

Bond Reimbursement and Grant Review Committee

Meeting Agenda

April 14, 2021, Wednesday, 1:00 pm to 4:30 pm

April 15, 2021, Thursday, 1:00 pm to 4:30 pm

Teleconference

Audio Teleconference available through free online Zoom application.

[Join Online – Meeting Number: 824 0602 2162](#)

Join by Phone – Toll Call-in number (US/Canada): 1 (253) 215-8782; Meeting: 824 0602 2162

Chair: Heidi Teshner

Wednesday, April 14th

Agenda Topics

1:00 – 1:10 PM	Committee Preparation <ul style="list-style-type: none"> • Call-in, Roll Call, Introductions • Chair’s Opening Remarks • New Business, Additions to the Agenda • Agenda Review/Approval • Past Meeting Minutes Review/Approval
1:10 – 1:15 PM	Welcome & Introduction
1:15 – 1:30 PM	Public Comment
1:30 – 1:50 PM	Department Briefing <ul style="list-style-type: none"> • FY2022 CIP Reconsideration & Final Lists • PM State-of-the State Update (incl. Retro-Commissioning Update) • Report: School Capital Project Funding Under SB 237 • REAA and Small Municipal Fund Report
1:50 – 4:30 PM	Department CIP Briefing <ul style="list-style-type: none"> • FY 2023 CIP Application & Support Materials <ul style="list-style-type: none"> ▪ Q.4a Life-Safety Matrix FY 2023 Application Review <ul style="list-style-type: none"> • FY 2023 Application • FY 2023 Application Instructions • FY 2023 CIP Eligibility and Scoring Criteria • FY 2023 Rater’s Guide
4:30 PM	Recess

Additional agenda items may be taken up if time allows.

Thursday, April 15th**Agenda Topics**

- 1:00 – 1:05 PM Committee Preparation
- Call-in, Roll Call
 - Chair’s Opening Remarks
- 1:05 – 1:15 PM Public Comment
- 1:15 – 2:30 PM Cost Model Update
- 19th Edition Model School Elements, Proposed Changes
 - HMS, Inc. Teleconference
- Action Item
- Model School Escalation Elements
- 2:30 – 3:30 PM Publication Updates
- *Construction Standards for Alaska Schools*
 - *Site Selection Handbook*
- 3:30 – 4:00 PM Subcommittee Reports
- Design Ratios
 - Model School
 - School Space
- Action Item
- Approve Final Design Ratios
- 4:00 – 4:10 PM BR&GR Calendar and Work Plan Review & Update
- 4:10 – 4:15 PM Set Date for Next Meeting
- 4:15 - 4:20 PM DEED Wrap-up
- 4:20 – 4:30 PM Committee Member Comments
- 4:30 PM Adjourn

BOND REIMBURSEMENT & GRANT REVIEW COMMITTEE

Wednesday, February 25, 2021 - 2:00 p.m. – 4:15 p.m.

DRAFT MEETING MINUTES FOR APPROVAL

Committee Members Present

Heidi Teshner, Chair
Randy Williams
Dale Smythe
James Estes
Don Hiley
David Kingsland
William Glumac

Staff

Tim Mearig
Lori Weed
Wayne Marquis
Sharol Roys

Additional Participants

Caroline Hamp for Rep. Dan Ortiz
Larry Morris, Anchorage SD
Kevin Lyon, Kenai Pen. Boro. SD
Branzon Anania, Southeast Island SD
Matt Gandel, Kodiak Island Boro.
Scott Worthington, BDS Architects
Ryan Butte, Lower Kuskokwim SD
Ryan Jeffries, Lower Kuskokwim SD

February 25, 2021

CALL TO ORDER and ROLL CALL at 2:00 p.m.

Chair Heidi Teshner called the meeting to order at 2:00 p.m. Roll call and introduction of members present; a senator has not been assigned to the committee, and Caroline Hamp was present for Rep. Dan Ortiz. Quorum of seven was established to conduct business.

CHAIR'S OPENING REMARKS

Chair Teshner mentioned that this would be the last meeting for two of the members and hoped it was a good meeting.

AGENDA REVIEW/APPROVAL

Randy Williams **MOVED** to approve today's agenda, **SECONDED** by Dale Smythe. Hearing no objection, the motion **PASSED**.

PAST MEETING MINUTES REVIEW/APPROVAL – December 2, 2020

William Glumac **MOVED** to approve the minutes as presented, **SECONDED** by James Estes. Hearing no objection, the motion **PASSED**, and the minutes were approved as presented.

PUBLIC COMMENT

A public comment period was offered, and no public testimony was provided.

FY2023 CIP GUIDELINES FOR RATERS

Preventive Maintenance Narratives (Sec. 9)

Tim Mearig reminded the committee that this item is in preparation for the April meeting where a CIP application will be approved. For almost a year, the department and committee have been collaborating on developing this scoring matrix. Because many questions still existed regarding the level of detail required for scoring, requests for comment on the matrix were sent out to interested parties. The comments received generally favored detailed responses explaining and defining scoring elements.

Tim explained that the new version of the draft scoring criteria, on the left-hand side of the side-by-side comparison, is a combination of the comments received and from independent department review. He also noted that any proposed changes that were a result of comments is

noted in small caps and that most of the changes are organizational rather than significant changes in the content.

The proposal for a requirement to have an intertie between CMMS and to include power monitoring and sub monitoring was removed as being too difficult to accomplish.

