V power circuit.

Provide Fire Alarm Magnetic Door Hold Open Device to be installed at the door into the Life Skills Apartment and connect to the Fire Alarm System and the existing 120V power circuit for the adjacent door hold open device. The Unisex Restroom and the Life Skills Apartment are each to be provided with a wall mounted Fire Alarm Strobe rated for 15cd (candela) and these are to be connected to the Fire Alarm System. The Life Skills Apartment is to be provided with a Fire Alarm Smoke Detector to be mounted in the ceiling and connected to the Fire Alarm System.

### SPECIAL SYSTEMS

The Life Skills Apartment is to be provided with a 120V doorbell to be wall mounted on the north wall and a doorbell push button to be located on the exterior of the entry door to the apartment.

### How Urgent is this Project?

There is urgency in addressing the building deficiencies and the related health and safety issues in getting this project done and complete. This year, several students with severe significant special education needs did not advance with their same grade level peers to the Jr/Sr High School and stayed enrolled at the elementary school for another academic year due in large part to the fact that there is no adequate facility for students to utilize at the junior/senior high school level. The Jr/Sr High School facilities failed to fully address the health, academic, daily living skill, social-emotional, behavioral and gross motor needs for the students that were age appropriate for a transition to the Jr/Sr High School. Deficiencies in building facilities compromise the ability of school personnel to design instruction for these students in alignment with the Colorado Alternate Academic Achievement Standards and further compromise the ability of school staff to implement specialized instruction and related services to meet IEP goals for students. The building deficiencies need to be addressed and changes are needed prior to the beginning of the 2016-2017 school year in order to appropriate transition grade eligible students to the Holyoke Jr/Sr High School.

While this is certainly an issue, it is also important that the district have suitable special needs classrooms for students with a wide range of disabilities rather than just those based in specific learning disorders. We believe that the public as well as parents have a strong expectation that the district completes this project in a timely manner that will support students regardless their physical, emotional or mental characteristics. We would like to begin work on this project immediately, however, we know that we need to wait and see if we can't get some assistance from the BEST program. This fall, students will either be stuck back at the elementary school or doing their best, along with their care providers, of receiving and Free and Appropriate Public Education in a school with very limited facilities to support their highly specialized needs. Lastly, if we cannot provide a suitable educational environment for high needs students, eventually, the district may be required to contract services for those students in other districts. This is incredibly problematic due to the fact that Holyoke is so geographically isolated. Also, the costs associated with those kinds of services can be as high as \$153 dollars per day including travel costs which means that a typical year could cost us over \$26,000 per student. This would be a tremendous financial burden on our district.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

Article 3 –

The remodel work will comply with the applicable codes as noted in Article 3. Due to the size and scope of the project, provisions of Article 3.1.7.

LEED 2009 for Schools New Construction and Major Renovations, does not apply.

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Article 4 –

4.1. The project shall comply with all applicable provisions of this article. The project is a remodel, and the roof and structural systems are existing to remain.

4.2 No technology upgrades are included in the project scope. Existing technology systems will remain. The technology for the entire building in terms of wireless as well as connectivity points were done over this past summer and wireless connectivity in this area is adequate for a number of computers and other technology devices. Holyoke School District has a wireless laptop program 1:1 for students 5-12 so there will be very few technology issues in this area.

4.3 The purpose of the project is to meet the goals outlined in 4.3.2.2 – Special Education Classrooms. This Life Skills Classroom will exceed the accessibility and adaptive needs of the current and reasonable anticipated student population in terms of wheelchairs, changing tables, physical therapy devices, as needed, and ADA bathroom will all meet the current code.

4.4 The scope of the remodel is less than 5000 square feet. New appliances in the classroom will be Energy Star rated. New lighting and HVAC upgrade will comply with the appropriate codes as outlined in Article 3. Due to the size of the project, LEED 2009 for Schools New Construction and Major Renovations, does not apply.

4.5 This building is less than 50 years old and is not on the historical registry.

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

Several years ago, the school district made a goal to become the premier facility in Northeastern Colorado. Since that time, Holyoke School District has worked tirelessly to meet this goal. The district operates with a general fund totaling \$6,107,584 dollars and is committed to all aspects of providing a quality education. For the Fiscal Year 2015 the district has allocated \$292,233 to operations and maintenance and other services which accounts for 30% of total discretionary funding. This year the district is expending \$490 per student for operations, services and improvements. We have three FTE dedicated professionals at the Jr/Sr High building and will have no problems keeping this facility clean and in good shape. One of our maintenance men has a very solid background in electrical and HVAC maintenance and upkeep as well as a strong understanding of appliances and fire systems. Furthermore, Holyoke School District has a tremendous facility management plan that will incorporate this remodel into its overall maintenance program. We also have a shared leadership model that has a budget and facilities committee. The purpose of the Shared Leadership Budget and Facilities Committee is to ensure the quality and upkeep of our facilities. This group is composed of school personnel, teachers, administrators as well as community and business owners. We meet once a month to review issues, provide direction and ensure quality of the building and the upkeep of our facilities. Due to this kind of attention and dedication, Holyoke School District voters have approved mill levy overrides for the last 10 years successfully to address facility issues and technology. We have no doubt that this room will be cared for with the same quality and attention the rest of our junior/high and high school receive.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

We are renovating one classroom and a smaller work place into a Severe and Significant Needs classroom due to the fact that we do not have a classroom for severe needs students at the secondary level. We also do not have adequate ventilation or sanitary conditions to help students who have toileting needs. It is also a safety issue due to the fact that we have students with profound disabilities overcrowded into a classroom that was made for kindergarten students in 1954. There are large 8th grade kids doing Occupational Therapy in the classroom with students who are barely in kindergarten and wheelchair bound. Furthermore, some of these students have emotional and developmental issues that may demonstrate behavioral issues that can dramatically negatively impact smaller students. This is a much needed facility upgrade due to the fact that we have older students grades 7 and 8 in our elementary school who need to be with their peers and also need a Life Skills environment so that they can begin to learn basic skills for living as well as preparing to enter into adult based support. These students are not in general education and work on the extended standards for children with a wide range of disabilities.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

**FY15-16 Charter School Capital Construction Allocation from the State:**

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Current Grant Request:</b>	\$140,322.20	<b>CDE Minimum Match %:</b>	45
<b>Current Applicant Match:</b>	\$114,809.07	<b>Actual Match % Provided:</b>	45
<b>Current Project Request:</b>	\$255,131.27	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	General Fund	
<b>Total of All Phases:</b>	\$255,131.27	<b>Escalation %:</b>	4
<b>Affected Sq Ft:</b>	900	<b>Contingency %:</b>	15
<b>Affected Pupils:</b>	252	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$283	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$27	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$257	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$1,012	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	4	NA	
<hr/>			
<b>District FTE Count:</b>	578	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$76,721,987	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$132,852	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$1,165,753	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$43,705	<b>Outstanding Bonded Debt:</b>	\$1,305,000
<b>Free Reduced Lunch %:</b>	47	<b>Total Bond Capacity:</b>	\$15,344,397
<b>Existing Bond Mill Levy:</b>	4	<b>Bond Capacity Remaining:</b>	\$14,039,397



**• Facilities Impacted by this Grant Application •****Holyoke RE-1J - Holyoke Jr/Sr HS Parital Roof Replacement - Holyoke Jr/Sr HS - 1975****School Name: Holyoke Jr/Sr HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	119,400
Replacement Value:	\$37,809,241
Condition Budget:	\$21,188,128
Total FCI:	56.04%
Energy Budget:	\$41,790
Suitability Budget:	\$2,425,600
Total RSLI:	16%
Total CFI:	62.6%
Condition Score: (60%)	2.95
Energy Score: (0%)	2.14
Suitability Score: (40%)	4.10
School Score:	3.41





# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Holyoke RE-1J

**County:** Phillips

**Project Title:** Jr/Sr HS Parital Roof Replacement

**Previous BEST Grant(s) Funded:** 3

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School            | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement    | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input checked="" type="checkbox"/> Renovation | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition              | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security              | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Phillips County is located on the beautiful high plains of Northeastern Colorado. Situated less than 30 minutes south of Interstate 76 and I-80, the county's eastern border presides next to Southwestern Nebraska. The county is only 150 miles (approximately 2-2.5 hrs) from Metro Denver and major U.S. trade corridors. Haxtun, Paoli, Holyoke and Amherst are the towns located in Phillips County. The total county population in 2010 equaled 4,442. Holyoke is the county seat and the heart of Phillips County and is a progressive but peaceful place to enjoy life. It is home to half of the county's population at 2,261, making it the largest populated community in the county. In 2007, the median family income was \$39,430. Holyoke is located at the crossroads of US Highway 6 and 385 in northeast Colorado, approximately 180 miles from Denver, and is the heart of Phillips County. The community is a rural community of 2,200 citizens who make their living in agriculture or agriculture-related and support businesses. Residents are justly proud of their prosperous, progressive city, located in one of the best farming areas of the state.

Agricultural production is the primary industry in Phillips County, with Holyoke being home to approximately 160 businesses, with a high per capita income from agriculture. This is largely attributable to the development of irrigation during the past 30 years for the production of cash crops such as beats, beans, corn and wheat.

Residents and visitors praise the community's well-kept appearance and visitors are impressed by the beautiful lawns and trees in the city. Holyoke has excellent health care facilities including a hospital, clinic, nursing home and assisted living facilities, as well as an airport. Holyoke School District Re-1J covers approximately 540 square miles and educates 600 students K-12. The district has two school buildings, a K-6 facility and a 7-12 facility. The school also operates an alternative school supporting students in grades 7-12 who are in need of a different method of instruction due to individual circumstances. Facilities have long been a source of pride in the community and have recently undergone several improvements in thanks to BEST grants and matching funds from a successful mill levy override election in 2010. The mill levy was extended by voters through 2020, passing with 67% of the vote.

Holyoke is proud of its diversity. The district is one of the few ethnically diverse school districts in Northeastern Colorado with 46% of its students Hispanic and 53% Caucasian, and 25% of the overall school population receives direct services in our ESL program for English Language Learners. Nearly half of the school population is eligible for free or reduced price meals. The district appreciate diversity and believes in providing the most diverse experiences for students as well which include full-time art, music and PE programs K-12, the most choices for sports in the region, plays, a television studio, and a full Career and Technical Education program and service clubs. Holyoke is a place that is inclusive of all students and we are very proud of our school.

The Jr/Sr High School roofing project will complete the balance of the roof's needing repair at the High School from the roofing projects started in 2012 and provide many more years of service to keep the High School building in good condition for academic and educational purposes. The District has always taken pride in its facilities, their upkeep and appearance. Maintenance and Facility personnel continually monitor and inspect the facilities and grounds to keep a healthy and safe environment for students, staff and the community. Six years ago, Holyoke School District created a strong master facility plan as well as a five year goal for major project improvements to be completed. The first part of that was a new roof for the

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

high school and elementary school. The final part of that five year plan is to complete the junior high roof.

### Deficiencies Associated with this Project:

The Holyoke Junior High/High School complex consists of the old gym, which was built in the early 50's, the high school which was built in 1974 and shop buildings which were built in 1974, and the junior high which was built in 1999. The project areas include the old gym, the shop areas and the junior high. The high school roof was replaced in 2012. The old gym and the shop buildings have shingle roofs at a 4/12 pitch. These buildings were last reroofed in the 1980's and the shingles are at the end of their useful life. There are numerous areas of missing or damaged shingles. The roofs also have numerous mechanical penetrations. Most of these are poorly flashed and cause leaks in the interior of the building. The junior high has a low slope roof with a fully adhered 60 mil EPDM membrane. The roof membrane is original to the building and is approaching the end of its expected useful life. Many of the seams are deteriorated and there are several areas which leak, especially at the intersections with the earlier sloped roof buildings. The roof structure has a minimal 1/8" per foot slope and lacks overflow scuppers for many of the roof drains. The perimeter coping is rusted in many location. The roof structure is 8" structural insulated panels supported by steel structure. Many of these panels have deflected, causing water ponding on the roof. The extent and scope of these roof deficiencies exceed the reserve capacity of the school district to make the needed repairs in a timely fashion.

### Proposed Solution to Address the Deficiencies Stated Above:

The proposed solution is to replace the existing roofing on both the low slope and steep slope roofs, and to correct the existing structural deficiencies in the roof structure of the low slope area at the junior high. The shingle roofs on the sloped roof buildings would be replaced with prefinished standing seam sheet metal roofing. The metal roofing would be installed over 30lb roofing felt. The multiple mechanical equipment penetrations of the roof would be reflashed with watertight flashing details, using pre-finished metal to match the new roofing. As a part of the roof assessment, a structural engineer has reviewed the structural insulated panels at the low slope roof. The engineer recommends that additional support be added to the structure to halt the creep. The recommended correction would involve adding 2x12 wood framing added at the joints between the structural insulated panels to provide addition support. The engineer also recommends that the roof slope be increased to minimize ponding on the roof. 1/8"/foot tapered insulation will be added to the existing 1/4"/foot structural slope to provide a minimum of 1/4" per foot slope to meet current construction guidelines and good roofing design practice. A new fully adhered 90 mil EPDM membrane will be installed, with 1/2" oriented strand board underlayment and upgraded seam details to achieve the manufacturer's 30 year warranty, similar to the roof installed on the high school in 2012. This warranty includes coverage for 100 mph wind and 2" diameter hail. The existing roof panels have an R value of R-30 and additional insulation beyond the tapered insulation is not planned. Perimeter roof scuppers will be added to provide overflow drainage. New prefinished metal coping would be installed as a part of the reroofing.

### How Urgent is this Project?

The repairs to the roof represent an immediate need for the Holyoke School District. Halting further creep of the structural insulated panels is a critical issue with potential life safety consequences. The roof panel deflection combined with the poor drainage of the roof causes ponding on the roof. The added weight of the ponded water causes more defection which in turn causes more ponding. Located on the Eastern Plains of Colorado, Holyoke frequently receives extreme weather. A heavy precipitation event, either snow or rain, would raise the potential for catastrophic failure of the roof panels. Improving the drainage of the low slope roof is also an immediate need. Standing water increases the loading on the roof and contributes to the creep of the structural insulated panels. Ponding water also increases the likelihood of leaks, especially at the connection to the steep slope roofs, and accelerates the deterioration of the roof membrane. The existing drainage does not meet current building codes or the Public School Facility Construction Guidelines. The lack of overflow scuppers would allow additional ponding in the event of a clogged roof drain. Current leaks in the building are damaging interior finishes giving the building an unsightly appearance, and adding to the workload of the maintenance staff. Leaks may cause mold contamination if not addressed. Buckets in the hallways are disruptive to the educational process and present a tripping hazard to student and staff. The creep in the roof panels is also damaging interior finishes, such as the gypsum board ceiling in the commons area.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

This project will conform to section 4.1.2 Roofs of the Public School Facility Construction Guidelines by providing a weather-tight roof that drains water positively off the roof and discharges the water off and away from the building. The roof will be installed by a qualified contractor who is approved by the roofing manufacturer to install the specified roof system and shall receive the specified warranty upon completion of the roof. In particular the project will:

Be installed by a qualified contractor who is approved by the roofing manufacturer to install the specified roof system. The project specification will be limited to major manufacturers. The manufacturer's contractor approval criteria will help to ensure that the selected contractor will provide a quality installation.

The low slope roofing will be a 90 mil fully adhered EPDM membrane.

The steep slope roofing will be a standing seam metal roof system; minimum 24 gage prefinished steel with a minimum 1.5" seam height

The existing junior high was constructed to a relatively high standard of energy efficiency. The 8" structural insulated roof panels provide R-30 insulation for the roof. The additional tapered insulation will vary from ½" to 6 ½" thick, providing additional insulation for the roof.