Within the capital planning narrative is a method of forecasting renewal which uses FCI (Facility Condition Index) in its scoring criteria. A formula has been provided to determine the FCI value.

Tim set out three options for committee consideration: (1) Prepare the FY23 CIP application materials with the currently revised maintenance narratives; (2) seek additional comment from previous commenters; or (3) open a new period of public comment.

Randy Williams thought the revisions made it clearer what was required at each level and overall thought the revisions were a positive improvement. In the maintenance management criteria, he questioned how 10 percent of school facilities would be measured, whether it would be 10 percent of the components of each building system or 10 percent of the buildings to have 100 percent components. Tim answered that the 10 percent applies to the number of main schools that the district operates. If the district has ten or less, then one school would be adequate.

Lori Weed asked if it would be clearer if the language “each main school component report includes components from each building system” was added to the criteria. Randy Williams replied that it did make it more clear and added that he thought the original commenter was a little confused also.

Dale Smythe asked what the acceptable sources of costs are for the facility renewal cost index or facility condition index. He wanted to know if that element would require a cost estimator and/or design professional, or whether an estimate from the Cost Model would be sufficient. Tim Mearig answered that there is not a definition of where the costs need to come from. There are districts that are actively accomplishing this kind of analysis as part of their capital planning, and that is why it showed up, because those districts are evaluated against districts who are not doing something at that level. Lori Weed stated the insurance replacement value would be the default for the department unless the district has a more defined value.

Dale Smythe asked if the FCI number was used anywhere else in the decision-making process. Tim Mearig replied that it is not a part of any objective scoring criteria. There is no place where the FCI is used as a metric for scoring an application. He has seen some support for FCI scores from districts where condition inventories have been accomplished for the purpose of determining the cost of current need and deferred need. A district is going to get full points if they provide a report that shows a list of their main schools and an FCI, and how they got to that number is not envisioned in this particular set of criteria. However, it should list the cost of deferred items, the replacement value, and the calculation for the FCI, with the name of the school listed.

Don Hiley is concerned about the tremendous increase in the amount of paperwork that is going to be required to submit an application to get any kind of score on the narratives. Generating extra reports, facility condition indexes, enrollment projections for every building, all will drive

the process sky high on the amount of paperwork required. He has heard a lot of comments from people who are frustrated with the process as it stands and the effort that goes into generating the reports that they don't find useful; and increasing the paperwork even more may push some of the districts into non-participation.

He is also concerned that there is one set of rules for everyone, and while the larger districts like Anchorage or Mat-Su have the personnel to handle the applications, the smaller districts do not. For example, some of the smaller districts are not able to calculate facility condition indexes and generate all the information that is asked for in the matrix in order to get any kind of score on their maintenance narratives. He works with a lot of the smaller districts, and he is hearing that if these applications continue to be geared more to the larger districts, some of the smaller districts will choose to not participate.

Chair Teshner asked the committee whether or not to go with the department's recommendation of option 1 or if they wanted option 2 or 3. Dale Smythe was in favor of option 1 with possible clarification to the requirements of source for the facility condition index. David Kingsland supported clarification of FCI parameters noting that there had also been public comment in this area. Randy Williams was also in favor of option 1 because there are not enough substantial changes to warrant delaying it or to ask for more public comment.

Chair Teshner asked if there was any opposition to option 1, hearing none, Chair Teshner directed Tim to go with option 1.

Tim Mearig thanked the committee for their support and noted that if the matrix for maintenance narratives were approved for this year's CIP applications, the department would be able to provide analysis of scoring and how things changed district by district. He made clear that the department was not trying to change scores but trying to make it clear how the department had been scoring.

Life/Safety/Code Scoring (Sec. 4)

Tim Mearig noted the just-mentioned philosophy of bringing clarity but not trying to influence historic point assignments also exists with the rating of Life Safety/Code points on projects that include both non-life safety, and protection of structure items as well as those that do qualify for the condition within the same project and how to rate those accordingly.

An analysis provided by the department between FY20 and 21 indicated that many scores had increased toward the top, possibly due to the weighting factor. A possible weighting tool was identified and implemented in FY22, and it did not work very well. The department had used a method that compared point values of conditions and percentage of cost as a test of how to weight the projects appropriately. They found that a significant number of the projects had some anomalies that increased the scores beyond a baseline percentage of code repair costs to total project costs.

The department has proposed in option 1 to compare the cost to repair certain conditions to the total cost, so it compares the same types of factors: cost to cost. Option 2 compares points to points so that is more consistent statistically. Tim discussed the table and data. He stated that the department

would watch this closely and feels that there will be some additional analysis before a recommendation can be made to the committee.

Randy Williams asked if there were any projections for any of the options and any idea of what effect that would have on the scores. Tim replied that they did know the scores for FY22, and the other charts show how the scoring would have worked in the various options.

Both Dale Smythe and James Estes favored further analysis by the department. No one was opposed to further analysis.

SUBCOMMITTEE REPORTS

Model Schools

Don Hiley reported that the subcommittee had been reviewing three new sections of the School Construction Standards Manual: Substructure, Superstructure, and Conveying Systems. The subcommittee considered the idea of creating a checklist so people could work through that and minimize searching through the manual. That idea seemed to have merit.

Don noted they had sent an invitation to the Alaska A4LE to participate in development and review but had not received a reply. Work might have occurred at their annual meeting but that was canceled for 2020. There are no meetings scheduled at present, but the hope is that by spring they would have a semi-working draft completed that could at least be out for public comment.

Scott Worthington requested that he be provided with a copy of whatever was sent to A4LE for review and stated he would be glad to help with the content.

Design Ratios

DESIGN RATIO RECOMMENDATIONS VOLUME : EXTERIOR SURFACE AREA

Dale Smythe summarized and elaborated on the subcommittee report, the group had met after the report was submitted so there are additional items to discuss. . The subcommittee focused on the volume to exterior surface area ratio. This specific ratio is related to a cubic form and that made it difficult to try and recommend anything out of the report because of the relationship of the shape. The idea of a semi-cube or a hypothetical theoretical optimum does not match what a realistic school facility could ever look like. There is some savings to be achieved on the concept of this ratio but not through regulating or proposing a target. The subcommittee members agreed that this ratio was not the right way to try and monitor this going forward. He would like to get that in writing for consideration by the committee and then close out this project and move back to the subject of space planning.

Dale thanked the subcommittee members for their participation and expertise and mentioned that he would like to get some input from A4LE.

PUBLICATIONS

Construction Standards – Part 3 (final draft)

Tim Mearig reported that Part 3 of the Construction Standards speaks specifically to building systems. Most of the sections have been completed, and he is looking forward to reaching the point where the greater design and school facility operator community can start to review it to avoid any surprises with new regulations.

Section numbering is indexed to the DEED CostFormat and the *Condition Survey Handbook*, and those are both indexed to a building system numbering format. The sections were further detailed in a sub-numbering system allowing specific items to be separated to provide more detailed levels of information of what is required. Tim would like some feedback from the committee whether this level of detail is desired.

Tim discussed the superstructure section. The first three sections, Building System Summary, Design Philosophy, and Model Alaskan School are meant to be preambles that set out what is contained in the rest of the superstructure section. He asked whether those preambles are helpful by section to help orient design construction personnel on what the system consists of and what some of the philosophies are that might be driving the following elements is another category of input. Another question is whether it is appropriate to include design efficiency ratios that might come up in the process.

Tim gave an example of a micro efficiency standard: for foundation walls and treatment, carbon steel reinforcing bar is required with ratios in the 50-100 pounds per cubic yard of concrete. Premium is defined as above 100 pounds per cubic yard of concrete, so that would not be supported.

Tim noted these area the areas on which we would like some committee discussion from the Model School Subcommittee and department level. It could be on these items and on anything else that needs to be clarified or explained. They are also seeking comments on anything that seems out of place, whether it be something in the premium level that should be allowed or anything else that seems out of place.

Discussion

Don Hiley has some discomfort with the word “required” since it seems to imply that it is something that must be done, but in a lot of the sections, it might not be the only thing that needs to be done. He also wondered whether the level of detail was appropriate.

Scott Worthington suggested that “required” be replaced with “accepted practice” or something similar. Don Hiley suggested “as required” as a possible change.

Tim noted that when using a checklist for requirements, each item needs to be addressed to determine if it applies or does not apply because each item does not apply to all projects.

Randy Williams suggested the terms “baseline” or “standard” in place of “required.”

Scott Worthington pointed out that the terms “required,” “recommended,” and “premium” are already defined in the manual.

Dale Smythe offered his opinion that this document should be far less detailed. There is no reason to repeat things that are already defined that code is already requiring. He gave an example regarding concrete. Once the size of the school and location are determined, that’s 99 percent of it. There really is not any value for the department to be reviewing the compressive strength of concrete. He favored including lessons learned, things like roof slopes

at valleys, (glaciation) stripping the hoods off roofs, etc. If that information is not normally picked up, then that might be included.

Don Hiley agreed with Dale about the level of detail. He is concerned about the ongoing maintenance of the document and the amount of upkeep it would take to keep it relevant or whether it would go out of date if the code or regulations change. There are places that had adopted standards and had not updated them for years, so it was out of date, but the document was still referenced as a requirement and codified. He would like to keep it more general, although there are some specific things that should be detailed, like perhaps not putting vinyl siding on a building.

Dale Smythe added that if the expected lifespan and the location and size of the school is known, that's 99 percent of the criteria. For example, in Western Alaska there is really only one foundation method, but if you change the lifespan to two years instead of 30, you wouldn't be using post and pad.

Randy Williams asked if getting public input or further review was something to discuss now or if it was a future topic.

Tim Mearig replied that it is a big concern for the department and the Model School Subcommittee. They have not seen the kind of interest that they expected, but most people understand that 90 percent of school construction is hitting the mark for cost effectiveness. Perhaps people are not expecting anything new or relevant, so they don't feel a need to contribute much. This handbook is under the committee's charter and statute and will be reviewed and approved by the committee, and it should concern the committee that it is done well.

Don Hiley said they were hoping to get more feedback and wanted to have a discussion at the A4LE conference in December to try to get some interest generated and get people into the process. He thought that the design people who work on schools around the state would be a little more interested since this has a direct impact on their work. But this is a COVID year, and people apparently had other things to do. Hopefully before this gets into an adopted form, it will get more review from the specialists that are working in these various areas every day. There is a lot of expertise still to be tapped.

Randy Williams is concerned that there is little feedback. Developing these things in a vacuum is not good, and he asked if there were any other publications where they can go through the standard steps of getting feedback.

Tim Mearig thought they had a good reach into the school districts through people who do CIP notes to track things, but they don't have as much reach into the design professions in general. The sections on substructure and superstructure are ready for review by technical experts, but they have not asked for review yet.