The choice of roof membrane color was researched when the roofs were replaced on the High School and Elementary school in 2012. Degree heating days predominate Colorado's climate, and roofs that reflect solar heat can actually increase heating energy demand more than they reduce cooling energy demand, especially in facilities that are not used during the summer. For this reason, the decision was made to use a traditional black EPDM roofing membrane.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

Capital project monies are budgeted in the General Fund each year along with mill levy override monies of which 60% is designated for capital projects for approximately \$290,000 a year. As the roofs are deemed in need of repair or placement, monies would be budgeted for the project that year. Maintenance personnel as well as the roofing consultant and final company that winds the roofing bid will perform annual inspections of the roofs and inspect the drains on a more frequent basis as recommended by the roofing consultant. Several years ago, the school district made a goal to become the premier facility in Northeastern Colorado. Since that time, Holyoke School District has worked tirelessly to meet this goal. The district operates with a general fund totaling \$6,107,584 dollars and is committed to all aspects of providing a quality education. For the Fiscal Year 2015 the district has allocated 292,233 to operations and maintenance and other services which accounts for 30% of total discretionary funding. This year the district is expending \$490 per student for operations, services and improvements. We have three FTE dedicated professionals at the jr/sr. high building and will have no problems keeping this facility clean and in good shape. One of our maintenance men have a very solid background in electrical and HVAC maintenance and upkeep as well as a strong understanding of appliances and fire systems. Furthermore, Holyoke School District has a tremendous facility management plan that will incorporate this remodel into its overall maintenance program. We also have a shared leadership model that has a budget and facilities committee. The purpose of the Shared Leadership Budget and Facilities committee is to ensure the quality and upkeep of our facilities. This group is composed of school personnel, teachers, administrators as well as community and business owners. We meet once a month to review issues, provide direction and ensure quality of the building and the upkeep of our facilities. Due to this kind of attention and dedication, Holyoke School District voters have approved mill levy overrides for the last 10 years successfully to address facility issues and technology. We have no doubt that this room will be cared for with the same quality and attention the rest of our junior/high and high school receives.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The Jr/Sr High School building was constructed in 1975 and the roofs were last repaired in 1988 and are at the end of their warranty life. All other portions of the High School roofs have been replaced and this will complete the process. More leaks are appearing where the seams are between the buildings and damaging ceiling tiles and carpet within the building.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

**FY15-16 Charter School Capital Construction Allocation from the State:**

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Current Grant Request:</b>	\$450,368.18	<b>CDE Minimum Match %:</b>	45
<b>Current Applicant Match:</b>	\$368,483.06	<b>Actual Match % Provided:</b>	45
<b>Current Project Request:</b>	\$818,851.24	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	General Fund	
<b>Total of All Phases:</b>	\$818,851.24	<b>Escalation %:</b>	4
<b>Affected Sq Ft:</b>	44,154	<b>Contingency %:</b>	24
<b>Affected Pupils:</b>	252	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$19	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$18	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$3,249	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	175	NA	

<b>District FTE Count:</b>	578	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$76,721,987	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$132,852	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$1,165,753	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$43,705	<b>Outstanding Bonded Debt:</b>	\$1,305,000
<b>Free Reduced Lunch %:</b>	47	<b>Total Bond Capacity:</b>	\$15,344,397
<b>Existing Bond Mill Levy:</b>	4	<b>Bond Capacity Remaining:</b>	\$14,039,397

• Facilities Impacted by this Grant Application •

**Pueblo City 60 - Heritage ES Partial Roof Replacement - Heritage ES - 1992**

**School Name: Heritage ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	50,636
Replacement Value:	\$10,784,971
Condition Budget:	\$3,114,923
Total FCI:	28.88%
Energy Budget:	\$17,723
Suitability Budget:	\$501,300
Total RSLI:	17%
Total CFI:	33.7%
Condition Score: (60%)	3.42
Energy Score: (0%)	2.50
Suitability Score: (40%)	4.57
School Score:	3.88



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Pueblo City 60

**County:** Pueblo

**Project Title:** Heritage ES Partial Roof Replacement

**Previous BEST Grant(s) Funded:** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Pueblo 60 City Schools primarily serves the youth within the City of Pueblo. As of the October 1, 2015 pupil membership count there are 17,634 students served by 32 schools: (16) elementary schools, (4) middle schools, (3) K-8 schools, (4) high schools, (3) International magnet schools, and (2) charter schools. The profile of the student body reflects 75% minority students and 73% of students qualify for free and reduced lunch programs.

Heritage Elementary School is home to approximately 430 students and 40 staff members, and serves PreK, Kindergarten, and Grades 1 through 6. The school is included in the district's master plan. Pueblo School District 60 has continued experiencing budget cuts in funding for both operating budgets and Capital Reserve budgets. Operating budgets have been cut approximately thirty-five percent since 2004. The district is also in the process of repaying its 2002 bond of \$98,000,000. Our outstanding bond repayment debt is approximately \$46,960,000 over the next seven years of the approved bond measure life. Due to these restrictions we will not have the opportunity to fund major projects such as roof replacement without assistance for many years.

The District does a commendable job allocating its limited maintenance resources among the many needs of its 32 schools. The work requested in this grant application will not only ensure a reliable roofing system for Heritage Elementary School, but will also enable the District to reallocate maintenance resources to benefit the other buildings in the District. At this time, the replacement of the Heritage ES roof is one of the two most critical and time-sensitive roof-related maintenance efforts for the District.

## Deficiencies Associated with this Project:

The roofing system is deemed Necessary in the 2010 CDE assessment and has further deteriorated since that time and will continue to degrade each year we wait to replace it. During precipitation events, the school has numerous roof areas that leak. This includes leaks in electrical utility closets and classrooms. The classroom leaks have disrupted education activities and caused water damage to ceiling and floor finishes. The situation will only get worse if further delayed. An adequate roof system provides proper protection of the district's fixed assets and provides improved space conditions for all learning spaces within the building.

## Proposed Solution to Address the Deficiencies Stated Above:

The proposed solution is to remove approximately 12,747 square feet of the existing critical roofing areas. The removal includes the existing membrane, all tapered and base insulation, and all associated wood blocking and metal flashing from adjacent curbs and parapets.

The new work includes new base and tapered insulation, new roof membrane, and all associated new wood blocking and metal flashing. Also included is the anticipated replacement of the existing roof drains, as the existing drains are in disrepair and many covers are missing.



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

Since the State of Colorado adopted the 2015 IBC and 2015 IECC in April of 2015, the minimum R-Value for “insulation entirely above deck” has been increased from a minimum R-20 to R-30 for the Pueblo climate region. Previously the School District had been installing R-20 roofing systems on their buildings. This new code requirement triggers the need to increase the thickness of insulation, which likely results in also needing to adjust parapet heights and adjust expansion joints. This scope of work is included in the budget estimate for the required quantities.

## How Urgent is this Project?

There is immediate need to replace the failing roofing system to prevent further damage to the interior spaces and eliminate the continual disruption to the student learning environment when leaks need to be fixed. This project proposes that the District will pursue replacing the roof as soon as possible once funding is approved.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

The new proposed roofing system will conform to the Public Schools Construction Guidelines for a new minimum 4-ply Built-up low slope roof per the following reference:

4.1.2 Roofs. A weather-tight roof that drains water positively off the roof and discharges the water off and away from the building. All roofs shall be installed by a qualified contractor who is approved by the roofing manufacturer to install the specified roof system and shall receive the specified warranty upon completion of the roof. The National Roofing Contractors Association divides roofing into two generic classifications: low-slope roofing and steep-slope roofing. Low-slope roofing includes water impermeable, or weatherproof types of roof membranes installed on slopes of less than or equal to 3:12 (fourteen degrees).

4.1.2.1 - Low slope roofing systems:

4.1.2.1.1 - Built-up – minimum 4 ply, type IV fiberglass felt, asphalt BUR system. Gravel or cap sheet surfacing required.

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

The district will require a 25 year warranty on the roof, and requires the contractor to repair any problems during the warranty period. The district will also contract a third party roof inspector to ensure that all repairs are completed to code and district requirements. Once the project is completed the roof will be inspected quarterly by school district personnel (this process is performed by the Facilities Department on all buildings/roofs). The district allocates funds for roof repairs and preventive maintenance annually. The district contracts out roof repairs as needed for all its roofs.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Heritage Elementary School consists of one building originally constructed in 1992. There have been no additions to the building since the original construction. The roof replacement as part of this grant application was installed in 1992 with the original construction.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

## FY15-16 Charter School Capital Construction Allocation from the State:

Current Grant Request:	\$289,971.48	CDE Minimum Match %:	47
Current Applicant Match:	\$257,144.52	Actual Match % Provided:	47
Current Project Request:	\$547,116.00	Is a Waiver Letter Required?	No
Previous Grant Awards:	\$0.00	Will this Project go for a Bond?	No

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	General Fund	
<b>Total of All Phases:</b>	\$547,116.00	<b>Escalation %:</b>	7
<b>Affected Sq Ft:</b>	33,728	<b>Contingency %:</b>	10
<b>Affected Pupils:</b>	428	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$16	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$2	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$15	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$1,278	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	79	NA	
<hr/>			
<b>District FTE Count:</b>	16,046	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$995,961,448	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$62,071	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$9,591,889	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$35,211	<b>Outstanding Bonded Debt:</b>	\$57,790,000
<b>Free Reduced Lunch %:</b>	72	<b>Total Bond Capacity:</b>	\$199,192,290
<b>Existing Bond Mill Levy:</b>	8.3	<b>Bond Capacity Remaining:</b>	\$141,402,290

• Facilities Impacted by this Grant Application •

**Pueblo City 60 - Goodnight K-8 School Partial Roof Replacement - Goodnight ES/MS - 1955**

**School Name: Goodnight ES/MS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	48,548
Replacement Value:	\$16,787,511
Condition Budget:	\$5,950,470
Total FCI:	35.45%
Energy Budget:	\$16,992
Suitability Budget:	\$2,294,600
Total RSLI:	25%
Total CFI:	49.2%
Condition Score: (60%)	3.32
Energy Score: (0%)	1.98
Suitability Score: (40%)	3.77
School Score:	3.50



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Pueblo City 60

**County:** Pueblo

**Project Title:** Goodnight K-8 School Partial Roof Replacement

**Previous BEST Grant(s) Funded:** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Pueblo 60 City Schools primarily serves the youth within the City of Pueblo. As of the October 1, 2015 pupil membership count there are 17,634 students served by 32 schools: (16) elementary schools, (4) middle schools, (3) K-8 schools, (4) high schools, (3) International magnet schools, and (2) charter schools. The profile of the student body reflects 75% minority students and 73% of students qualify for free and reduced lunch programs.

Goodnight K-8 School is home to approximately 700 students and 55 staff members, and serves Kindergarten, and Grades 1 through 8. The school is included in the district's master plan. Pueblo School District 60 has continued experiencing budget cuts in funding for both operating budgets and Capital Reserve budgets. Operating budgets have been cut approximately thirty-five percent since 2004. The district is also in the process of repaying its 2002 bond of \$98,000,000. Our outstanding bond repayment debt is approximately \$46,960,000 over the next seven years of the approved bond measure life. Due to these restrictions we will not have the opportunity to fund major projects such as roof replacement without assistance for many years.

The District does a commendable job allocating its limited maintenance resources among the many needs of its 32 schools. The work requested in this grant application will not only ensure a reliable roofing system for Goodnight K8 School, but will also enable the District to reallocate maintenance resources to benefit the other buildings in the District. At this time, the replacement of the Goodnight K8 roof is one of the two most critical and time-sensitive roof-related maintenance efforts for the District.

## Deficiencies Associated with this Project:

The roofing system is deemed Necessary in the 2010 CDE assessment and has further deteriorated since that time and will continue to degrade each year we wait to replace it. During precipitation events, the school has numerous roof areas that leak. This includes leaks in electrical utility closets and classrooms. The classroom leaks have disrupted education activities and caused water damage to ceiling and floor finishes. The situation will only get worse if further delayed. An adequate roof system provides proper protection of the district's fixed assets and provides improved space conditions for all learning spaces within the building.

## Proposed Solution to Address the Deficiencies Stated Above:

The proposed solution is to remove approximately 12,747 square feet of the existing critical roofing areas. The removal includes the existing membrane, all tapered and base insulation, and all associated wood blocking and metal flashing from adjacent curbs and parapets.

The new work includes new base and tapered insulation, new roof membrane, and all associated new wood blocking and metal flashing. Also included is the anticipated replacement of the existing roof drains, as the existing drains are in disrepair and many covers are missing.

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

Since the State of Colorado adopted the 2015 IBC and 2015 IECC in April of 2015, the minimum R-Value for “insulation entirely above deck” has been increased from a minimum R-20 to R-30 for the Pueblo climate region. Previously the School District had been installing R-20 roofing systems on their buildings. This new code requirement triggers the need to increase the thickness of insulation, which likely results in also needing to adjust parapet heights and adjust expansion joints. This scope of work is included in the budget estimate for the required quantities.

## How Urgent is this Project?

There is immediate need to replace the failing roofing system to prevent further damage to the interior spaces and eliminate the continual disruption to the student learning environment when leaks need to be fixed. This project proposes that the District will pursue replacing the roof as soon as possible once funding is approved.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

The new proposed roofing system will conform to the Public Schools Construction Guidelines for a new minimum 4-ply Built-up low slope roof per the following reference:

4.1.2 Roofs. A weather-tight roof that drains water positively off the roof and discharges the water off and away from the building. All roofs shall be installed by a qualified contractor who is approved by the roofing manufacturer to install the specified roof system and shall receive the specified warranty upon completion of the roof. The National Roofing Contractors Association divides roofing into two generic classifications: low-slope roofing and steep-slope roofing. Low-slope roofing includes water impermeable, or weatherproof types of roof membranes installed on slopes of less than or equal to 3:12 (fourteen degrees).

4.1.2.1 - Low slope roofing systems:

4.1.2.1.1 - Built-up – minimum 4 ply, type IV fiberglass felt, asphalt BUR system. Gravel or cap sheet surfacing required.

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

The district will require a 25 year warranty on the roof, and requires the contractor to repair any problems during the warranty period. The district will also contract a third party roof inspector to ensure that all repairs are completed to code and district requirements. Once the project is completed the roof will be inspected quarterly by school district personnel (this process is performed by the Facilities Department on all buildings/roofs). The district allocates funds for roof repairs and preventive maintenance annually. The district contracts out roof repairs as needed for all its roofs.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Goodnight K-8 School consists of one building originally constructed in 1955. There have been additions constructed in 1970 and 2004. The roof replacement as part of this grant application was installed in 1997 on the original 1955 part of the building.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

## FY15-16 Charter School Capital Construction Allocation from the State:

Current Grant Request:	\$122,918.14	CDE Minimum Match %:	47
Current Applicant Match:	\$109,002.87	Actual Match % Provided:	47
Current Project Request:	\$231,921.01	Is a Waiver Letter Required?	No
Previous Grant Awards:	\$0.00	Will this Project go for a Bond?	No

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	General Fund	
<b>Total of All Phases:</b>	\$231,921.01	<b>Escalation %:</b>	7
<b>Affected Sq Ft:</b>	12,747	<b>Contingency %:</b>	10
<b>Affected Pupils:</b>	705	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$18	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$2	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$17	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$329	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	18	NA	
<hr/>			
<b>District FTE Count:</b>	16,046	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$995,961,448	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$62,071	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$9,591,889	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$35,211	<b>Outstanding Bonded Debt:</b>	\$57,790,000
<b>Free Reduced Lunch %:</b>	72	<b>Total Bond Capacity:</b>	\$199,192,290
<b>Existing Bond Mill Levy:</b>	8.3	<b>Bond Capacity Remaining:</b>	\$141,402,290



• Facilities Impacted by this Grant Application •

### Swallows Charter - New Classroom Building - Swallows Charter Academy - 1995

**School Name: Swallows Charter Academy**

Number of Buildings:	4
All or Portion built by WPA:	No
Gross Area (SF):	31,050
Replacement Value:	\$7,934,011
Condition Budget:	\$5,622,717
Total FCI:	70.87%
Energy Budget:	\$10,868
Suitability Budget:	\$1,047,400
Total RSLI:	10%
Total CFI:	84.2%
Condition Score: (60%)	2.48
Energy Score: (0%)	2.19
Suitability Score: (40%)	0.73
School Score:	1.78



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Swallows Charter

**County:** Pueblo

**Project Title:** New Classroom Building

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** Yes

**If Yes, please explain why:** The non-award letter stated that although our project qualifies for this grant program, our project could not be funded. This will be SCA's 4th attempt for requesting funds.

## Project Type:

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School                    | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input checked="" type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation                    | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition                      | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security                      | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

SCA in Pueblo West, Colorado was established in 1996 and is authorized under Pueblo School District No. 70 and started with 49 middle school students, in one modular building. For 19 years, SCA has grown into a 556 student K-12 program housed in 3 buildings. SCA serves approximately 7% of the entire District 70 population and has 215 students on the waiting list. The K-3 students are housed in a renovated grocery store built in 1995, plus four modular which house 4th-5th graders. The MS/HS programs are primarily housed in 13 modular classrooms, linked together in one building, which is what we seek to replace. SCA students are among the highest performing students in southern Colorado. SCA has most successful early college program in this region along with the highest graduation rate, lowest dropout rate and the highest ACT composite score in the region; above the state and district average. SCA has been successful despite the fact that our facilities do not meet current construction guidelines, and are generally speaking, a community eyesore and an embarrassment to our students. SCA continues to have steady growth in enrollment and has maintained a healthy waiting list for the past 19 years. Pueblo West Parks and Recreation, Free Will Baptist Church, the VA, Girl and Boy Scouts, Civil Air Patrol, the YMCA, and other community organizations use our facilities on a regular basis. Our K-12 F & R lunch population has increased to K-8 = 27.1% and 9-12 = 31.3%. The building we seek to replace is located behind the main building, 450 feet from door to door. This building is primarily used for middle and high school core classes so our students must walk between the two buildings to attend lunch and elective classes. The school campus lacks sufficient security, landscaping and vegetation, and does not provide any protection for our students from inclement weather, wind, or threats of harm in worst-case scenario situations. We continually deal with welfare and safety issues, including, but not limited to: health and safety concerns, major structural issues, roofing and flooring problems, poor air circulation and ventilation, inadequate electrical service, and a lack of capacity. The modular buildings are set on concrete blocks instead of a foundation. The perimeter walls rest unprotected on the earthen berms and have suffered considerable rot from ground to structure wicking of ground moisture. Moderate to severe mold growth exists in these areas. The security and life safety deficiencies illustrated throughout the BEST Grant application, master plan, and the updated school assessment reports include 16 unsupervised entry/exit points at the MS/HS building alone, recurring roof problems, poor building/campus layout for even basic security, dangerous walkways and exposed site hazards, all of which are unable to be addressed without major capital revenues beyond the scope of SCA's budget. Moreover, the items in the building currently in use beyond their normal life expectancy include: fire protection specialties, electrical systems, communication and security systems, the heating and air conditioning units in each classroom, and all exterior lighting. Research shows environmental hazards, such as indoor air pollution, molds, and chemical mismanagement can adversely impact a child's ability to learn and their short and long-term health. The condition of a school building may have a stronger influence on student performance than the combined influences of family background, socioeconomic status, school attendance and behavior, according to the Clearinghouse for Educational Statistics. More specifically, students who attend school in better buildings have test scores ranging from 5 to 17 percentile points higher than students in substandard facilities. It is clear that SCA is in need of a new permanent facility for the education of our students, and with that, we can hope to see academic gains immediately.