Chair Teshner asked if it was the intention that when the publication is finished that it will go out for public comment as a whole document. Tim Mearig said yes, that the committee's work plan schedule was for the review to start in April, but it looks like it will be later than that before it is

polished up enough to send out. He also commented to Dale that the PSI of concrete is not specified in code.

Dale Smythe replied that there are strength requirements that relate to that which is why this is a perfect example of the prescriptive method you can do and still get to the result, which is the intent here.

Tim said that the document is positioned so as not to reproduce code. But saying “do what the code requires” over and over may not be needed. A lot of things can be done with a building that meets the code that are beyond what could be called cost effective. Dale Smythe agreed with that but gave an example of concrete failing at Scammon Bay that was designed to the correct PSI, but the pH of the water was wrong. He questioned if they are going to get into that much detail, controlling the pH for the water for the mix trying to do remote construction. He agrees with the goal but is questioning the application of the standard to get there.

Tim Mearig said he’s not trying to defend that it’s very important to have that mentioned in the standard. He acknowledged that the committee’s comments have been very helpful.

Don Hiley pointed out that all these things go to the department for review before they get built, so there is a secondary line of defense there. He doesn’t want to see it get too detailed because specialists are paid to do that. And since there is that second line of defense, that may weigh in a little bit on the level of specificity that is needed.

Dale Smythe agreed but pointed out that on the structural end, the state of Alaska cannot staff a structural reviewer, so they are trusting the design professionals explicitly, and a double check is required.

Scott Worthington said that to him, the usefulness of this document is as a designer looking at what the state accepts and recognizes as materials that they have seen to be proven in the field, and that gives the designers a good starting point. These are standards and practices that the state accepts, but it is up to the designer to recognize if those materials are the right ones.

He added that when looking for public feedback, perhaps e-mail is not the way to do it because it is too easy to put off responding until it’s too late. Maybe it would be more effective to talk one on one with a structural engineer.

Kevin Lyon stated that when he needs a review, he goes to that particular trade professional to take a look and make sure the standard was there. Also, if an exception is requested from what is required, an explanation is needed.

In response to the question from Chair Teshner, Tim Mearig said that this will continue to be developed and input will be sought along the way.

Alaska School Facilities Preventative Maintenance Handbook

Tim Mearig stated that this handbook has not been updated since approximately 1999, and they have been trying to reorient the publication to realign with the five areas of maintenance and

facility management that are outlined in statute, developed in regulation, and used by the department day by day.

They were hoping to further edit the energy management section but did not get to that. They worked on the custodial care section, and a draft master custodial schedule was presented together with a narrative on how schedules are envisioned, how they get used, and how they vary.

This schedule has many of the same elements as part 2 of the construction standards handbook where the different types of rooms are listed. This schedule is meant to be a starting point to develop a specific plan for any building.

Randy Williams asked how Tim was going to develop the energy management section, whether he had certain sources or was starting from scratch. Tim replied that he had been looking at the AHFC pamphlet on setting up an energy management program. They have been doing a lot of work in that area with retro commissioning. He added that Randy should feel free to write a paragraph about anything he wanted. Randy said he would love to participate, even if it's just reviewing, and Tim said he would be glad to have the help.

BR&GR WORKPLAN REVIEW & UPDATE

Chair Teshner referred the committee to the workplan, noting that the next meeting is scheduled for March 17th, and asked Tim Mearig if there were any specific items to address or just provide the construction standards for review. Tim replied that it was just for review, and some of the dates would have to be pushed out; for example, a final draft of the PM Handbook was not completed in February as scheduled. He said he might bring that back to the committee in March for suggestions.

Lori Weed stated that unless the committee members had specific items they wanted updated, the department would wait until the March meeting for any department proposals.

COMMITTEE MEMBER COMMENTS

Randy Williams thanked everyone for their input and participation.

Dale Smythe thanked the department and the subcommittees for all their effort. He hoped he had not sounded too critical – it's just that he gets excited because he likes working on these projects.

Don Hiley thanked everyone for the opportunity to be a member of the committee, said it was his last meeting as a committee member, and wished the new members good luck.

James Estes thanked Don for his service and said he appreciated his perspective as he was representing some of the smaller districts. He also thanked the department and committee members for all the hard work.

William Glumac thanked everybody and said this was his last meeting as a committee member. He said he learned a lot through this experience and appreciates the hard work that the department puts in.

Chair Teshner thanked both Don and William for their time on the committee and their input. She hopes they continue to participate in the meetings when they can. She also thanked the staff for all their hard work. She also mentioned that since Don is no longer going to be the chair for the Model School Subcommittee, a new chair will be needed. She hopes that Don will consider continuing to support that subcommittee process. She hoped everyone continued to stay safe and healthy.

MEETING ADJOURNED

William Glumac **MOVED** to adjourn, **SECONDED** by James Estes. Hearing no objection, the motion **PASSED**, and the meeting adjourned at 4:15 p.m.

BOND REIMBURSEMENT & GRANT REVIEW COMMITTEE

Wednesday, March 17, 2021 – 3:00 p.m. – 4:31 p.m.

DRAFT MEETING MINUTES FOR APPROVAL

Committee Members Present

Heidi Teshner, Chair
Senator Roger Holland
Randy Williams
Dale Smythe
James Estes
Kevin Lyon
David Kingsland
Branzon Anania

Staff

Tim Mearig
Lori Weed
Wayne Marquis
Sharol Roys

Additional Participants

Rachel Molina Lodoen, Anchorage SD
Don Hiley, SERRC
Scott Worthington, BDS Architects
Ruby Steedle, AK Council of School
Administrators
Malan Paquette

March 17, 2021

CALL TO ORDER and ROLL CALL at 3:00 p.m.