# BEST FY2016-17 GRANT APPLICATION SUMMARIES

## Deficiencies Associated with this Project:

13 modular units make up the MS/HS building and are deficient in the following areas:

&#10146;Lack of foundation (modular's sitting on blocks)

&#10146;Structural movement both vertically and horizontally (continuous flooring and roofing repairs)

&#10146;Fire safety (no sprinkler system)

&#10146;Electrical service (lack of capacity has limited our science and other curriculum)

&#10146;Security system

&#10146;Lighting (interior and exterior)

&#10146;Our vision for a 21st Century school is compromised. We simply do not have a safe, healthy, or inspiring learning environment!

Our students are deprived of a well-lit, secure, and worry free learning environment. Poor windows and poor air circulation contributes to asthma exacerbations. The fact that students must walk over 450 feet from one building to the other, in all weather conditions, multiple times per day is unacceptable. The desert dust blows into the building through vents and through the doors, which often causes our staff and students with asthma and allergies to stay home.

Temporary modular buildings are designed to serve as a "transitional" building; to be versatile and cost effective, but our time of transition is past due. We cannot provide a safe and secure learning environment for our student body without a significant financial commitment. Our hope lies with the BEST Grant Board.

The following is a summary list of our existing conditions at SCA. All deficiencies affect the health, safety, accessibility, and/or functionality of our learners, staff, and families.

### SAFETY AND SECURITY

1. 16 entry and exit points that cannot be sufficiently controlled.
2. The school needs a greater number of security cameras and devices, due to the layout of the campus and the distance between the buildings.
3. SCA lacks one secure entrance.
4. Site supervision is difficult due to the separation of the buildings.
5. In the event of an active shooter, there is no place for students to run and hide due to the layout of the buildings and the open campus.
6. No vegetative landscaping or natural barriers exist for several hundred feet in any direction.

### FIRE SAFETY

1. No fire sprinklers anywhere in the MS/HS transitory modular building exist.
2. The modular buildings lack smoke detectors and are not equipped with fire extinguishers in all the classrooms.
3. The limited electrical service, including the lack of outlets in each modular, has led to overloading circuits with the use of linked power strips and numerous extension cords.

### STRUCTURE

1. The modular building structural supports are stacked concrete block piers with wood shims used for leveling. Many of the shims have rotted and are missing or broken.
2. The concrete block structural supports are in an 18-inch deep excavated crawl space. This configuration causes the modular perimeter walls to sit directly on the ground, as opposed to being elevated 18 inches above the ground, which is more common. This direct contact between the perimeter walls and the ground has led to ground moisture wicking into the wood structure causing rot and mold issues.
3. The vapor barrier present in the crawl space was damaged and compromised during the process of bolting the 13 modulares together, which makes up our middle and high school building.
4. Moisture in the crawl space, particularly at the perimeter walls, has created a perfect environment for mold, rot, and rust.
5. Settlement and heaving amongst the many concrete block supports have caused doors and windows to not operate or seal correctly. This same vertical and horizontal movement has led to numerous roofing and flooring cracks which has led to the

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infiltration of dirt, molds, rodents and other contaminants.

## TRAFFIC AND EXPOSURE

1. The SCA campus is accessible by an open public alleyway that backs up to 15 businesses as well as the public main road through Pueblo West.
2. The pick-up and drop-off loop has limited capacity causing traffic issues on the main McCulloch Blvd and Civic Center Dr.
3. The pick-up and drop-off lanes double as the fire lane and delivery lane, which are not separated by sidewalks or buildings or any other protective measure.
4. The parking lot entrance and student drop-off is located much too close to the intersection of McCulloch Blvd and Civic Center Dr. The present location creates traffic congestion at both intersections as well as automobiles being stacked up in both drop-off loops.
5. The recent land purchase agreement with Pueblo West Metro District stipulates that SCA must re-route traffic off of McCulloch within 5 years of purchase or we could face financial penalties.

## SEVERE WEATHER

1. Due to the open campus, students are not sheltered from inclement weather.
2. There is no safe place to put students and staff in the event of a tornado due to the modular building not having a concrete foundation or adequate tie downs.
3. Students and staff with asthma and allergies are forced to stay home due to exposures to wind, dust, and bad weather and the fact that the temporary building does not adequately block out those harmful elements.

## ENVIRONMENTAL HEALTH AND SAFETY

### AIR QUALITY

1. Poor ventilation, lack of adequate air filters, and ill fitting doors and windows has led to a considerable infiltration of dust and other allergens which contributes to an unhealthy building. Each of the 13 modular buildings, which make up our MS/HS building, has its own wall mounted supply and return forced air HVAC system. There is no whole building ventilation system as you would find in a normal free standing school building.
2. The lack of a whole building ventilation system means a lack of fresh air. As a result, we have increased illnesses amongst students and staff, especially during the months of November through March when we average 50 student absences a day due to sickness.
3. The 13 modular buildings having individual HVAC units require a significant amount of service, with each classroom having 2 separate filtering systems.

### WATER DAMAGE

1. The 13 modulares, which make up this building all have relatively flat roofs. The horizontal and vertical movement between the modulares causes continuous cracking between the roof seams. This has led to considerable water leaks throughout the building, which has destroyed ceiling tiles and produced mold and mildew.
2. Settlement and heaving between the modular's, which make up the building has caused ill fitting doors and windows which allow the outside elements to enter the building. On a particularly snowy and windy day a teacher reported snow on her desk coming in through an ill-fitting window.
3. The lack of building/structure integrity has caused ceiling tiles to routinely be blown out of the ceilings on windy days.

### TEMPERATURE

1. The inadequate individual heating and air conditioning units cause inconsistent and often uncomfortable heating and cooling extremes which distract from the learning environment.
2. The individual HVAC systems leaves many individual spaces within the building without adequate temperature control. IE: corridors, restrooms, offices.
3. Most staff members use individual space heaters in offices and classrooms which are both inefficient and a safety concern.

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## SANITATION

1. The two restrooms which serve the entire MS/HS building staff and students are very difficult to keep clean with over 300 users daily. Toilets are clogged daily. There is only one ADA accessible stall in each restroom.
2. The two restrooms are not age appropriate as they frequently serve all age groups from kindergarten to high school age groups who utilize the building.
3. Only one men and women restroom for all of middle school, high school, staff, and visitors to share.

## SCHOOL GROUNDS AND OUTDOOR FACILITIES

1. The entire campus is open and exposed to any type of visitor or intruder.
2. All students must walk between the elementary and secondary buildings for lunch and some elective classes, exposing them to the elements.
3. Gravel and dirt walkways between buildings are difficult to maintain and cause safety hazards. Any precipitation causes muddy, slippery, and hazardous conditions within the buildings. Several students, parents, staff, and visitors have fallen or been injured this year alone.
4. The entire campus lacks landscape and vegetation. Students must walk, play, and do PE classes in dirt and weed infested grounds with harmful rocks and other dangerous natural elements.

## BUILDING EXTERIOR

1. Lack of adequate landscaping around the building does not allow for good drainage away from the building. This poor drainage has contributed to the moisture problems at the perimeter walls and in the crawl space.
2. Exterior lighting fixtures have far outlived their life expectancy and the fixture covers are cracked and broken from sun and weather making it near impossible to keep working bulbs.
3. The structural movement from lack of foundation has created numerous cracks in exterior walls and along roof seams.
4. Ill fitting doors and windows along with deteriorating weather stripping provide access for weather from the outside to the inside of the building.

## BUILDING INTERIOR

1. The building lacks adequate handicap accessibility from the parking lot to the building and throughout making us open to discrimination complaints from students, staff and the community as a whole.
2. The aluminum sliding windows, which are standard in modular construction, are low quality and feature un-insulated glass.
3. The 16 exit/access points pose a constant security concern.
4. The building fixtures, furnishings, walls, ceilings, flooring and all painted surfaces show considerable age and wear.

## LIGHTING

1. Poor to low lighting levels in the building cause headaches and other vision issues.
2. There are no lighting occupancy control sensors in the building. All of the on/off light switches in each classroom are very inefficient.

## LIMITATIONS OF SPACE

1. Health: the SCA Campus does not have space for a nurses station. In case of an emergency or illness, there is no place for students to lie down or receive medical care. Medications are kept in a cupboard alongside office supplies and a portable cot leans against a wall in the corridor.
2. High school science lab: The lack of space in the room does not allow for adequate chemical storage or fume hoods. Therefore the school cannot offer chemistry classes or certain other lab activities.
3. Middle school science lab: The lack of space and lack of adequate electrical and water service severely limits our science curriculum.
4. K-8 students use the same restroom facilities as 9-12 grade students at the same time. This creates an inappropriate age

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mix in the confines of the restrooms.

5. There is a general lack of storage space for teaching supplies, and no workplace for teachers outside of the classroom. We have added storage sheds outside of the building, which are not heated or lighted to accommodate numerous supplies and excess textbooks.

### COMMUNICATION

1. The buildings do not have an intercom/paging system. Staff is using the phone system to communicate.
2. School facility does not have a bell system in place due to lack of an intercom system.

### EFFICIENCY AND COST-EFFECTIVENESS

1. The individual electric heating and cooling units are more expensive to operate than similar gas-fired units or a central gas-fired heating and cooling systems. There is no gas in either building. Since July 2015, the MS/HS individual HVAC units have cost the school approximately \$4,000 to maintain thus far.
2. The building is not well insulated. At critical areas such as ceiling roof seam connections it is worse. Upgraded insulation is needed to improve comfort and reduce energy use.
3. The location of a single thermostat serving multiple spaces does not allow adequate control. Thus, the spaces are being overheated, which is detrimental to the computer labs, or over cooled based on the needs of a single space. This results in higher energy usage.
4. The cabling that exists between buildings for Internet and phone have become exposed due to settlement and weather, making for constant repairs, and increased expenses. Internet and phone service is unreliable and inconsistent for the MS/HS building.

For a detailed description and photographs of the deficiencies, please reference the Swallows Charter Academy master plan as well as the updated assessment report and photographs.

### Proposed Solution to Address the Deficiencies Stated Above:

In order to bring these deficiencies to resolution, the SCA community is pursuing the BEST grant to erect a safe, permanent two-story building for our students. The Design Advisory Group (DAG) convened to study various options, which included remodeling existing facilities, adding to the existing facility, and building a new facility to replace all and/or parts of the facility. All viable scenarios were evaluated. The DAG evaluated all of the options with the following criteria in mind:

- Safety and security of the students and staff
- Life safety and code violations
- Educational program adequacies and deficiencies as it relates to the existing facilities
- Immediate and anticipated maintenance and repairs needed for each building
- Facility maintenance and operations costs
- Efficiency of the buildings: energy, LED lights, etc.

The rationale and evaluation of each option is explained in the master plan with the updated project plan (2013). In addition, deficiency solutions and costs are described in detail in the Updated School Assessment Report (February, 2014). The DAG has determined that the deficiencies will continue to deplete the schools' budget and deter our focus from our children and their educational goals. Thus, it was determined that a complete MS/HS modular classroom replacement would be the BEST option to pursue.

According to the CDE Capital Construction House Bill 08-1335, projects that address safety hazards, health concerns, relieve overcrowding, and move students from temporary facilities to permanent facilities are a priority. Swallows Charter Academy has had at least 300 people at one time, in temporary facilities for over 8 years, which has presented many health and safety hazards as outlined above. SCA has a total of 556 students that deserve a safe and protective environment in which to learn.

A new permanent facility that replaces the MS/HS modular units will solve the following problems:



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## STRUCTURE

A new building would provide a stable support structure and would eliminate the absorption of water into the walls and wood structure. A masonry building is the only resolve. A new building with a solid foundation would eliminate a crawlspace infested with mold and excessive moisture. A new building would be supported on a new solid foundation, eliminating excessive settling issues. The current bid for mold abatement, water extraction, and excavation has been presented to SCA in the amount of \$12,500. SCA feels that this would be throwing good money after bad, when a new facility would solve and prevent future occurrences.

## SAFETY AND SECURITY

A new facility would eliminate the 16 entry and exit points that cannot be sufficiently controlled. A new building would create one secure entry point and provide greater security, eliminating much of the need for students to travel outside between the buildings. One building would allow security cameras to be used more efficiently and effectively. Restrooms for staff and students would be separate, increasing the level of student safety facility wide.

## FIRE SAFETY

A new facility would be fire code compliant with a sprinkler system ensuring that the building is compliant with fire sprinklers, alarm horn/strobes in the corridors, smoke detectors, and fire extinguishers in all the classrooms. It would also ensure that our outlets are code compliant within the entire school.

## ENVIRONMENTAL HEALTH AND SAFETY

New mechanical systems would eliminate poor ventilation, lack of air filters, and permeable doorways and windows. It would decrease dust and allergens, leading to higher quality of health. A new mechanical system in a new building would eliminate individual HVAC units and provide a high quality system for everyone.

A new roof that is not flat and is engineered to accommodate the Pueblo West high winds and year round weather conditions will practically eliminate the regular repairs and maintenance issues for many years. A solid structure eliminates alignment issues, gaps, and settlement problems with the doors and seam gaps in the flooring, as well as needing to replace ceiling tiles regularly due to high winds.

## SEVERE WEATHER

A masonry building would provide a solid structure for students in the event of a Tornado, replacing the unsafe metal panel modulars. Students and staff with asthma and allergies will no longer be forced to stay home due to exposures to wind, dust, and bad weather and would attend a school with proper ventilation.

## TEMPERATURE

A new building would have energy efficient, climate controlled systems installed and would eliminate the use of space heaters and fans, creating an even climate throughout the building.

## BUILDING EXTERIOR

Proper drainage for water flow away from the building and eliminating wood rot long term can only be addressed by a new building structure. A new facility with the sufficient amount of electrical capacity to maintain proper lighting will allow us to provide safe passage to and from the parking lots. Building a foundation with a new solid permanent structure is the only solution to not having a foundation.

Deteriorating weather stripping is around all doors. This will be addressed when the foundation is corrected with a new building.

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## BUILDING INTERIOR

ADA compliance regulations can fully be remedied. We would no longer be forced to turn away disabled students, unable to meet their needs because of facility limitations. BEST grant funds would install energy efficient windows, fixtures, carpet, 21st Century learning classroom furniture, plumbing, HVAC and LED lighting. A new building will design extra storage space that is needed for educational programs. Science classrooms would be equipped with the proper safety protocols as well as storage for chemicals in order to offer classes such as chemistry and advanced biology. A new facility would provide an area in the administration offices for the school nurse so students can lay/sit down and to be cared for by staff.

## COMMUNICATION /TECHNOLOGY

Construction of a new facility will allow for upgraded network cables, such as T1 and communication lines that can increase capabilities for technology as well as communication on campus. An intercom/paging/bell system would be state of the art and staff would be specifically trained on the system itself and new crisis management protocols to go with the new facility.

## EFFICIENCY AND COST-EFFECTIVENESS

The individual electric heating and cooling units are more expensive to operate than modern heating and cooling systems. Adequate controls over indoor spaces, classrooms, and restrooms are necessary to control energy usage.

## How Urgent is this Project?

The life safety deficiencies are too great to ignore or delay any further. As a community school it is our responsibility to provide a safe learning environment for our students and staff and we believe our only hope lies in being awarded a BEST Grant.

The SCA Board of Directors and administration along with the Pueblo County Sheriff's Department and the Pueblo West Fire Departments have determined that these facility deficiencies that continue to put Pueblo West students at risk must be addressed immediately. Time will not fix the vast amount of wide-open space that remains unprotected while our children are exposed to unforeseen events such as threats of physical harm and daily exposure to the environmental elements. In fact, SCA's school resource officer has observed that the building arrangements and placement on the site has several security defects, which cannot be addressed without major renovations and replacement of the modular buildings.

Considering the recent events of countless acts of violence against schools and innocent children, the safety and the security of our children are of the utmost importance. Serious and life safety deficiencies have been outlined throughout the application, the amended master plan, and the updated school report. Our students are the highest performing students in all of Pueblo County and they should have a high performing facility in order to grow even further, and also be rewarded for their hard work and persistence.

It is SCA's goal to continue to inspire and instruct our students to be innovative leaders of the 21st Century in spite of their surroundings. We teach about having a positive attitude no matter what – and to continue being relentless in the pursuit of goals, no matter what. We lead by example, as we submit this BEST grant application for the fourth year in a row.