Chair Heidi Teshner called the meeting to order at 3:00 p.m. Roll call and introduction of members present. A member from the House of Representatives had not been appointed at the time of this meeting. Quorum was established to conduct business.

CHAIR'S OPENING REMARKS

Chair Teshner welcomed new members Kevin Lyon and Branston Anania, and guests were recognized and welcomed.

AGENDA REVIEW/APPROVAL

Dale Smyth **MOVED** to approve today's agenda, **SECONDED** by Kevin Lyon. Hearing no objection, the motion **PASSED**.

PAST MEETING MINUTES REVIEW/APPROVAL – February 25, 2020

The minutes from the February meeting were not included in the packet and will be considered for approval at the April meeting.

PUBLIC COMMENT

A public comment period was offered, and no public testimony was provided.

NEW MEMBER WELCOME AND ORIENTATION

Chair Teshner introduced the orientation for new members which is in the packet on pages 3 through 16. Tim Mearig addressed the history of the committee and its members. He mentioned that over the years, a more programmed approach to committee assignment and terms had evolved. The duties of the committee are set out in statute, and Tim pointed out that they are remarkably stable since there has been only one substantive change since 1993.

Chair Teshner discussed the meeting structure and mentioned that since the pandemic all the meetings have been virtual. Lori Weed discussed the packet contents and procedure and asked the members if they had a preference for which platform was used for the virtual meetings. Two

members expressed preference for anything except WebEx, two members were more familiar with Zoom, and the others had no preference between Zoom, Teams, and WebEx.

Dale Smythe commented that one of the things the committee does not do is score applications. Tim Mearig explained that the department has a robust process for scoring and evaluating capital improvement project applications with department staff. The work is guided by the application materials approved by the committee.

Chair Teshner discussed the general meeting schedule and procedures, and Lori Weed talked about the packet contents and procedures.

BR&GR WORKPLAN REVIEW & UPDATE

Tim Mearig stated that the department uses the committee's input to develop an annual work plan that gets tweaked throughout the year. The department also has a master work plan, which has not been amended since 2017. Typically, this document would be edited by the department and then updated by the committee, and both documents should reflect the committee's duties as listed in the statutes.

Dale Smythe asked how proposed changes for consideration are brought to the attention of the department. Tim replied that ideas for changes could be proposed by anyone, including a constituent or stakeholder, and then could be forwarded to the chair to make its way onto the agenda as a special item. Also, the committee can ask the department to do research on any item.

Tim explained that some of the changes to the annual work plan are strictly administrative, such as changing dates to reflect the current year. The rest of the proposed changes focus on criteria for cost-effective school construction. Many of the proposed changes are a result of the work of subcommittees that were established in 2017.

The changes in section 3.4 relate to the Design Ratio Subcommittee. Previously the Commissioning Subcommittee had action items in this section but it completed its work last year. Tim noted that the successful closure of a subcommittee should, hopefully, encourage anyone to join and participate in another subcommittee. A communication had been sent to the committee regarding the need to re-establish leadership on some subcommittees. The work of the Model School Subcommittee shows adjustments to the dates for the publication of a handbook for standard for design and construction of schools that have been pushed back to the latter part of 2021.

Section 4 on prototypical school design deals with having a standard school plan that can be used repeatedly to save money on planning and construction. A study on this subject was completed in 2015 and is available on the department's website. That study concluded that there are opportunities when multiple schools are being built at the same time, but there are also some limitations that make it challenging to use the same plans across the variety of school sizes and geographic and climate areas in the state of Alaska.

The dates in Section 5, the grant application and ranking section, have been changed to reflect the annual cycle. Also, the department is working on the space allocation section and some other

challenging areas that might be included in the state's prioritization process or project evaluation process.

Section 6 discusses the processes and recommendations regarding ranking capital projects and how those are funded as well as making sure that the costs are in line with cost-effective school construction. It also includes non-construction costs such as a percent for art, school equipment, and other ancillary elements for new schools or additions. The 13 publications that the department manages are addressed in this section of the plan.

There is no new information for Section 7 regarding energy efficiency standards. Action on this section was finished last year and has passed into regulation, and now the need for commissioning both new and existing buildings in school districts to enhance energy efficiency is recognized.

The upcoming applications for the FY '23 process will be reviewed at the April meeting, formalizing those with the committee, and then getting those approved for the department to issue after the meeting. The districts can then start preparing their applications so they can meet the September 1st deadline.

The July meeting is tentatively scheduled to review the progress that the department is making in publications and standards. Items that are listed on the annual work plan have been included in both the July and September meetings. The September meeting takes place just before the department gets busy evaluating CIP applications. Tim requested that the committee clarify that those are work items they want to do and that they can support those timeframes.

Due to time limits, Tim did not discuss the master work plan. He only pointed out that the publication section has some specific dates in mind to reflect the desire to have the publications updated at a minimum of five-year intervals so that they do not become out of date and unhelpful.

Availability of the members to attend a July meeting was discussed, and most members will be available, but a date certain will have to be decided. This meeting would be primarily for committee review of the Design and Construction Standards Handbook, which Tim had wanted to be available for public comment by July, but that date will have to be extended to September.

SUBCOMMITTEE REPORTS

Design Ratios

Dale Smythe reported that the subcommittee had developed realistic ratios to use and the logic behind each. He hopes to prepare a summary this month to forward to staff.