If SCA does not receive the BEST grant, then we would be forced to seek out other financial avenues, which mean additional debt services, increased maintenance and utility costs for a longer period of time; with no real means for SCA to increase its revenue to keep pace with the needs. This includes the probable purchase of more modular units as the years continue. SCA's current classrooms are already at capacity. Eventually, the current facility will not be able to sustain our population or our student needs, putting the wellbeing of every person at risk and getting worse each year that passes.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

SCA fully intends to adhere to all guidelines in the construction of a new building that will replace the temporary modular buildings. This project will remedy security, life safety, and health threats that have been outlined. The budget submitted with this application reflects complete compliance with the guidelines and includes both hard and soft costs for the entire scope of

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the project. SCA intends to comply with all other applicable local, state, and federal laws and regulations. The budget for SCA's grant proposal includes an allocation for an owner's representative, an architect with experience in building high performing schools, and a full team of consultants and engineers, including mechanical, electrical, plumbing, and structural engineers as well as a LEED consulting engineer. The owner's representative will coordinate with district facility managers and current school and community stakeholders in refining the design and implementation throughout construction. Performance specifications and contracting will be an important part of balancing the energy savings set forth by the DAG and the cost constraints inherent in any budget. A full commissioning at the close of the project should ensure that all systems are operating and functioning at required performance levels presented by LEED Gold for certification. The following is a snapshot of how SCA's project would conform to guidelines. A complete analysis of compliance is available in the master plan.

### 4.1 Health and Safety Guidelines

4.1.1 Sound building structure: Currently the Middle School and High School Building, which is the target of this BEST Grant application, is made up of 13 temporary modular classrooms fastened together to form one building. This "building" is set on concrete blocks without a concrete foundation. This project seeks to replace this temporary modular building with a permanent new structure with a foundation.

4.1.2 Roofs: Currently the MS/HS building has a relatively flat aluminum roof commonly found on modular classrooms. Because of differential movement inherent of fastening modular buildings together, the roof continuously cracks along the seams between the various modular's causing numerous leaks. The new project would be weather tight throughout including the new roof, and would be configured so as runoff would be positively drained away from the building.

4.1.3 Electrical Service: The current MS/HS building has limited electrical service and outlet configuration which does not meet current electrical and fire codes. Circuit breaker trips occur daily. The new building will provide adequate electrical service for a school, and will be designed to meet all applicable National Fire Protection and National Electrical codes.

4.1.4 Mechanical systems: The current HVAC systems are inefficient, have poor ventilation, produce unacceptable sound levels, and do not maintain acceptable temperature levels throughout the building. The new building design SCA has programmed will include a safe and efficient mechanical system which will provide proper ventilation and temperatures throughout the facility in accordance with current ASHRAE 55 standards. The new system is designed to provide continuous healthy indoor air quality.

4.1.5 Plumbing: The existing MS/HS building has critically inadequate plumbing capacity which limits the restroom facilities and science room facilities. The proposed new building is designed with adequate plumbing capacity to serve every need in a school building of this size. All new plumbing will meet or exceed Colorado Drinking Water Regulations, the Environmental Protection Agency Safe Drinking Water Act Standards, and the 2015 Plumbing Code requirements.

4.1.6 Fire Management: The existing MS/HS temporary modular building does NOT have a fire Sprinkler System. The new building will be fully sprinkled and will feature every fire alarm and notification system required by state and local fire code requirements.

4.1.7 Paths of egress: Currently, there is not an egress path. Architectural plans reorient the main entrance to include an egress for better flow of traffic in and out of the drop off loop and the building itself. The new design will separate the parent loop from the service loading area and fire lane.

4.1.8 Facilities with safety managed hazardous materials: Currently, the school does NOT have any means to store or dispose of hazardous materials or waste. SCA plans for a science lab that would contain approved storage containers for the storage of toxic and hazardous paints or chemicals for use in the classroom. Fire blankets and extinguishers will be provided as well. In addition, an easily accessible eyewash fountain/shower along with an independent hand-washing sink will be provided in the laboratory rooms. The school will comply with all AHEERA criteria and develop, maintain, and update a management plan.

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4.1.9 Security: SCA is not secure! To remedy our primary safety deficiency, the proposed facility reorients the school entrance to the south side of the facility. The site entrance, drop-off, and parking would be relocated east of the present location and oriented along the south side of the site along Civic Center Drive. The new building is designed to restrict normal entrance to only one or two locations, with no recessed doorways and limits the number of entryways into the building. The main entrance walking traffic is designed to flow past the main office area and be visibly monitored from administration directly. The main entrance will have a controlled entry system where all visitors will have to be buzzed into the building. All other exterior entrances will be locked for controlled access. Interior classroom doors will have locking hardware for lock down procedures and will have code compliant doors that allow for line of sight into the corridors. SCA plans to explore the most current security and access options available. SCA envisions an intercom/phone system with communication devices located in all classrooms and throughout the school to provide efficient inter-school communications and also allow communication with local fire, police, and medical agencies during emergency situations.

SCA will install additional cameras and implement an effective video management system. All doors will lock with panic bars to open readily. Unless a door is intended for ingress, exterior doors will not have handles and locks on the outside. Doors will be steel or aluminum alloy. Any glass doors will be fully armed and equipped with burglar-resistant tempered glass. Exit doors with panic push-bars will be "access control doors," per the codes adopted by the Colorado Division of Fire Prevention and Control. Armored strike plates will securely fasten to the doorframe in direct alignment to receive the latch easily. Faculty, staff, and administration will have an automated controlled access system, which will include identification card/badge readers. Students will be expected to carry some form of identification that will be used for access to the school.

The main entrance will have a building vestibule with double door entry to provide a secured area for visitors to be authenticated and gain clearance. The building shall allow for school personnel to be able to monitor incoming visitors from a safe location out of reach using video monitoring. The administration offices will be in the front entrance to maximize security for school occupants and to detect an intruder from the entire perimeter.

Interior classroom doors shall have locking hardware for lock downs, which does not interfere with automatic closing and latching functions required by the fire code. These doors will have sidelights or door vision glass as well.

4.1.10 Health Code Standards: The new building will adhere to and conform to the Department of Public Health and Environmental rules and regulations governing schools.

4.1.11 Food Preparation Equipment and Maintenance: The kitchen and cafeteria areas are already completed and conform to the regulations of the Colorado Retail Food Establishment rules and regulations.

4.1.12 Emergency Care Room: Since the modular building does NOT have a nurse's office or a separate room to care for emergencies or sick children, design will include a separate emergency care room with a dedicated bathroom for sick students, and will comply with the Department of Public Health and Environment rules and regulations governing schools.

4.1.13 A site that safely separates pedestrian and vehicular traffic and is laid out according to the guidelines. Currently, SCA does NOT have a well-defined separation of pedestrian and vehicular traffic. The new plan will address this problem and will adhere to the guidelines specified.

4.1.14 Severe Weather Preparedness: SCA does NOT have a secure shelter designated for emergency situations and the temporary modular buildings do NOT serve as a sound structure to use in the event of an emergency or crisis. The new building will be designed to use as an emergency shelter for the entire community.

4.2 Technology, including but not limited to telecommunications and Internet connectivity technology and technology for individual student learning and classroom instruction.

The new building and additional classrooms will be wired for the Internet as well as have a wireless connection available. The media center/library and additional computer lab will be equipped for student learning according to the required specifications. All other classrooms and administrative areas will be constructed with a long-term sustainable technology infrastructure.

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- 4.2.1 Plans for the new facility include educational facilities that maximize individual student learning, classroom instruction, online instruction, and associated technologies. SCA will be connected to the Colorado Institutions of Higher Education Distant Learning Networks: "Internet" and "Internet two."
- 4.2.2 A new facility will include educational facilities with standards-based hard wired and wireless network connectivity.
- 4.2.3 A new facility will include security and associated filtering and intrusion control for internal voice, video and data networks.
- 4.2.4 Plans include external internet service provider (ISP) connection and internal wide area network (WAN) connections meeting or exceeding recommended guidelines of the state Education Technology Education Directors Association (SETDA) broadband imperative, and devices meeting or exceeding recommended specifications according to the most current version of technology guidelines for the Partnership for Assessment of Readiness for College and Careers Assessments. (PARCC)
- 4.2.5 A new facility will include school administrative offices with web-based activity access.
- 4.2.6 A new facility will include an administrative software package for Individual Educational Programs (IEP), Individual Learning Plans (ILP), Personal Learning plans (PLP), 504 Accommodations Plans, and all other required documents.
- 4.2.7 A new facility will include emergency power backup, redundant a/c for voice, video and data systems.
- 4.2.8 SCA does not have Bi-Directional Amplification (BDA). The new facility will include signal boosters that enhance in-building signals across a range of frequencies.
- 4.2.9 The new facility will be constructed with long-term sustainable technology infrastructure. Facilities should be built with sufficient data cabling and/or conduit and power infrastructure to allow for maximum flexibility as technological systems are upgraded and replaced in the future. A plan for technology lifecycle review intervals should be put in place for review every two to four years.
- 4.2.10 The new facility will include data centers and non-data centers.
- 4.2.10.1 SCA does not have an uninterruptible power center (UPS). The new building will include IDF and MDF locations wired with 30 Amp or 40 Amp power circuits to support sufficient backup power systems to maintain secure systems operation during a power outage, or intentional school attack.
- 4.2.10.1.1 SCA does not have the capability to back up data. The new facility will include a system to back up data by a generator.
- 4.2.11 The new facility will conform to all connectivity standards.
- 4.2.11.1 - The new building will be wireless. Data cabling will support appropriately spaced multiple-antenna wireless networking infrastructure allowing for a centrally located antenna every 2500 to 5000 square feet (and preferably performing a professional site survey/resonance analysis). Support for 802.11b/g/n, 802.11ac, and/or newer protocols are recommended.
- 4.2.11.2 - The new facility will be equipped with the latest network technology in order to support a wireless network.
- 4.2.11.2.1 - The new facility will include cabling. All new runs of copper data cable will be augmented category 6 cable or newer standards. Two cable runs will back any data jack.
- 4.2.11.2.2 - The new facility will include data closets connected by conduit and fiber optic cable to allow for maximum data performance and upgradeability.

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4.2.11.2.3 - The new facility will construct classrooms to have a data jack on the wall at the front and back of the room as well as data cable to the door for access control and a data jack on the ceiling near the front of the room for projection and/or smart board equipment as well as security/PA/clock devices.

4.2.11.2.4 - IDF to office, and library or technology/media centers. The new building will include any areas designed for independent work or study should have a dedicated data jack with two copper cable runs each.

4.2.11.2.5 - IDF to common areas, auditorium, and cafeteria. Common areas should contain one data jack per forty feet of linear wall space and such jacks shall be distributed at reasonably equal spaces throughout the room.

4.3 Building site requirements. Functionality of existing and planned public school facilities for core educational programs, particularly those educational programs for which the State Board has adopted state model content standards. Capacity of existing and planned public school facilities taking into consideration potential expansion of services for the benefit of students such as full-day kindergarten and preschool-an school-based health services and programs.

The new programming and space allocation adhere to the requirements for schools, as outlined in our updated master plan.

### LEARNING ENVIRONMENT CONDUCIVE TO HIGH PERFORMANCE

SCA is committed to designing an exciting learning environment with appropriate teaching and administrative support areas. Classrooms, common areas, and administrative offices will be designed to use as much natural lighting as possible. Well-designed, task-oriented artificial lighting will be designed to supplement daylight. Acoustical material will be utilized to reduce ambient noise levels, minimize transfer of noise between classrooms, corridors, and other learning areas, and create a learning environment that focuses students' attention.

SCA has programmed for two (2) kindergarten classrooms at 1,000 square feet each and general classrooms will be designed at 750 square feet to accommodate up to 24 students in each classroom.

SCA is committed to 21st Century Learning! Technology software and hardware are an integral part of our facility design, and that design will be a reflection of our technology philosophy. Technology will be integrated into the classrooms as well as additional computer labs available for whole classroom usage. SCA's curriculum currently meets or exceeds Colorado Content Standards and NCLB. Our mission embraces 21st Century Learning, but the site and current facility lack sufficient bandwidth for more advanced levels of information transport and delivery. With a new facility, individual learning and remote classroom instruction would be enhanced and enable connections to distance learning networks.

4.4 Building performance standards and guidelines for green building and energy efficiency.

The replacement of modulars will aim to meet the requirements set forth below.

Section 24-30-1305.5 C.R.S., requires all new facilities, additions, and renovation projects funded with 25% or more of state funds to conform with the High Performance Certification Program (HPCP) policy adopted by the Office of the State Architect (OSA) if:

- The new facility, addition, or renovation project contains 5,000 or more building square feet; and
- The project includes an HVAC system; and
- If increased initial cost resulting from HPCP can be recouped by decreased operational costs within 15 years, and
- In the case of a renovation project, the cost of the renovation exceeds 25% of the current value of the property.

### ENERGY EFFICIENT PERFORMANCE STANDARDS

Sound structural foundations, floors, walls, and roof systems are not taken for granted by those who have lived in a building without them for so long. SCA embraces green building and energy efficiency performance standards, or other programs that comply with the HPCP, reducing operations and maintenance costs, relieving operational expenses, and extending the service life of the facility. SCA envisions the primary delivery methods for heating, cooling, and lighting to be natural and sustainable, with mechanical or artificial systems available only to supplement at night or when conditions warrant it. High performance



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

systems and holistic thinking will be critical to realizing this vision. Higher operational costs result in sacrificed educational opportunities. It is a high priority that SCA think about long-term energy use and durability for decreased maintenance expenses and ensure a financially sound future.

SCA plans on selling our current modular buildings. The DAG team envisions a project of very little waste, where much of the furniture and technology will be reused in the new facility. Maintenance programs will be developed and implemented to keep equipment and materials functioning as intended, extend life of equipment and reduce operational costs.

SCA has approached its facility programming and decision making with an emphasis on innovative thinking. It is fundamentally important to the longevity of the building and hence the sustainability of the school that the selected materials and systems possess a combined lifespan that will enable the school to service the community well past the generation of students that is currently in the school. Constructed correctly, the design envisioned should remain relevant for as long as we continue to educate children in classrooms and be sustainable far beyond that.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

SCA has developed a capital replacement plan that sets aside and earmarks funds for the purpose of replacement of each of the major systems in the new facility as they reach the end of their service life. SCA acknowledges that replacement costs may take an unexpected path over the coming years and decades, as the economy and school funding priorities vary from year to year. We also understand that constant analysis of the components and systems through the facilitation of the maintenance plan will help keep capital replacement costs lower than normal, perhaps over a longer period of time. In preparation of this replacement plan, SCA determined for each of the categories an estimated replacement cost and an annual amount based on a straight-line method to be earmarked in capital reserves in order to cover the expenses of replacement. This information is set forth below in the following table:

System	Est. Yrs, before replacement	Annual Savings	Est. Total Cost
Air Handlers	20	\$150	\$3000
HVACs	20	\$300	\$6000
Misc. Plumbing	25	\$25	\$625
Light Fixtures	15	\$15	\$300
Painting	10	\$500	\$5,000
Roof System	50	\$2,300	\$115,000
Flooring	30	\$2,500	\$80,000
Landscaping	20	\$200	\$4,000
Hardscapes	25	\$800	\$20,000
Sealant/Weather striping	10	\$300	\$3,000
Visual display boards	10	\$500	\$5,000
Low volt cabling/Equip.	30	\$665	\$20,000
Doors/hardware	30	\$500	\$15,000
Windows/glazing	30	\$335	\$10,000
Window treatments	10	\$500	\$5,000
Fire sprinklers	50	\$200	\$10,000

TOTAL \$304,925

SCA has developed both a capital replacement plan and a maintenance plan for purposes of replacing the major components of our new energy efficient renovation and addition school. SCA acknowledges that maintenance costs during the initial years of the new charter school will be lower than at a later date as the facility ages. The SCA maintenance plan includes recommendations from the best practice of “predictive” maintenance, and avoiding the practice of “breakdown” maintenance. This preventative plan will include the following at a minimum:

1. Accurate and timely record keeping on the various systems will be tracked and maintained to include both the date and cost of occurrence. These records will be used to predict the accuracy of future project costs.
2. Operations manuals containing a list of scheduled tasks for preventative maintenance, repair standards, and work order

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

procedures will be a top priority for our office manager.

3. A maintenance schedule will be developed for each mechanical system, component, and product that includes exact timelines and tasks from manufacturers manuals and recommendations.
4. After installation, industry professionals will verify that building systems and components, as well as their functionality and operations, meet the intent of owners and designers. Final adjustments will be carefully documented if changes are necessary.
5. Air handling equipment will be inspected and maintained regularly by industry professionals.
6. Roof surfaces will be inspected regularly, with proper removal of snow and water. Leaks will be repaired upon discovery.
7. Industry professionals to include water fountains, pumps, expansion joints, drains, locker rooms, restrooms, and kitchen facilities will regularly inspect all plumbing and sprinkler systems.
8. Industry professionals to include thermographic scanning and motor current analysis used to identify common faults will regularly inspect the electrical systems.
9. The fire alarms and public address system will be regularly tested and maintained.
10. Floors will be waxed and sealed regularly.
11. Painting will be conducted on a rotating and predictable schedule, created with high traffic volume and impact in mind.

This schedule will be completed during summer months to avoid disturbance of learning activities.

Annual maintenance is anticipated to be in the estimated amount of \$2.72 per square foot based on approximately 22,364 square feet for a total of \$60,830. This information was based on information gathered from local contractors and they are believed to be feasible, but better projections can be determined after specific systems and materials are specified in the final plans, and actual operating information becomes available.

The following forecasted maintenance spreadsheet describes the frequency of anticipated maintenance per year, the estimated cost of each occurrence and the total annual maintenance cost for each system.

System/Component	Times per Year	Estimated Cost per Maintenance	Estimated Annual Cost
Roofing standing seam	1	\$300	\$300
Air Handler	4	\$150	\$600
VAV's	4	\$150	\$600
Misc. Plumbing	4	\$300	\$1200
Light Bulbs	12	\$100	\$1,200
Light Fixtures	2	\$500	\$1,000
Painting	6	\$150	\$900
Flooring	2	\$500	\$1,000
Landscaping/Irrigation	5	\$300	\$1,500
Hardscapes	2	\$500	\$1,000
Sealant/Weather Strip	2	\$500	\$1,000
Low Volt Cabling/Equipment	1	\$400	\$400
Doors and Hardware	2	\$300	\$600
Windows/Glazing	2	\$100	\$200
Window Treatments	4	\$50	\$200
Fire Sprinklers	1	\$1,000	\$1,000
<b>TOTAL</b>		<b>\$12,300</b>	

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The middle/high school modular structure is in urgent need of replacement. These modular units were manufactured in 1996 and installed on the SCA campus in 2008 intended to be a temporary facility for a maximum of one to two years. These

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

modular units were used at the time of purchase and installation, and were in fair condition. In 2008, the SCA Board expanded its educational programming, doubling grades 6-8 and adding a 9-12 program all at once. The Board determined that this was the most viable and cost effective solution for expansion. The Pueblo West area did not have a vacant facility available to lease or buy to serve as another viable option. The intention was to use the modular buildings temporarily and either build a new building or move into another building at a different location. The middle school and high school modular buildings have now been in place for 8 years and they have reached their maximum life span. Since 2008, SCA has purchased the existing school property from the Pueblo West Metro District for \$150,000, in order to develop a safe campus with a permanent structure for our K-12 students. In 2008, the temporary buildings served the purpose of housing 9-10 graders primarily, since most 11th and 12th grade students attend the early college program. However, the building has outgrown its original function and now serves over 300 6-12 students, 7 periods per day.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

The following is a list of capital improvements made to the facility since 2008.

- &#10146;13 Modular units were installed in 2008
- &#10146;Modular units needed additional work to connect them together as there were major gaps in floors and ceiling, 2008
- &#10146;Constructed for use with upgrades to carpet, paint, and utilities, 2008
- &#10146;Security system installed, 2011
- &#10146;New phone system installed, 2011
- &#10146;New technology lab installed with upgrades to the network 2011-2014
- &#10146;Various plumbing issues: sinks, toilets, and drinking fountains replaced and repaired, 2011-2015
- &#10146;Annual roof repairs, 2010-2015
- &#10146;Annual replacement of various ceiling tiles, 2011-2015
- &#10146;Rock and landscaping, 2012 and 2015
- &#10146;Purchase of school property for \$150,000, 2014
- &#10146;Controlled access system installed, 2015
- &#10146;Annual repairs and maintenance to the HVAC units, 2011-2016
- &#10146;Additional exterior lighting, 2010 and Spring, 2016
- &#10146;Additional storage shed, 2011

**FY15-16 Charter School Capital Construction Allocation from the State:**      \$138,235.00

<b>Current Grant Request:</b>	\$10,460,259.49	<b>CDE Minimum Match %:</b>	25
<b>Current Applicant Match:</b>	\$129,999.99	<b>Actual Match % Provided:</b>	1.227543
<b>Current Project Request:</b>	\$10,590,259.48	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	Fund Raising and Reserve Fund	
<b>Total of All Phases:</b>	\$10,590,259.48	<b>Escalation %:</b>	7
<b>Affected Sq Ft:</b>	26,130	<b>Contingency %:</b>	12
<b>Affected Pupils:</b>	556	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$405	<b>Does this Qualify for HPCP?</b>	Yes
<b>Soft Costs Per Sq Ft:</b>	\$69	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$336	<b>Who owns the Facility?</b>	Charter School

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Cost Per Pupil:** \$19,047

**Sq Ft Per Pupil:** 47

**Who will the Facility Revert to if the School Ceases to Exist:**

In the event the charter school shall no longer exist, the building reverts back to Pueblo District 70.

**District FTE Count:**

**Assessed Valuation:**

**PPAV:**

**Unreserved Gen Fund 13-14:**

**Median Household Income:**

**Free Reduced Lunch %:**

**Existing Bond Mill Levy:**

**Bonded Debt Approved:**

**Year(s) Bond Approved:**

**Bonded Debt Failed:**

**Year(s) Bond Failed:**

**Outstanding Bonded Debt:**

**Total Bond Capacity:**

**Bond Capacity Remaining:**

## BEST Charter School Grant Waiver Application

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching monies requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as practicable by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

### Instructions

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents or other relevant documentation as applicable to support the responses provided.

For questions 4-15

Only answer the questions, which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your charter school.

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your charter school.

Given the overall health and safety needs of the SCA students and staff, the only viable solution to address these issues is to replace the existing modular units that house the middle and high school classrooms. A partial waiver of the match is necessary to enhance:

- Health and safety needs of our students, by providing a safe facility and learning environment.
- Security measures, by eliminating the multiple entry/exit points, as well as additional cameras.
- Science educational programs such as Chemistry and Physics Labs.
- Build an updated infrastructure necessary to deliver a 21<sup>st</sup> Century learning experience.

If SCA does not receive the waiver, we would be forced to make budget cuts that would affect the health and safety needs of our SCA community, higher maintenance costs that would require us to invest money in a drying facility and take funds away from students learning.

The Pueblo community has a median household income of \$41,777, which is below the state and

national average. Our school community cannot produce the funds necessary for the full match, even with significant and ongoing fundraising efforts. Our families work hard to make ends meet, and they simply do not have the time to commit to assist with significant fundraisers, since many parents are working more than one job trying to provide for their families. A partial waiver would allow us to see this project through to the end, without additional hardship to the school, the community, and our families. We are desperate to provide a safe and secure facility for our K-12 students. As stated in our application, our current facility is not adequate in light of the heightened security plans and procedures that all schools must have in place. We are the only school in District 70 that is not yet connected to the Safe School Radio system, but do hope to allocate approximately \$30,000 toward that goal in the next several months. SCA will bring every dollar possible to the matching contribution, and are graciously requesting a waiver so we can provide a safe facility and continue to provide rigorous curriculum and maintain high standards.

2. Please describe why the cost of complying with the matching contribution would significantly limit educational opportunities within your charter school.

SCA's operating budget is approximately \$3.8 million, a full match would require roughly \$2.7 million, and salaries are about \$1.9 million, thus, SCA simply does not have enough money to support a full match. Given the severe condition of our facility, we would need to use the majority of our budget to maintain a building that is at the end of its life. Should the partial waiver be denied, SCA would not be able to replace or continue to safely maintain the MS/HS building. Drastic and aggressive budget cuts would be made in order to maintain the facility, which would ultimately impact health and safety needs, student educational programming such as curriculum, teachers, and other resources would have to be cut. The MS/HS science program would continue to fall behind other area schools as the limitations of the facility hold students back instead of taking them to the next level of experience. SCA will continue to provide an early college program without the ability to teach chemistry or do lab experiments.

Denial of a partial waiver would result in denying students of a safe facility as well as impacting students' learning as our budget continues to be invested in a building that is non-maintainable.

Denial of a partial waiver would result in denying students of much needed technology upgrades in order to keep up with educational trends and technology skills which are absolutely necessary in today's world. The MS/HS building is not equipped with sufficient network cable and wireless points for a strong network and SCA recognizes that much of the budget needs to be spent on upgrading technology not only for 21<sup>st</sup> Century skills but to accommodate the required state assessments. Funds would not be available to purchase curriculum, resources, and support our educational mission.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

Efforts have been made to secure in-kind donations if/when the project is funded. No monetary contributions have been committed from community partners such as the YMCA, the Pueblo West Metro District, Pueblo Community College, or CSUP.

4. Weighted average of district matches which comprise the student population.

5. Does the authorizing district have 10% or less bonding capacity remaining?

No





6. Is the charter school in a district owned facility?

No

7. How many times has the charter school attempted or attained bond proceeds from an authorizer's ballot measure for capital needs?

Three attempted, two awarded: Failed measure in 2010. Received \$22,000 in 2013 for a controlled access entry system and \$100,000 in 2004 for parking lot improvements.

8. How many times has the charter school attempted to do a special mill levy override pursuant to 22-30.5-405 for capital needs?

None

9. How many times has the charter school attempted or attained grant funding through a non-BEST source for capital needs?

The following capital grants were denied to SCA in recent years:

- a. 2008 – The Packard Foundation grant, \$30,000
  - b. 2008 – New School Startup Grant \$500,000
  - c. 2012 – Shell Science Classroom grant, \$20,000
  - d. 2012 – Clorox grant, \$50,000
  - e. 2013 – Shell Science grant, \$20,000
2. In 2007-08, Pueblo Community College offered land and building space to house the early college program. This proposal was rejected at the time by the District 70 School Board for unknown reasons.

10. How many times has the charter school attempted or obtained funding through CECFA or another type of financing?

Once

11. Charter school enrollment as a percent of district enrollment.

6.7%

12. Free/reduced lunch percentage in relation to the statewide average charter school free/reduced lunch percentage?

CDE reports that the SCA K-8 is at 27.1% and the high school is at 31.3%. The statewide average for free and reduced lunch is 47.36%.

13. Percentage of PPR spent on non M&O facilities costs.

SCA spends approximately 92% of the annual budget on non M & O facilities costs.

14. Unreserved fund balance as a percent of budget.

The SCA unreserved balance is currently \$321,473.00 which is 8% of the 2015-16 annual budget.

15. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

Two unforeseen facilities issues have burdened SCA this school year both financially and educationally. In August 2015, it was discovered that the entire main sewer line had to be replaced and school was cancelled for three days. This was an unexpected expense of \$16,500, and three days out of school for both students and staff.



In February 2016, it was discovered that mold was present in at least one area under the modular building, and the anticipated cost for mold abatement is over \$12,500. SCA has already spent approximately \$3,500 on testing and investigating the mold issue in the modular buildings. Approximately \$4000 has been spent on maintaining the HVAC units in the modular buildings since July 2015.

The SCA community is limited in funds and contributes in other means by using their talents, such as volunteering to work on landscaping, an irrigation system, and a flagpole, totaling approximately \$1600, this year. SCA has dedicated the following monies toward the matching portion of the BEST grant if successfully awarded:

- a. \$60,000 (or more) from the reserve fund balance.
- b. \$40,000 (the full amount) from the 2016-17 Charter School Capital Construction Fund
- c. \$15,000 from the SCA P.T.O.
- d. \$15,000 from the SCA Educational Foundation
- e. \$10,000 from fundraising

This amount totals \$130,000.00. SCA is able to provide 1% of the match, thus we are requesting that the remaining balance of the 25% match (\$2,517,564.00) is waived. SCA will also aggressively seek corporate and private sponsorships to add to our matching contribution in the event a BEST grant is awarded. Our hope lies with you, the BEST grant Board.





**ADMINISTRATIVE SERVICES CENTER**  
24951 EAST HIGHWAY 50 PUEBLO, COLORADO 81006  
TELEPHONE (719) 542-0220 [www.district70.org](http://www.district70.org)

**C. Edward Smith**  
Superintendent

February 22, 2016

Dear BEST Grant Committee Members

As the superintendent of School District 70, it is my privilege to write this letter of support for Swallows Charter Academy, in the pursuit of a BEST Grant. Swallows Charter Academy is one of two charter schools in District 70, in fact, one of the most established charter schools in the state of Colorado. Swallows is located in Pueblo West, in two separate buildings; one a renovated grocery store, and the other, a collection of modular buildings. Even though the facilities and grounds are inadequate, Swallows continues to be one of our top performing schools in the district. With a new facility designed with learning in mind, I can only imagine what achievement might look like at Swallows.

I can assure the BEST grant committee that the relationship between Swallows Charter and it's authorizer will continue to grow well into the future, and we fully support their mission and vision, their long-term plans for incremental growth over time, and a new facility.

In my years in District 70 both as the assistant superintendent and the superintendent, I have know Swallows Board and administration to be exploring several options for a new facility, on several sites in Pueblo West. Extensive and expensive research was conducted on a site near Avenida Del Oro, which proved not to be feasible for several factors. The Board also looked seriously at an existing facility behind the Pueblo West Walmart, and that was not a viable option due to asbestos and other hazards. The Swallows community also did not support the proximity of being so close to Walmart. Therefore, when the SCA Board began discussion with the Pueblo West Metro Board to purchase the land the modulares currently sit on, it was no surprise that this option was well received by the community, the school district, and the metro district. The current location has housed Swallows for the past 16 years, and it has become a landmark in this community. It seems the perfect location to establish a permanent and safe home for Swallows.

The safety and security of the students and staff at Swallows has always been a top priority for the district. We are dedicated to ensuring the best protections and welfare of our students at all of our schools, and Swallows has some substantial safety issues, with students traversing an open campus throughout the school day and being housed in expired temporary modular buildings. A new facility would provide the ability not only to deliver the highest quality instruction, but also ensure the safety and security every child in District 70 deserves. Please consider funding the Swallows master plan for a new facility through the BEST grant option one or two, and giving these students the BEST possible education.

Sincerely,

A handwritten signature in blue ink that reads "C. Edward Smith".

Mr. Ed Smith  
Superintendent

**• Facilities Impacted by this Grant Application •****Frontier Charter Academy - Frontier Academy HVAC Replacement - 1984****School Name: Frontier Charter Academy**

Number of Buildings:	2
All or Portion built by WPA:	No
Gross Area (SF):	59,000
Replacement Value:	\$16,211,610
Condition Budget:	\$8,893,084
Total FCI:	54.86%
Energy Budget:	\$20,650
Suitability Budget:	\$3,349,400
Total RSLI:	12%
Total CFI:	75.6%
Condition Score: (60%)	3.10
Energy Score: (0%)	2.19
Suitability Score: (40%)	3.68
School Score:	3.33



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**Applicant Name:** Frontier Charter Academy

**County:** Weld

**Project Title:** ES HVAC Replacement

**Previous BEST Grant(s) Funded:** 1

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input checked="" type="checkbox"/> HVAC    | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Frontier Academy Charter School is a tuition free charter school for grades Kindergarten through 12 in Greeley Colorado. There are two campuses. The secondary campus at 6530 W. 16th Street houses grades 6 through 12. The elementary campus at 3560 W. 29th Street has two buildings, the Kindergarten through 3rd grade building and the 4th/5th grade building. Our 2015 population was 1353 students (Kindergarten through 12th grade). In addition, Frontier Academy offers a home school ACCESS program on Fridays at our secondary campus. The average classroom size is 24 students (K-5) and 28 students (6-12). We have an A+ rating at [www.coloradoschoolgrades.com](http://www.coloradoschoolgrades.com). We have received state recognition for our Music, Arts, Drama, and Athletic programs, offer Advanced Placement and college concurrent courses, and are national qualifiers for Academic Pentathlon and Academic Decathlon.

Since 1997, Frontier Academy maintains a 30-year contract with Weld County School District 6. The two buildings that house the elementary campus are retrofitted storefront business buildings. Over the past 18 years, the elementary campus has redesigned the two buildings to accommodate 661 students and 68 staff on a daily routine of learning, playtime, and specials (library, P.E., Music, Art, and Fine Arts). The secondary building was built specifically for Frontier Academy and opened in 2000.

The Administrative Unit of Frontier Academy is the Executive Committee/Board, which is responsible for governing Frontier Academy (K-12).

Its attention is necessarily directed to planning, evaluating, and policy-making. Their responsibilities cover many phases of the school program including employees, students, curriculum, finance and facilities.

The Executive Committee developed and focused on the following strategic goals to accomplish the vision and mission.

Facilities – Plan, design and operate structures that provide students the opportunity to inspire student achievement.

Safe Campus – Provide students/staff/community a safe environment

Communications - Enhance the information flow throughout the community

Revenue Streams - Funding for opportunities

Academic Development – Enhancing the growth of students.

Staff – Enhancing the growth of Frontier Academy personnel.

Board Development – Oversight and accountability refinement

As part of the academy's strategic plan, replacement of the original HVAC units on the roofs of the elementary buildings is a priority, in addition to any original A/C units and original individual classroom furnaces. Currently, the academy has only been able to repair and replace as needed, with the knowledge that in the next 2-3 years, all units will require replacement. At this juncture, the academy has decided to pursue the 2016 BEST Grant to be able to complete a project of this size and cost.

## Deficiencies Associated with this Project:

Frontier Academy Elementary School is located in the original buildings that it occupied upon its charter in 1997. The academy has made philosophical decisions that positively impact the learning environment for our students, such as small class sizes, Direct Instruction and Core Knowledge Curriculum. However, this comes at a financial cost that is further impacted

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

by the lack of school facility funding inherent in charter schools creating a shortfall of approximately 25%.