School Space

Dale Smythe is interested in this new subcommittee concerning efficiency of school space standards. Even with meeting current space guidelines, there are unintended consequences that affect items such as wall thickness, envelope size, and potential R value. He is looking for members to join and participate.

Chair Teshner invited the new members to join any subcommittee that interested them and also pointed out that a chair is needed for the Model School Subcommittee since Don Hiley is no longer a member.

Tim Mearig commented on the design ratio process, how to measure a building to see if it's an efficiently designed building. He requested that Dale Smythe explain to the committee in April what was considered and how the recommendations came to be. He also would like the committee to consider if more background data is needed before sending it out for public review.

Scott Worthington offered to help in an advisory capacity to bring in the A4LE point of view. He is specifically interested in the space allocation subcommittee.

Tim Mearig reminded everyone that the committee acted in the past to authorize any subcommittee chair to gather members from any sector to provide information and assistance, whether for a specific subject or as a full member. The subcommittees never implement standards but rather refer and recommend to the full committee for action.

PUBLICATIONS

Construction Standards – Part 3 (final draft)

Construction Standards - Part 2 Design Guidance (progress)

Tim Mearig reported that the cover memo is a good overview of this project and its status. He would like to receive direction from the committee on the five bulleted points on page 2 of the memo, especially whether the level of detail is appropriate. He is also looking for people to help fill in gaps in the publication primarily on infrastructure standards and school equipment.

There are two new systems in this version: furnishing and equipment (starting on page 120 of the packet) and the following section dealing with unique systems such as packaged units and whole buildings. These two sections were prepared recently and have not been reviewed by the committee, and all comments regarding those are welcome.

One question brought up in staff review was how much the state is willing to invest in library-type furnishings. The description in the handbook is fairly traditional now, but he raised the subject of media spaces and how media is delivered and what is acceptable as part of a school. David Kingsland mentioned that his wife is a former school librarian and is now the director of the Seward Library and Museum, and he volunteered to ask her to review this section.

Tim also is concerned about duplication of information. For example, specific equipment for CTE is listed in part 3, and in part 2 there are some generalities about that particular type of instructional space.

COMMITTEE MEMBER COMMENTS

Dale Smyth stated that he had a lot of comments on the construction standards, and he would submit those by e-mail. He went on to say that he thought it was too specific and that there was some overlap. To him it looks a lot like an ed spec, and he would like to see it get back to the basics of what the state is doing to limit budget and space and then not have so much control on those things that should be covered by some other type of standard. If that approach is used on

the whole document, it would take out of lot of the elements that someone could get bogged down in.

Dale also mentioned that he thought it would be important to note what the state is having to consistently spend money on within existing schools. If there are issues that arise repeatedly, the standard priorities could be directed at those first, so the cost benefit analysis is more balanced.

Dale had a question about the new energy recording standards that have just gone out and how that affects the preventative maintenance document.

David Kingsland had no comments except for saying he has put his wife on the hook.

James Estes welcomed the new members and looks forward to working with them. He also said that he thinks the department is doing a great job with the preventative maintenance and new energy standards.

Randy Williams apologized for being late to the meeting. He is hoping to get involved in one of the subcommittees.

Branson Anania thanked the committee for welcoming him. He would like to participate and help out but needs to look a little further to see where he would fit in best.

Kevin Lyon said he could probably contribute to the model Alaska school subcommittee and could help with some of the design and school construction standards. He agrees with Dale that a more basic approach would be preferable to the ed spec format. He thanked the members for having him on the committee.

Senator Holland looks forward to joining the meetings and seeing how he can offer any assistance.

Chair Teshner thanked Senator Holland and Kevin and Branson and stated that if they wanted to have a one-on-one meeting with the department, that could be arranged.

MEETING ADJOURNED

Chair Teshner **MOVED** to adjourn, **SECONDED** by Dale Smythe. Hearing no objection, the motion **PASSED**, and the meeting adjourned at 4:31 p.m.



To: Bond Reimbursement & Grant Review Committee
From: School Facilities
Date: April 14, 2021

DEPARTMENT BRIEFING

FY 2022 CIP Report

The department received reconsideration requests from three districts on three projects. In the lists issued December 19, 2020, the department reconsidered its determination on these projects and adjusted the project budget on one project, and the project budget and priority points on another project.

No appeals were received within the statutory deadline. No changes were made to the reconsideration lists and the final lists were issued January 15, 2021. The final lists are included in the packet. These were approved by the State Board of Education meeting on March 17, 2021.

The major maintenance list contains a total of 108 projects amounting to a total state share request of \$187,285,413, and the school construction list contains 17 projects with a state share request of \$162,305,916.

An updated sheet on the CIP grant request and funding history FY12-FY22 is included for reference.

Preventive Maintenance Update (PM State-of-the-State)

The Preventive Maintenance State of the State Report was updated on August 15, 2020, and is included in the packet. For the current FY22 CIP cycle, 48 of 53 school districts have certified preventive maintenance programs.