With conservative budgeting, Frontier Academy has made continuous improvements to both buildings. Maintenance is continually scheduled to our HVAC systems to ensure they reach their lifespan. The K-3 Building was built in 1994 and the 4-5 Building was built in 1990. The HVAC systems that Frontier Academy is requesting in this grant proposal are original units. Last year, one unit failed causing an unexpected expenditure of \$18,645.00. The academy desires to prevent further unexpected costs by removing and replacing all of the original units. The HVAC units on the K-3 Building are 22 years old. The HVAC units on the 4-5 Building are 26 years old. The average lifespan of rooftop HVAC units is 20-30 years, according to the contractors who have bid our project. According to ASHRAE.org (the American Society of Heating, Refrigerating and Air-Conditioning Engineers), average life expectancy of roof top air-conditioners or other commercial air-to-air mechanical devices is 15 years.

The interior furnace units in the 4/5 building were installed as we built additional classrooms in 2000. These furnace units were installed 'as needed' and retrofitted into classroom closets. We are requesting grant funds to bring all heating and air conditioning up to date to prevent further unexpected failures.

### **Proposed Solution to Address the Deficiencies Stated Above:**

Brad Crittenden, Head of Maintenance and Safety, requested bids from 4 mechanical contractors that service Northern Colorado.

All 4 mechanical contractors are in agreement that the project requires a like for like replacement of the existing HVAC systems. The current system has functioned well for years, with only the units breaking down eventually after exceeding their useful life. Unit replacement is by far the most economical and practical option.

Current city code does not require any changes to the current design of our system, and all quotes include working with the existing gas, flue, and plenum on all furnaces to accommodate the new equipment. This includes connecting into existing electrical connections on the rooftop. Frontier Academy will require air balance testing, before and after, to ensure proper heating/cooling of all spaces after the work is complete.

### **How Urgent is this Project?**

As part of Frontier Academy's Building Repair and Maintenance budget, the academy allocated funds for the continued issues that arise due to aging HVAC equipment. When our business manager creates the annual budget, the discussion of not if, but when, our HVAC systems will fail becomes a future problem with no solution. By applying for the BEST Grant for the 2016/2017 cycle, Frontier Academy is proactively addressing the needs of the elementary campus, and not simply waiting for the failure to happen.

### **How Does this Project Conform with the Public School Facility Construction Guidelines?**

4.1.4 Mechanical systems. A safe and efficient mechanical system that provides proper ventilation, proper sound levels and maintains the building temperature and relative humidity. The mechanical system shall be designed, maintained and installed utilizing current State and Federal building codes, and shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30. 4.1.4.1 - Healthy building indoor air quality (IAQ) through the use of the mechanical heating, ventilation and air conditioning (HVAC) systems or operable windows and by reducing air infiltration and water penetration with a tight building envelope. Adopted 09/02/2015 4.1.4.2 - Mechanical systems shall comply with: ASHRAE Standard 62.1-2013 Ventilation for Acceptable Indoor Air Quality, ASHRAE 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings, and ASHRAE Standard 189.1-2014 Standard for the Design of HighPerformance Green Buildings.

Frontier Academy currently hires maintenance of our HVAC system to ensure:

- Replacement all HVAC equipment air filter media 4 times a year, using MERV 8 filters that remove particles from 3 – 10 microns in size (a human hair is 17 microns). Merv 8 filtration removes pollen, fine dust, and pet dander, will not promote the growth of bacteria, mold, mildew, or fungi in normal operating environments, and has not been chemically treated. MERV filters are designed to last three months.
- For the heating season, gas pressure is checked, flame sensors and burner compartment are cleaned, plus correct airflow is



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

checked.

- Carbon monoxide is tested for the residential furnaces at the furnace and a walk around test is performed for the roof top units.
- For the spring tune up, the operation of the air conditioning system is checked to include proper airflow, temperature drop/correct airflow, and refrigerant charge.

Frontier Academy will continue to comply with the Public School Facility Construction Guidelines after the full HVAC project is completed.

Newer equipment also includes current energy recovery ventilation technology, which meets ASHRAE ventilation and energy standards, while improving indoor air quality.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

Frontier Academy's 2015/2016 includes a \$180,000 budgeted line item for Repairs & Maintenance for both campuses. This continues to be sufficient for the needs of all 3 buildings including the 2 buildings on the elementary campus. The academy would continue to keep this budgeted line item in our yearly budget. The HVAC project, if not approved by the BEST Grant, would continue to be included as a future project in our strategic plans. Discussion has occurred that the academy could begin to replace a few units per year. The disadvantage to this option is choosing one unit to replace, and later to find that the remaining units fail.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

Since 1997, Frontier Academy maintains a 30-year contract with Weld County School District 6. As a charter school, Frontier Academy is responsible for the cost of their facilities. Finding an affordable building to operate within was the 1st challenge in opening a charter school in 1997. Frontier Academy continues to finance all 3 buildings with bonds. While the idea of relocating the elementary school sounds appealing, the buildings that house Kindergarten through 5th grades are retrofitted to our needs and continue to be an affordable option for our charter school to operate. The secondary campus was built as a new school building by the academy and houses grades 6 through 12.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

The elementary campus comprises of 2 neighboring buildings on 29th Street. The buildings were initially retail space, one a greenhouse/nursery and the other a carpet store. The west building (greenhouse/nursery) was the first building that Frontier Academy acquired in 1996 and opened the charter school in 1997. In 2000, Frontier Academy acquired the building to the east (carpet store) and expanded as students and grades were added each year. What was once storefront property of a carpet store is now our library. What was once the greenhouse is now our Kindergarten wing and lunchroom. The school has operated on a conservative budget since opening in 1997 and is proud to say that all improvements have been paid from our fund balance in cash reserves.

**FY15-16 Charter School Capital Construction Allocation from the State:** \$375,726.00

<b>Current Grant Request:</b>	\$114,721.65	<b>CDE Minimum Match %:</b>	50
<b>Current Applicant Match:</b>	\$114,721.65	<b>Actual Match % Provided:</b>	50
<b>Current Project Request:</b>	\$229,443.30	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		General Fund

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Total of All Phases:</b>	\$229,443.30	<b>Escalation %:</b>	5
<b>Affected Sq Ft:</b>	67,586	<b>Contingency %:</b>	10
<b>Affected Pupils:</b>	661	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$3	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$0	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$3	<b>Who owns the Facility?</b>	3rd Party
<b>Cost Per Pupil:</b>	\$275	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	81		The facility goes to authorizer Weld County School District 6.

**District FTE Count:**

**Assessed Valuation:**

**PPAV:**

**Unreserved Gen Fund 13-14:**

**Median Household Income:**

**Free Reduced Lunch %:**

**Existing Bond Mill Levy:**

**Bonded Debt Approved:**

**Year(s) Bond Approved:**

**Bonded Debt Failed:**

**Year(s) Bond Failed:**

**Outstanding Bonded Debt:**

**Total Bond Capacity:**

**Bond Capacity Remaining:**



DEIRDRE PILCH, ED.D.  
SUPERINTENDENT  
1025 NINTH AVENUE  
GREELEY, COLORADO 80631  
970-348-6012  
DPILCH@GREELEYSCHOOLS.ORG

February 24, 2016

Colorado Department of Education  
Mr. Jay Hoskinson, Regional Program Manager  
Office of Capital Construction

Re: Frontier Academy BEST Grant Application

Mr. Hoskinson,

Please consider this letter satisfaction of the following requirement, 'As part of the grant submittal packet the charter school must include a letter, from their authorizer, indicating the authorizer's position on the application, pursuant to 22-43.7-109(3) C.R.S.'.

Weld County School District 6 supports the efforts of Frontier Academy Charter School in applying for HVAC replacement at their two elementary campus buildings via the Colorado BEST Grant Program.

Frontier Academy obtained the signatures of Dr. Pilch, District 6 Superintendent, and Roger DeWitt, District 6 School Board President, in the BEST grant application.

Thank you,

Deirdre Pilch, Ed.D.  
Superintendent of Schools

• Facilities Impacted by this Grant Application •

**Greeley 6 - McAuliffe ES Roof Replacement - Christa McAuliffe ES - 1988**

**School Name: Christa McAuliffe ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	49,605
Replacement Value:	\$13,508,379
Condition Budget:	\$6,946,341
Total FCI:	51.42%
Energy Budget:	\$0
Suitability Budget:	\$1,116,300
Total RSLI:	26%
Total CFI:	59.7%
Condition Score: (60%)	3.80
Energy Score: (0%)	2.29
Suitability Score: (40%)	4.40
School Score:	4.04



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Greeley 6

**County:** Weld

**Project Title:** McAuliffe ES Roof Replacement

**Previous BEST Grant(s) Funded:** 2

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

## Project Type:

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

## General Information About the District / School, and Information About the Affected Facilities:

Weld County School District 6 serves a diverse and growing population of minority and immigrant students. The school district provides over 65.33% of its students with free or reduced lunch. The educational make-up of Weld County School District 6 includes 3 high schools, 3 alternative high schools, an online school, 4 middle schools, 3 K-8's, 12 elementary schools and 6 charter schools.

McAuliffe Elementary has been recognized as having some of the most significant and pressing roof replacement needs. This school was built in 1988 and continues to operate as an educational facility.

## Deficiencies Associated with this Project:

The roof at McAuliffe is 28 years old and exceeded the manufacturer's warranty in 1998. The roof is 49,605 sq. ft. of ballasted EPDM and is currently showing evidence of extensive bridging of the perimeter flashing. The bridging has caused the membrane to pull away from the flashing. Multiple repairs over the course of time have begun to show extensive wear. As the EPDM sheet ages, the membrane continues to constrict as it is a loose laid membrane held in place with ballast. Additionally, McAuliffe is experiencing significant leaks during and after all rain and snow storms. These leaks result in ceiling tile and dry wall damage that require constant repair. There are many man hours needed to repair each leak and perform carpet extractions to prevent mold from growing. Standing water and the resulting mold cause both health and safety hazards for students and staff. Attached you will find a log outlining the many work orders submitted to address these leaks in the library, gym, hallways, kitchen, cafeteria, as well as various classrooms. All told, 95% of the roof will need to be replaced.

## Proposed Solution to Address the Deficiencies Stated Above:

BEST grant funding would be specifically directed towards the replacement of the existing 45-mil Carlisle EPDM membrane with a new Fully Adhered 60-mil EPDM membrane and 20 year warranty. A fully adhered membrane is preferable to a ballasted membrane because there will be smaller costs associated with maintenance. A fully adhered roof would not require the removal of rocks in order to find a leak or make a repair. 10 sq. ft. of ballast weighs approximately 1 ton. Without ballast to move, there is a smaller chance of injury to personnel. In addition, an adhered roof is less likely to lift in high winds. The black membrane will allow snow to melt faster increasing visibility. With increased visibility, anyone on the roof will likely spot a damaged membrane resulting in better care and maintenance. A fully adhered roof would give Dos Rios increased longevity. After the roof's 15-20 year life span, it can be coated to get up to 10 years of additional usefulness. Insulation will be inspected upon the removal of the existing ballast. All insulation that shows water damage will be replaced, and new Dens-Deck roof boards will be secured to the existing metal deck. If the district were to receive this funding, the restrictions on the Capital Projects fund would be relieved as the District has reserved a portion of funds to be used in the event a major roof repair or replacement would be required.

**How Urgent is this Project?**

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

There are numerous areas of the roof that are compromised due to delamination. The urgency of this deficiency is high and should be corrected within the year. Numerous roof leaks have exposed the interior finish and sensitive electronic equipment to water damage. Upon consultation with Carlisle, if the roof assembly is not replaced, it is likely that the roof leaks will continue to get worse. There is a very real concern of mold growth due to frequent wetting. This resulting mold could cause a serious health risk to students and staff. Additionally, the separation between the membrane and flashing has exposed the membrane to weather causing ultraviolet damage. Seam failures may start to appear more frequently as stress to the roofing membrane will continue to increase. The membrane is well past its 10 year warranty and we are in danger of a catastrophic failure.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

McAuliffe will implement measures as recommended by the roofing contractor(s) to repair and otherwise secure a fully adhered roof membrane in a safe manner to prevent delamination, detachment, or other failures that could lead to student injury, roof leaks or structural damage.

4.1 Health and safety issues, including security needs and all applicable health, safety and environmental codes and standards as required by state and federal law. Public school facility accessibility.

4.1.1 Sound building structures. Each building should be constructed and maintained with sound structural foundation, floor, wall and roof systems.

4.1.1.1 - All building structures shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30 and ANSI S12.60, Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools.

4.1.2 Roofs. A weather-tight roof that drains water positively off the roof and discharges the water off and away from the building. All roofs shall be installed by a qualified contractor who is approved by the roofing manufacturer to install the specified roof system and shall receive the specified warranty upon completion of the roof. The National Roofing Contractors Association divides roofing into two generic classifications: low-slope roofing and steep-slope roofing. Low-slope roofing includes water impermeable, or weatherproof types of roof membranes installed on slopes of less than or equal to 3:12 (fourteen degrees). Steep slope roofing includes water-shedding types of roof coverings installed on slopes exceeding 3:12 (fourteen degrees).

4.1.2.1.2- Ethylene Propylene Diene Monomer - minimum 60 mil EPDM membrane, with a ballasted or adhered system.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

Over the last three years, on average, approximately 2% or \$2.8 million of the General Fund budget has been expended on the maintenance of Facilities in the District. In addition to General Fund expenditures, the district has spent over \$3.4 million on district facilities on the past three years out of the Capital Projects Fund. At the end of the 2014-2015 fiscal year, there was a \$3.3 million balance in the Capital Projects Fund. This money, over time, has been set aside to address the growing list of significant maintenance repairs, health and safety concerns and code compliance issues identified by facility assessments. When the project is completed, the district will continue to transfer a minimum of \$750K of the General Fund annually for the continued preventative maintenance of systems and infrastructure for the facilities.

The district would expect to see a savings in repair and maintenance costs from these roof replacements. These savings would, in turn, help to ensure the sustainability of these funds for a preventative maintenance plan and will be reflected in the district's maintenance department budget as well as the Capital Projects Fund budget.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The education facility was originally constructed as a public elementary school and completed in 1988.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$348,524.59	<b>CDE Minimum Match %:</b>	52
<b>Current Applicant Match:</b>	\$98,301.81	<b>Actual Match % Provided:</b>	22
<b>Current Project Request:</b>	\$446,826.40	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	Capital Reserve Projects Fund	
<b>Total of All Phases:</b>	\$446,826.40	<b>Escalation %:</b>	3
<b>Affected Sq Ft:</b>	44,500	<b>Contingency %:</b>	5
<b>Affected Pupils:</b>	502	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$10	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$9	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$890	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	89	NA	
<b>District FTE Count:</b>	20,460	<b>Bonded Debt Approved:</b>	\$8,200,000
<b>Assessed Valuation:</b>	\$1,160,415,340	<b>Year(s) Bond Approved:</b>	12
<b>PPAV:</b>	\$56,715	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$13,174,548	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$46,432	<b>Outstanding Bonded Debt:</b>	\$71,505,633
<b>Free Reduced Lunch %:</b>	62	<b>Total Bond Capacity:</b>	\$232,083,068
<b>Existing Bond Mill Levy:</b>	10.715	<b>Bond Capacity Remaining:</b>	\$160,577,435



Division of Capital Construction

**BEST School District and BOCES Grant Waiver Application**

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

**Instructions**

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

For questions 4-11

Only answer the questions which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your school district.

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES.

As of June 30, 2015, Weld County School District 6 had a fund balance of \$3.3 million in the Capital Projects Fund. After taking into account the commitments of various facility maintenance and repair projects, matching contributions for the Greeley West BEST cash grant, health and safety concerns, and code compliance issues the uncommitted balance as of February, 2016 is less than \$100K. The district plans on transferring \$750K from the General Fund to the Capital Projects Fund for the next two fiscal years. If the full matching contribution of 52% is required for the project, 30.7% of the 2017 and 2018 General Fund transfers will be required to be reserved for roof projects, which directly impacts other repairs, maintenance, technology and operational demands.

2. Please describe why the cost of complying with the match contribution would significantly limit educational opportunities within your school district or BOCES.

Weld County School District 6 is one of the lowest ranking school districts in the State for per pupil funding. As a result,

resources are limited for educational offerings. If more funding were available, the District would provide a full-day kindergarten program (\$10.6 million), offer students a more cohesive environment by eliminating modular buildings (\$20 million), address student capacity levels by expanding facilities including Winograd K-8 (\$50 million), support aging technology needs in our classrooms, reduce student-teacher ratios in the classroom, and continue to support our higher percentage of special education and English language learners. In addition, roof maintenance needs over the next five years have been assessed at \$5 million while immediate flooring needs related to asbestos is estimated at \$6 million. The district's educational needs far outweigh our existing resources, thus funding for the repair and maintenance projects are limited and low budget priority.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants, or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

District Capital Project funds are carefully managed and maintained in order to cover emergency maintenance needs, operations, facility upgrades, and progress towards the district's master plan goals. Our normal budgetary operations cannot sustain the maintenance needed annually. The district was unsuccessful in its attempt to pass a mill levy override in 2009. We are currently discussing a bond initiative at a minimum of \$80 million in order to address deferred maintenance needs.

4. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

5. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

6. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

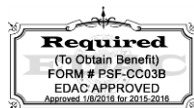
7. Bond Election failures and successes in the last 10 years – The more attempts the school district has had, the lower the match.

The district has had one attempt at a bond election within the last 10 years. In 2012, the district received a BEST grant in the amount of \$21 million to build a new middle school. The required match for the grant was \$8.2 million. The district was successful in passing a bond to support the match for the construction of the new middle school as well as demolition and abatement of the middle school the district is vacating. District 6 feels the 2012 bond election was only successful because the BEST grant was awarded for a new middle school. The requirement of an \$8.1 million match was a palatable increase for the Greeley-Evans community.

8. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

9. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

As of June 30, 2014, the school district has an outstanding bond debt of \$71.5 million. Because the district has not sought any significant (non-matching) bonds within the last 20 years, the district's bond capacity is \$116 million which ranks Weld County School District 6 156 lowest out of 178 school districts. Because of the recession and significant failure of a MLO tax increase in 2009, the district has been apprehensive to ask local voters for support. The district is currently evaluating an initiative for the November 2016 election. If a mill levy override or bond issue were to pass, a portion of those funds would be used to cover the match for McAuliffe and Dos Rios roof replacement projects. That being said, the District has numerous deferred maintenance projects that are also considered immediate and emergent.



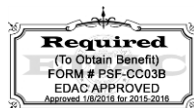
The roof needs for these two sites are such that they cannot be delayed in the event a mill levy override or bond issue fails. Due to the socioeconomic population of the community, tax increase initiatives for both the District and the City have historically been unsuccessful.

10. The school district's unreserved fund balance as it relates to their overall budget.

As of June 30, 2015, the district's general fund unassigned fund balance was \$10.7 million which was 6.7% of the total general fund operating budget. The total unassigned fund balance will cover only one month's worth of payroll costs or support maintenance and capital improvement needs. In previous years, the district maintained a higher unassigned fund balance to prepare for future cuts that would impact education funding in years to come. The District has historically transferred \$750K from the General Fund budget to the Capital Projects Fund in order to address deferred maintenance needs. While a portion of these funds could and will be allocated to the roof replacement projects, there are also other immediate maintenance projects, health and safety concerns, and code compliance issues that will need to be addressed. These funds are set aside for emergent needs only. An additional \$250K is already set aside in the 2016-2017 budgets as an additional allocation to the Capital Projects Fund with the intent of supporting a match for the McAuliffe and Dos Rios roof replacement projects.

11. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

Weld County school district 6 is in the bottom 5% of per pupil funding in the State of Colorado. The district has limited community support to raise taxes for education initiatives.



• Facilities Impacted by this Grant Application •

**Greeley 6 - Dos Rios ES Roof Replacement - Dos Rios ES - 1988**

**School Name: Dos Rios ES**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	49,124
Replacement Value:	\$13,066,349
Condition Budget:	\$5,179,758
Total FCI:	39.64%
Energy Budget:	\$17,193
Suitability Budget:	\$1,875,900
Total RSLI:	27%
Total CFI:	54.1%
Condition Score: (60%)	3.56
Energy Score: (0%)	2.08
Suitability Score: (40%)	4.15
School Score:	3.80



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Greeley 6

**County:** Weld

**Project Title:** Dos Rios ES Roof Replacement

**Previous BEST Grant(s) Funded:** 2

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> New School         | <input checked="" type="checkbox"/> Roof    | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation         | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition           | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input type="checkbox"/> Security           | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

**General Information About the District / School, and Information About the Affected Facilities:**

Weld County School District 6 serves a diverse and growing population of minority and immigrant students. The school district provides over 65.33% of its students with free or reduced lunch. The educational make-up of Weld County School District 6 includes 3 high schools, 3 alternative high schools, an online school, 4 middle schools, 3 K-8's, 12 elementary schools and 6 charter schools.

Dos Rios Elementary has been recognized as having some of the most significant and pressing roof replacement needs. This school was built in 1988 and continues to operate as an educational facility.

**Deficiencies Associated with this Project:**

The roof at Dos Rios is 28 years old and exceeded the manufacturer's warranty in 1998. The roof is 49,124 sq. ft. of ballasted EPDM and is currently showing evidence of extensive bridging of the perimeter flashing. The bridging has caused the membrane to pull away from the flashing. Multiple repairs over the course of time have begun to show extensive wear. As the EPDM sheet ages, the membrane continues to constrict as it is a loose laid membrane held in place with ballast. Additionally, Dos Rios is experiencing significant leaks during and after all rain and snow storms. These leaks result in ceiling tile and dry wall damage that require constant repair. There are many man hours needed to repair each leak and perform carpet extractions to prevent mold from growing. Standing water and the resulting mold cause both health and safety hazards for students and staff. Attached you will find a log outlining the many work orders submitted to address these leaks in the library, gym, hallways, kitchen, cafeteria, as well as various classrooms. All told, 95% of the roof will need to be replaced.

**Proposed Solution to Address the Deficiencies Stated Above:**

BEST grant funding would be specifically directed towards the replacement of the existing 45-mil Carlisle EPDM membrane with a new Fully Adhered 60-mil EPDM membrane and 20 year warranty. A fully adhered membrane is preferable to a ballasted membrane because there will be smaller costs associated with maintenance. A fully adhered roof would not require the removal of rocks in order to find a leak or make a repair. 10 sq. ft. of ballast weighs approximately 1 ton. Without ballast to move, there is a smaller chance of injury to personnel. In addition, an adhered roof is less likely to lift in high winds. The black membrane will allow snow to melt faster increasing visibility. With increased visibility, anyone on the roof will likely spot a damaged membrane resulting in better care and maintenance. A fully adhered roof would give Dos Rios increased longevity. After the roof's 15-20 year life span, it can be coated to get up to 10 years of additional usefulness. Insulation will be inspected upon the removal of the existing ballast. All insulation that shows water damage will be replaced, and new Dens-Deck roof boards will be secured to the existing metal deck. If the district were to receive this funding, the restrictions on the Capital Projects fund would be relieved as the District has reserved a portion of funds to be used in the event a major roof repair or replacement would be required.



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

## How Urgent is this Project?

There are numerous areas of the roof that are compromised due to delamination. The urgency of this deficiency is high and should be corrected within the year. Numerous roof leaks have exposed the interior finish and sensitive electronic equipment to water damage. Upon consultation with Carlisle, if the roof assembly is not replaced, it is likely that the roof leaks will continue to get worse. There is a very real concern of mold growth due to frequent wetting. This resulting mold could cause a serious health risk to students and staff. Additionally, the separation between the membrane and flashing has exposed the membrane to weather causing ultraviolet damage. Seam failures may start to appear more frequently as stress to the roofing membrane will continue to increase. The membrane is well past its 10 year warranty and we are in danger of a catastrophic failure.

## How Does this Project Conform with the Public School Facility Construction Guidelines?

Dos Rios will implement measures as recommended by the roofing contractor(s) to repair and otherwise secure a fully adhered roof membrane in a safe manner to prevent delamination, detachment, or other failures that could lead to student injury, roof leaks or structural damage.

4.1 Health and safety issues, including security needs and all applicable health, safety and environmental codes and standards as required by state and federal law. Public school facility accessibility.

4.1.1 Sound building structures. Each building should be constructed and maintained with sound structural foundation, floor, wall and roof systems.

4.1.1.1 - All building structures shall conform to all applicable codes adopted by the Colorado Division of Fire Prevention and Control in 8 CCR 1507-30 and ANSI S12.60, Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools.

4.1.2 Roofs. A weather-tight roof that drains water positively off the roof and discharges the water off and away from the building. All roofs shall be installed by a qualified contractor who is approved by the roofing manufacturer to install the specified roof system and shall receive the specified warranty upon completion of the roof. The National Roofing Contractors Association divides roofing into two generic classifications: low-slope roofing and steep-slope roofing. Low-slope roofing includes water impermeable, or weatherproof types of roof membranes installed on slopes of less than or equal to 3:12 (fourteen degrees). Steep slope roofing includes water-shedding types of roof coverings installed on slopes exceeding 3:12 (fourteen degrees).

4.1.2.1.2- Ethylene Propylene Diene Monomer - minimum 60 mil EPDM membrane, with a ballasted or adhered system.

## How Does the Applicant Plan to Maintain the Project if it is Awarded?

Over the last three years, on average, approximately 2% or \$2.8 million of the General Fund budget has been expended on the maintenance of Facilities in the District. In addition to General Fund expenditures, the district has spent over \$3.4 million on district facilities on the past three years out of the Capital Projects Fund. At the end of the 2014-2015 fiscal year, there was a \$3.3 million balance in the Capital Projects Fund. This money, over time, has been set aside to address the growing list of significant maintenance repairs, health and safety concerns and code compliance issues identified by facility assessments. When the project is completed, the district will continue to transfer a minimum of \$750K of the General Fund annually for the continued preventative maintenance of systems and infrastructure for the facilities.

The district would expect to see a savings in repair and maintenance costs from these roof replacements. These savings would, in turn, help to ensure the sustainability of these funds for a preventative maintenance plan and will be reflected in the district's maintenance department budget as well as the Capital Projects Fund budget.

**If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:**

The education facility was originally constructed as a public elementary school and completed in 1988.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

**FY15-16 Charter School Capital Construction Allocation from the State:**

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

<b>Current Grant Request:</b>	\$348,479.10	<b>CDE Minimum Match %:</b>	52
<b>Current Applicant Match:</b>	\$98,288.98	<b>Actual Match % Provided:</b>	22
<b>Current Project Request:</b>	\$446,768.08	<b>Is a Waiver Letter Required?</b>	Yes
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	No
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00	Capital Reserve Projects Fund	
<b>Total of All Phases:</b>	\$446,768.08	<b>Escalation %:</b>	3
<b>Affected Sq Ft:</b>	45,000	<b>Contingency %:</b>	5
<b>Affected Pupils:</b>	559	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$10	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$1	<b>Is a Master Plan Complete?</b>	Yes
<b>Hard Costs Per Sq Ft:</b>	\$9	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$799	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	80	NA	
<b>District FTE Count:</b>	20,460	<b>Bonded Debt Approved:</b>	\$8,200,000
<b>Assessed Valuation:</b>	\$1,160,415,340	<b>Year(s) Bond Approved:</b>	12
<b>PPAV:</b>	\$56,715	<b>Bonded Debt Failed:</b>	
<b>Unreserved Gen Fund 13-14:</b>	\$13,174,548	<b>Year(s) Bond Failed:</b>	
<b>Median Household Income:</b>	\$46,432	<b>Outstanding Bonded Debt:</b>	\$71,505,633
<b>Free Reduced Lunch %:</b>	62	<b>Total Bond Capacity:</b>	\$232,083,068
<b>Existing Bond Mill Levy:</b>	10.715	<b>Bond Capacity Remaining:</b>	\$160,577,435



Division of Capital Construction

**BEST School District and BOCES Grant Waiver Application**

The BEST grant is a matching grant and each applicant is assigned a unique minimum matching requirement, pursuant to 22-43.7-109(9) C.R.S., to identify their financial capacity. An applicant may apply to the Capital Construction Assistance Board for a waiver or reduction of the matching moneys requirement for their project if the applicant determines their minimum match is not reflective of their current financial capacity, pursuant to 22-43.7-109(10) C.R.S.

Waiver applications are reviewed independent of the grant application. Upon review of the waiver application, the Capital Construction Assistance Board will make a motion to approve or deny the applicant's waiver request.

The Capital Construction Assistance Board shall seek to be as equitable as possible by considering the total financial capacity of each applicant pursuant to 22-43.7-109(11) C.R.S.

**Instructions**

For questions 1-3

Be specific when answering the questions and explaining the issues and impacts. Your response should include dollar amounts and specific ways in which such issues and impacts make it impossible for the applicant to make its full matching contribution. Please submit meeting minutes, award/non-award letters, official communications, budget documents, or other relevant documentation to support the responses provided.

For questions 4-11

Only answer the questions which the applicant feels directly contribute to a reduction in their minimum matching requirement. For each response, please describe why the applicant feels that specific match criterion does not accurately reflect the financial capacity of your school district.

---

1. Please describe why a waiver or reduction of the matching contribution would significantly enhance educational opportunity and quality within your school district or BOCES.

As of June 30, 2015, Weld County School District 6 had a fund balance of \$3.3 million in the Capital Projects Fund. After taking into account the commitments of various facility maintenance and repair projects, matching contributions for the Greeley West BEST cash grant, health and safety concerns, and code compliance issues the uncommitted balance as of February, 2016 is less than \$100K. The district plans on transferring \$750K from the General Fund to the Capital Projects Fund for the next two fiscal years. If the full matching contribution of 52% is required for the project, 30.7% of the 2017 and 2018 General Fund transfers will be required to be reserved for roof projects, which directly impacts other repairs, maintenance, technology and operational demands.

2. Please describe why the cost of complying with the match contribution would significantly limit educational opportunities within your school district or BOCES.

Weld County School District 6 is one of the lowest ranking school districts in the State for per pupil funding. As a result,

resources are limited for educational offerings. If more funding were available, the District would provide a full-day kindergarten program (\$10.6 million), offer students a more cohesive environment by eliminating modular buildings (\$20 million), address student capacity levels by expanding facilities including Winograd K-8 (\$50 million), support aging technology needs in our classrooms, reduce student-teacher ratios in the classroom, and continue to support our higher percentage of special education and English language learners. In addition, roof maintenance needs over the next five years have been assessed at \$5 million while immediate flooring needs related to asbestos is estimated at \$6 million. The district's educational needs far outweigh our existing resources, thus funding for the repair and maintenance projects are limited and low budget priority.

3. What efforts have been made to coordinate the project with local governmental entities, community based organizations, other available grants, or other organizations to more efficiently or effectively leverage the applicant's ability to contribute financial assistance to the project?

District Capital Project funds are carefully managed and maintained in order to cover emergency maintenance needs, operations, facility upgrades, and progress towards the district's master plan goals. Our normal budgetary operations cannot sustain the maintenance needed annually. The district was unsuccessful in its attempt to pass a mill levy override in 2009. We are currently discussing a bond initiative at a minimum of \$80 million in order to address deferred maintenance needs.

4. Per Pupil Assessed Valuation relative to the statewide average – The higher the Per Pupil Assessed Value the higher the match.

5. The district's median household income relative to the statewide average – The higher the median household income, the higher the match.

6. Percentage of pupils eligible for free or reduced cost lunch relative to the statewide average – The lower the percentage for free and reduced cost lunch, the higher the match.

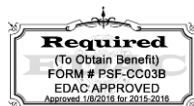
7. Bond Election failures and successes in the last 10 years – The more attempts the school district has had, the lower the match.

The district has had one attempt at a bond election within the last 10 years. In 2012, the district received a BEST grant in the amount of \$21 million to build a new middle school. The required match for the grant was \$8.2 million. The district was successful in passing a bond to support the match for the construction of the new middle school as well as demolition and abatement of the middle school the district is vacating. District 6 feels the 2012 bond election was only successful because the BEST grant was awarded for a new middle school. The requirement of an \$8.1 million match was a palatable increase for the Greeley-Evans community.

8. Bond mill levy relative to the statewide average – The higher the bond mill levy, the lower the match.

9. The school district's current available bond capacity remaining. - The higher the bond capacity, the higher the match.

As of June 30, 2014, the school district has an outstanding bond debt of \$71.5 million. Because the district has not sought any significant (non-matching) bonds within the last 20 years, the district's bond capacity is \$116 million which ranks Weld County School District 6 156 lowest out of 178 school districts. Because of the recession and significant failure of a MLO tax increase in 2009, the district has been apprehensive to ask local voters for support. The district is currently evaluating an initiative for the November 2016 election. If a mill levy override or bond issue were to pass, a portion of those funds would be used to cover the match for McAuliffe and Dos Rios roof replacement projects. That being said, the District has numerous deferred maintenance projects that are also considered immediate and emergent.



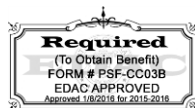
The roof needs for these two sites are such that they cannot be delayed in the event a mill levy override or bond issue fails. Due to the socioeconomic population of the community, tax increase initiatives for both the District and the City have historically been unsuccessful.

10. The school district's unreserved fund balance as it relates to their overall budget.

As of June 30, 2015, the district's general fund unassigned fund balance was \$10.7 million which was 6.7% of the total general fund operating budget. The total unassigned fund balance will cover only one month's worth of payroll costs or support maintenance and capital improvement needs. In previous years, the district maintained a higher unassigned fund balance to prepare for future cuts that would impact education funding in years to come. The District has historically transferred \$750K from the General Fund budget to the Capital Projects Fund in order to address deferred maintenance needs. While a portion of these funds could and will be allocated to the roof replacement projects, there are also other immediate maintenance projects, health and safety concerns, and code compliance issues that will need to be addressed. These funds are set aside for emergent needs only. An additional \$250K is already set aside in the 2016-2017 budgets as an additional allocation to the Capital Projects Fund with the intent of supporting a match for the McAuliffe and Dos Rios roof replacement projects.

11. Please describe any other extenuating circumstances deemed appropriate for a waiver or reduction in the matching contribution.

Weld County school district 6 is in the bottom 5% of per pupil funding in the State of Colorado. The district has limited community support to raise taxes for education initiatives.