Districts not currently certified include:

- Aleutian Region
- Hydaburg City
- Lake & Peninsula
- Skagway
- Yukon Flats

Districts granted provisional certification and working with the department to develop a full year of evidence of plan adherence include:

- Bristol Bay Borough
- Chatham
- Galena City
- Kake City
- Kuspuk
- Lower Kuskokwim
- Nenana City
- Pelican City
- Yakutat

“Virtual” site visits for the current fiscal year 2021 have been scheduled or taken place for the following school districts:

- Annette Island
- Dillingham City
- Haines Borough
- Juneau Borough
- Ketchikan
- Northwest Arctic Borough
- Petersburg Borough
- Southwest Region
- Wrangell Borough

Last, prior to the June 1 initial certification deadline, all districts are being reviewed for the newly implemented energy program regulations that require “regular evaluation of the effectiveness of and need for commissioning existing buildings”. In mid-November, the department issued program guidance and tools for compliance to every school district. The Facilities section, through our Building Management Specialist, Wayne Marquis, has made it a priority to guide and encourage districts toward compliance. We established a minimum goal of ensuring every eligible district that applied for FY22 state-aid would assimilate this new requirement and remain eligible for FY23. As of March 31, our progress on that and other metrics is as follows:

- Number of districts compliant by review – 12
- Number of districts compliant by “n/a” – 15 (no required facilities)
- Total compliant districts – 27 of 53 (51%)
- Total compliant CIP eligible – 25 of 48 (51%)
- Total compliant on FY22 CIP – 18 of 30 (60%)

School Capital Project Funding Report

AS 14.11.035 requires, beginning in February 2013, an annual report on school construction and major maintenance funding. The statute requires reports of spending from each of the three funding programs providing state aid for capital improvement projects—school construction and major maintenance grants under AS 14.11.011, REAA and small municipal district allocations under AS 14.11.025, and school construction debt reimbursement under AS 14.11.100. Summary tables from the 2021 report showing the funding activity by program, fiscal year, and category are included in the packet. The final report is available on the department’s website.

REAA & Small Municipality Fund Report

The Regional Education Attendance Area fund was established by chapter 93, SLA 2010 (SB 237). The amount of money available each fiscal year is tied to the annual debt service incurred under AS 14.11.100. In 2013, the fund was amended to include “small municipal school districts”. In 2018, the fund was amended to allow funding of major maintenance grants, but maintaining the primary function to fund school construction projects. Since the first appropriation in FY 2013, \$280,647,878 has been deposited into the Regional Education Attendance Area and Small Municipal School -District (REAA) fund. From FY13 through FY15, \$869,528 in interest also accrued to the fund for a total of \$281,517,406. A total of 14 projects have obligated \$281,077,525.

The combined projected FY22 REAA fund appropriation and unobligated fund balance is anticipated to be approximately \$17,119,000. If appropriated, this funding would be sufficient to provide the state share of \$9,476,008 for the priority #1 project on the School Construction Grant Fund list, Hollis K-12 School Replacement. Options for use of the

remaining balance will be evaluated in accordance with 4 AAC 31.023(b). A summary sheet is included in the packet.

Legislative Action

Governor introduced the budget bills for the First Session of the 32nd Legislature. The operating budget (HB 69/SB 49) as introduced provides for an allocation of \$41,771,980 for state aid for costs of school construction under AS 14.11.100 (debt reimbursement) and \$17,119,000 to the regional education attendance area and small municipal school district fund. These amounts are half of the full reimbursement entitlement and fund calculation for FY2023. The capital budget introduced (HB 70/SB 50) does not include funding for either the School Construction Grant Fund or the Major Maintenance Grant Fund. All budget bills are in the House and Senate Finance Committees.

The supplemental budget (HB 84/SB 68) as introduced by the Governor includes \$240,000 for DEED to fund development of a “Statewide School Capital Funding Forecast Database”. (See the paragraph and supporting document under ***Department Projects.***)

HB 93/SB 74 by the Governor proposed a statewide general obligation (G.O.) bond package that would allocate \$25 million for “Major Maintenance Grant Fund for School Major Maintenance” and \$9 million for “Houston Middle School Replacement”. Senate Transportation passed out a committee substitute for SB 74 that itemized funding for specific major maintenance list projects; the funding mostly goes down the list funding projects that fit within the remaining available balance of \$25 million, with the exception of skipping over the rank 10 project, Fairbanks Administrative Center Air Conditioning and Ventilation Replacement. HB 93 is in the House Finance Committee; SB 74 is in the Senate Finance Committee.

SB 17 by Sen. Begich proposes that the state energy policy include a goal of a least 50% of energy used by state and state-funded facilities (including public school buildings) be obtained from clean energy sources by 2026. Proposes that the state perform energy audits of public facilities (including schools), periodically review energy audits, and coordinate retrofit projects. SB 17 is in the Senate Community & Regional Affairs Committee.

Cost Model Update

The DEED Program Demand Cost Model, which is a tool used to assist school districts in estimating construction and renovation costs, will be updated again in 2021. This will be the 20th Edition of the tool. The contract with HMS, Inc. calls for final products on April 30 for use in the FY2023 application cycle and will be posted on the department’s website before the annual CIP training workshop.

A teleconference with HMS, Inc. has been scheduled to allow the committee to provide input on potential changes to the elements of the Model School Building Escalation Study per the Model Alaskan School subcommittee recommendation. See separate agenda item and supplemental materials.

Department Projects

Should funding be provided in HB 84/SB 68, the department will initiate a project to create robust school capital funding forecast for Alaska. AS 14.11.035 requires an annual report on state aid for school construction. That statute reads in part, “*The report must include an analysis of funding sources and the short-term and long-term fiscal effects of the funding on*

the state.” Without a forecast of capital need, that analysis cannot be provided. The June 2020 GAO report on the nation’s school facilities makes clear the need for a clear forecast of capital need.¹ That report showed that only two-thirds of local districts, and almost no states, had a comprehensive assessment of school capital needs. A capital project summary outlining this vital project is included in the packet.