• **Facilities Impacted by this Grant Application** •

**Weld County School District Re-3J - Districtwide Security Upgrades - Hoff ES - 2001**

**School Name:** Hoff ES

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	56,000
Replacement Value:	\$14,918,662
Condition Budget:	\$2,855,274
Total FCI:	19.14%
Energy Budget:	\$0
Suitability Budget:	\$1,297,000
Total RSLI:	27%
Total CFI:	27.8%
Condition Score: (60%)	3.81
Energy Score: (0%)	2.81
Suitability Score: (40%)	4.51
School Score:	4.09



**Weld County School District Re-3J - Districtwide Security Upgrades - Hudson ES - 1963**

**School Name:** Hudson ES

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	48,935
Replacement Value:	\$12,967,807
Condition Budget:	\$7,865,204
Total FCI:	60.65%
Energy Budget:	\$17,127
Suitability Budget:	\$961,000
Total RSLI:	12%
Total CFI:	68.2%
Condition Score: (60%)	3.33
Energy Score: (0%)	2.40
Suitability Score: (40%)	4.42
School Score:	3.77



**Weld County School District Re-3J - Districtwide Security Upgrades - Lochbuie ES - 2003**

**School Name:** Lochbuie ES

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	56,000
Replacement Value:	\$14,916,462
Condition Budget:	\$2,863,340
Total FCI:	19.20%
Energy Budget:	\$0
Suitability Budget:	\$1,933,800
Total RSLI:	34%
Total CFI:	32.2%
Condition Score: (60%)	3.92
Energy Score: (0%)	2.29
Suitability Score: (40%)	4.10
School Score:	3.99





• Facilities Impacted by this Grant Application •

**Weld County School District Re-3J - Districtwide Security Upgrades - Weld Central HS - 2006**

**School Name: Weld Central HS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	175,000
Replacement Value:	\$56,213,561
Condition Budget:	\$1,487,531
Total FCI:	2.65%
Energy Budget:	\$61,250
Suitability Budget:	\$1,381,400
Total RSLI:	46%
Total CFI:	5.2%
Condition Score: (60%)	4.02
Energy Score: (0%)	1.93
Suitability Score: (40%)	4.80
School Score:	4.33



**Weld County School District Re-3J - Districtwide Security Upgrades - Weld Central JHS - 1954**

**School Name: Weld Central JHS**

Number of Buildings:	1
All or Portion built by WPA:	No
Gross Area (SF):	87,316
Replacement Value:	\$26,927,141
Condition Budget:	\$5,696,801
Total FCI:	21.16%
Energy Budget:	\$0
Suitability Budget:	\$267,700
Total RSLI:	34%
Total CFI:	22.2%
Condition Score: (60%)	3.56
Energy Score: (0%)	2.05
Suitability Score: (40%)	4.76
School Score:	4.04



# BEST FY2016-17 GRANT APPLICATION SUMMARIES

**Applicant Name:** Weld County School District Re-3J

**County:** Weld

**Project Title:** Districtwide Security Upgrades

**Previous BEST Grant(s) Funded:** 0

**Has this project been previously applied for and not funded?** No

**If Yes, please explain why:**

**Project Type:**

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> New School          | <input type="checkbox"/> Roof               | <input type="checkbox"/> Asbestos Abatement | <input type="checkbox"/> Water Systems          |
| <input type="checkbox"/> School Replacement  | <input type="checkbox"/> Fire Alarm         | <input type="checkbox"/> Lighting           | <input type="checkbox"/> Facility Sitework      |
| <input type="checkbox"/> Renovation          | <input type="checkbox"/> Boiler Replacement | <input type="checkbox"/> Electrical Upgrade | <input type="checkbox"/> Land Purchase          |
| <input type="checkbox"/> Addition            | <input type="checkbox"/> HVAC               | <input type="checkbox"/> Energy Savings     | <input type="checkbox"/> Other, please explain: |
| <input checked="" type="checkbox"/> Security | <input type="checkbox"/> ADA                | <input type="checkbox"/> Window Replacement |   |

**General Information About the District / School, and Information About the Affected Facilities:**

Weld County School District Re-3J is a small district covering a large area. Weld 3J covers 480 square miles including the towns of Lochbuie, Hudson, Keenesburg, Roggen and Prospect Valley and all of the rural areas in between. The Middle School and High School are located 3 miles south of Keenesburg. The student count for the current fiscal year of 2015-2016 is 2,341 and the district employs close to 320 licensed and classified staff, not including coaching staff and substitute teachers. Over the past five years, our district has lost over 10 million dollars to the negative factor, and like many other districts, has made cuts to many maintenance and upgrade items to lower the impact to students. In light of recent school threats and increases in school threats, the district has taken a hard look at the state of our security at all of the locations throughout the district and find that we need to make security upgrades to all of our schools a priority. None of our locations have secure entrances and this is where the majority of the work needs to be done. The district is located in a fairly rural area of Weld County, only one of our towns have a local Police Department providing close dispatch for one of our schools, Lochbuie Elementary. The other towns rely on part time contracted police and sheriff services for the towns that include the remaining schools and support offices. This causes concern with response times to each of our rural schools if there were a threat. Last year we were able to install the Blue Point System at our High School, which is similar to a fire pull system that dispatches directly to the local police/county sheriff, confirming that 911 is contacted and allowing the staff to give all efforts and attention to the threat situation. This is one of the items included in our application for our other locations.

**Deficiencies Associated with this Project:**

Each of our locations require secured entrances. At this time, we do not lock our main entrances, as we do not have systems in place to allow the auto release of doors to allow entrance to the building. Weld 3J's schools and support buildings are located in rural areas, there is very little police presence in each of these areas. This causes concern with response time in the event of a threat.

Hudson Academy of Arts and Sciences, one of our oldest facilities, has personnel located where our entrance is and has a clear view. This personnel is located behind a desk and glass enclosure, therefore would not be able to slow any threat walking through the front doors. The Town of Hudson has recently hired a Town Sheriff, prior to that they contracted their police services with Weld County. This location is one where police presence is not available at all hours of our operation. This goes to the concern of response time in the event of a threat. The nearest full time police services are 7 miles South West in the Town of Lochbuie and 10 miles to the West with the City of Fort Lupton. There is not an Event Alerting and Notification System in this location; therefore, in the event of an emergency of threat, personnel would have to dial 911 prior to begin the dispatch process of police services.

Hoff Elementary is located in the Town of Keenesburg. The entrance to this location is a single set of doors that opens directly into an atrium central location. A person entering the building is not forced directly into the office area. The person will have direct access to hallways and the lunch room. Visually with the building windows, the office personnel would not see a threat until it was already in the building. There is a great need to stop persons from entering the building at the outer doors and vestibule forcing any visitors to office personnel prior to being admitted to the building. The Town of Keenesburg contracts

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

police services with the Town of Lochbuie Police Department. They are only contracted for a number of hours a week, not full time. The District is not made aware of what these hours generally will be. This goes to the concern of response time in the event of a threat. The nearest full time police services are 16 miles South West in the Town of Lochbuie and 20 miles to the South West with the City of Fort Lupton. The Weld County Sheriff's Department would be dispatched as well in the event of a threat, unfortunately Weld County is one of the biggest Counties in the State and it is not guaranteed that there would be an officer close. There is not an Event Alerting and Notification System in this location; therefore, in the event of an emergency of threat, personnel would have to dial 911 prior to begin the dispatch process of police services.

Lochbuie Elementary is a building that is a duplicate of Hoff Elementary. It is located in the Town of Lochbuie. The entrance to this location is a single set of doors that opens directly into an atrium central location. Any person entering the building is not forced directly into the office area, they have direct access to hallways and the lunch room. The office personnel would not see a threat until it was already in the building due to the placement of the windows and the location of the office door. This location needs a vestibule to force a stop of entrance into the building without being contacted by office personnel. The Town of Lochbuie is the only location that has their own full time Police Department. The personnel at the school work closely with the officers and have a very positive relationship. There is not an Event Alerting and Notification System in this location either.

Weld Central Middle School is located three miles south of Keenesburg. This building is one of our oldest facilities. This building has double door entrances, but the doors do not remained locked here either without the system to remotely release the doors for entrance. A person entering this building will come in contact with office personnel through a window as they enter, but there is not a stopping point for the person entering, with direct access to the lunch room, gym, and hallways. The staff entrance, at the back of the building, is not monitored and is left open in during the morning and afternoon. The Middle School and High School are two of our greatest concerns when we look at location and the response time of police services due to the rural location. The District contracts the full time services of an SRO, who is located at the High School. In the event of a threat, other than the SRO, the nearest police services are 16 miles South West in the Town of Lochbuie and 20 miles to the West with the City of Fort Lupton. The Weld County Sheriff's Department would be dispatched as well, again there is the concern of the location of the closest officers. There is not an Event Alerting and Notification System in this location.

Weld Central High School is located three miles south of Keenesburg next door to the Middle School. This building is one of our newest facilities. This building has double door entrances both at the front of the building for student drop off and staff parking and entrance and at the rear of the building for student parking and entrance. The front entrance of the location does not have direct view of persons entering the building. Visitors are asked to check in at the desk open to the entrance hall (staffed by students); there is not a forced stopping point. A person entering this building will have direct access to the main commons where all halls come together allowing access to any wing. The student entrance, at the back of the building, is monitored with a staffed office where personnel are able to see who is entering. Anyone entering this entrance has direct access to the hallways without having a forced stopping point as well. The High School does have an Event Alerting and Notification System, BluePoint. This system, when the pull station is activated, will directly alert the local dispatch. This increases the response time for any and all police and emergency services in the event of a threat. This is the system that we would like to install at all of our locations to increase the response time. The SRO located at the High School does give some sense of safety, but again is only one person in the event of a threat. The nearest police services are 16 miles South West in the Town of Lochbuie and 20 miles to the West with the City of Fort Lupton. The Weld County Sheriff's Department would be dispatched as well.

The District Office is located in the Town of Keenesburg. The location has a double door entrance, but again remains unlocked during business hours. This building does not have an Event Alerting and Notification System.

### **Proposed Solution to Address the Deficiencies Stated Above:**

To achieve secured entrances at each of our locations and update security district wide we would initiate the following plans: Hudson Academy of Arts and Sciences would require building framing for a second set of doors to create a vestibule. Access card readers would be installed at the main entry doors and remote unlocking capability for the vestibule doors would be installed. The use of remote unlocking of doors will require additional door hardware as well as software. Cameras will be installed at the main vestibules as well as an intercom system to connect to the administration office for the use of unlocking the inner doors of the vestibule by staff. The administration office will have a Visitor Management System, for scanning of visitor IDs and creation of visitor passes. The BluePoint System will be installed. Cameras will be installed at various locations both within and outside the building.

## BEST FY2016-17 GRANT APPLICATION SUMMARIES

Hoff Elementary as well as Lochbuie Elementary would require the same work as the buildings are identical. A secure vestibule will need to be built to include a second set of doors. Access card readers would be installed at the main entry doors and remote unlocking capability for the vestibule doors would be installed. The use of remote unlocking of doors will require additional door hardware as well as software. Cameras will be installed at the main vestibules as well as an intercom system to connect to the administration office for the use of unlocking the inner doors of the vestibule by staff. The administration office will have a Visitor Management System, for scanning of visitor IDs and creation of visitor passes. The BluePoint System will be installed. Cameras will be installed at various locations both within and outside the building.

Weld Central Middle School has a vestibule at this time and will not need any physical changes. The inner doors will require new door hardware and software to facilitate remote unlocking. Access card readers would be installed at the main entry doors and remote unlocking capability for the vestibule doors would be installed. An access card reader would be installed at the staff entrance as well. Cameras will be installed at the main vestibules as well as an intercom system to connect to the administration office for the use of unlocking the inner doors of the vestibule by staff. The administration office will have a Visitor Management System, for scanning of visitor IDs and creation of visitor passes. The BluePoint System will be installed. Cameras will be installed at various locations both within and outside the building.

Weld Central High School has a vestibule at both the front and rear entrances. This location will not need any physical changes. The inner doors will require new door hardware and software to facilitate remote unlocking. Access card readers would be installed both at the main entry doors and the student entrance and remote unlocking capability for the vestibule doors would be installed. Cameras will be installed at the main vestibules and student entrance vestibules, as well as an intercom systems to connect to the administration office and back entrance for the use of unlocking the inner doors of the vestibule by staff. The administration office will have a Visitor Management System, for scanning of visitor IDs and creation of visitor passes. Cameras will be installed at various locations both within and outside the building.

The District Office has a double door entrance. This location will not need any physical changes. The inner doors will require new door hardware and software to facilitate remote unlocking. Access card readers would be installed at the main entry doors and remote unlocking capability for the vestibule doors would be installed. Cameras will be installed at the main vestibules as well as an intercom system to connect to the administration office for the use of unlocking the inner doors of the vestibule by staff. The BluePoint System will be installed.

### How Urgent is this Project?

With the increase in school violence, there is an urgency for all school districts. The safety and security of our students and staff is of very high importance. When our bond issue passes we would start the process of some of the items as soon as January of 2017 and the remainder to begin in phases throughout 2017.

### How Does this Project Conform with the Public School Facility Construction Guidelines?

The project will bring all of our locations to conform with:

4.1.9 - Security - In general to all of our locations.

4.1.9.1.1 - Video Management Systems (VMS) - Install cameras at the main vestibules and around the buildings in various locations.

4.1.9.2 - Controlled Access - Install access control card readers at the main entry doors and remote unlocking capability for the vestibule doors by school administration staff.

4.1.9.3 - Front Door Security - Includes the above installation of cameras and access control card readers. Install intercom system at the main vestibules connecting to the administration offices and to use for unlocking the vestibules' doors.

Purchase of visitor management system (Raptor System) for scanning of visitor IDs and creation of visitor passes located in each of the locations administration offices.

4.1.9.4 - Door Lock/Intrusion Detection - Installation of the control access card readers and intercom systems. Installation of second set of doors to create secure vestibule at the locations that do not have them at this point.

4.1.9.5 - Event Alerting and Notification System - Installation of the BluePoint System at our Elementary locations, the Middle School Location and our Administration Building.

### How Does the Applicant Plan to Maintain the Project if it is Awarded?

Upon completion of installation of all security upgrades, the new systems will be entered into our Preventative Maintenance system that will automatically generate the work orders for the regular maintenance. There will be annual preventative maintenance and service amounts budgeted for annually. This will include annual budget for both maintenance service and technological services needed.



## BEST FY2016-17 GRANT APPLICATION SUMMARIES

If this application is for the renovation, reconstruction, expansion, or replacement of an existing public school facility, describe the condition of the public school facility at the time it was purchased or constructed. If the facility was not new, or was not adequate as a public school facility at that time, provide the rationale for purchasing the facility or constructing it in the manner in which you did:

District Administration Building, built 1987, built to standards at the time.  
 Hoff Elementary, built 2001, built to standards at the time.  
 Hudson Academy of Arts and Sciences, built 1963, addition 2001, built to standards at the time.  
 Lochbuie Elementary, built 2002, built to standards at the time.  
 Weld Central Middle School, built 1963, addition 2011, built to standards at the time.  
 Weld Central High School, built 2006, built to standards at the time.

**FOR CHARTER SCHOOL APPLICANTS ONLY: Describe the history of capital improvements made to the facility by the charter school in order to make it suitable for their students:**

NA

### FY15-16 Charter School Capital Construction Allocation from the State:

<b>Current Grant Request:</b>	\$230,653.24	<b>CDE Minimum Match %:</b>	71
<b>Current Applicant Match:</b>	\$564,702.76	<b>Actual Match % Provided:</b>	71
<b>Current Project Request:</b>	\$795,356.00	<b>Is a Waiver Letter Required?</b>	No
<b>Previous Grant Awards:</b>	\$0.00	<b>Will this Project go for a Bond?</b>	Yes
<b>Previous Matches:</b>	\$0.00	<b>Source of Match Detail:</b>	
<b>Future Grant Requests:</b>	\$0.00		2016 Bond Election
<b>Total of All Phases:</b>	\$795,356.00	<b>Escalation %:</b>	8
<b>Affected Sq Ft:</b>	474,759	<b>Contingency %:</b>	8
<b>Affected Pupils:</b>	2,161	<b>Historical Adverse Effect?</b>	No
<b>Cost Per Sq Ft:</b>	\$2	<b>Does this Qualify for HPCP?</b>	No
<b>Soft Costs Per Sq Ft:</b>	\$2	<b>Is a Master Plan Complete?</b>	No
<b>Hard Costs Per Sq Ft:</b>	\$0	<b>Who owns the Facility?</b>	District
<b>Cost Per Pupil:</b>	\$368	<b>Who will the Facility Revert to if the School Ceases to Exist:</b>	
<b>Sq Ft Per Pupil:</b>	220		NA

<b>District FTE Count:</b>	2,153	<b>Bonded Debt Approved:</b>	
<b>Assessed Valuation:</b>	\$1,584,510,440	<b>Year(s) Bond Approved:</b>	
<b>PPAV:</b>	\$735,955	<b>Bonded Debt Failed:</b>	\$26,500,000
<b>Unreserved Gen Fund 13-14:</b>	\$2,675,081	<b>Year(s) Bond Failed:</b>	08
<b>Median Household Income:</b>	\$58,790	<b>Outstanding Bonded Debt:</b>	\$27,595,707
<b>Free Reduced Lunch %:</b>	50	<b>Total Bond Capacity:</b>	\$316,902,088
<b>Existing Bond Mill Levy:</b>	2.214	<b>Bond Capacity Remaining:</b>	\$289,306,381







**DIVISION OF CAPITAL CONSTRUCTION**

**MAY 2016**