Publications Update

Following is a list of publications currently managed by the department along with an estimated revision priority, and the year of publication or latest draft. Those in bold are publications proposed for committee approval.

1. **Alaska School Facilities Preventive Maintenance Handbook** (1999) [*Proposed update 2021*]
2. **School Design and Construction Standards Handbook** (new) [*Proposed 2021*]
3. Site Selection Criteria & Evaluation Handbook (2011 2nd Ed.) [*Proposed update 2021*]
4. **Guidelines for School Equipment Purchases** (2016) [*Proposed update 2021*]
5. **Space Guidelines Handbook** (1996)
6. Facility Appraisal Guide (1997)
7. Renewal & Replacement Schedule (2001)
8. Outdoor Facility Guidelines for Secondary Schools (new)
9. Capital Project Administration Handbook (2017)
10. Project Delivery Method Handbook (2017)
11. **Life Cycle Cost Analysis Handbook** (2018)
12. Professional Services for School Capital Projects (2018)
13. **Swimming Pool Guidelines** (2019)
14. **A Handbook to Writing Educational Specifications** (2019)
15. **Guide for School Facility Condition Surveys** (2020)
16. Cost Format – *DEED Standard Construction Cost Estimate Format* (2020 3rd Ed.)

See specific cover memos for the publications being presented under separate agenda items.

Committee Member Update

On March 1, the commissioner appointed the following members:

- Dale Smythe, Professional Degrees & Experience in School Construction (reappointment)
- Kevin Lyon, Experience in Urban or Rural School Facilities Management
- Branzon Anania, Public Representative

Legislative members have been appointed to the committee by the Senate President and Speaker of the House. Welcome Sen. Roger Holland and Rep. Dan Ortiz.

¹ Government Accountability Office. School Districts Frequently Identified Multiple Building Systems Needing Updates or Replacement, GAO 20-494; June 4, 2020. <https://www.gao.gov/assets/gao-20-494.pdf>

**Alaska Department of Education and Early Development
 FY2022 Capital Improvement Projects
 School Construction Grant Fund**

Final List

Jan 15 Rank	Dec 18 Rank	Nov 5 Rank	School District	Project Name	Amount Requested	Eligible Amount	Prior Funding	DEED Recommended Amount	Participating Share	State Share	Aggregate Amount
1	1	1	Southeast Island	Hollis K-12 School Replacement	\$10,355,919	\$10,355,919	\$686,523	\$9,669,396	\$193,388	\$9,476,008	\$9,476,008
2	2	2	Lower Kuskokwim	Anna Tobeluk Memorial K-12 School Renovation/Addition, Nunapitchuk	\$45,271,315	\$45,271,315	\$0	\$45,271,315	\$905,426	\$44,365,889	\$53,841,897
3	3	5	Yukon-Koyukuk	Minto K-12 School Renovation/Addition	\$11,719,931	\$11,719,931	\$0	\$11,719,931	\$234,399	\$11,485,532	\$65,327,429
4	4	3	Lower Kuskokwim	William N. Miller K-12 Memorial School Replacement, Napakiak	\$47,322,739	\$43,672,991	\$0	\$43,672,991	\$873,460	\$42,799,531	\$108,126,960
5	5	4	Anchorage	Gruening Middle School Non-Seismic Improvements	\$22,344,492	\$19,950,551	\$0	\$19,950,551	\$6,982,693	\$12,967,858	\$121,094,818
6	6	6	Anchorage	Gruening Middle School Accessibility Upgrades	\$406,320	\$406,320	\$0	\$406,320	\$142,212	\$264,108	\$121,358,926
7	7	7	Hoonah City	Hoonah School Playground Improvements	\$230,366	\$230,366	\$0	\$230,366	\$69,110	\$161,256	\$121,520,182
8	8	8	Anchorage	East High School Bus Driveway Improvements	\$910,366	\$910,366	\$0	\$910,366	\$318,628	\$591,738	\$122,111,920
9	9	9	Lower Kuskokwim	Newtok K-12 School Relocation/Replacement, Mertarvik	\$32,209,022	\$32,209,022	\$0	\$32,209,022	\$644,180	\$31,564,842	\$153,676,762
10	10	10	Anchorage	Security Vestibules Group 2, 3 Sites	\$951,669	\$951,669	\$0	\$951,669	\$333,084	\$618,585	\$154,295,347
11	11	11	Kenai Peninsula Borough	Kenai Middle School Security Remodel	\$1,287,504	\$1,526,987	\$0	\$1,526,987	\$534,445	\$992,542	\$155,287,889
12	12	12	Lower Kuskokwim	Water Storage and Treatment, Kongiganak	\$7,164,700	\$3,475,823	\$0	\$3,475,823	\$69,516	\$3,406,307	\$158,694,196
13	13	13	Anchorage	Security Vestibules Group 1, 3 Sites	\$1,231,000	\$1,231,000	\$0	\$1,231,000	\$430,850	\$800,150	\$159,494,346
14	14	14	Lower Kuskokwim	Bethel Campus Transportation and Drainage Upgrades	\$1,065,532	\$1,065,532	\$0	\$1,065,532	\$21,311	\$1,044,221	\$160,538,567
15	15	15	Anchorage	Chugiak High School Track Improvements	\$926,000	\$926,000	\$0	\$926,000	\$324,100	\$601,900	\$161,140,467
16	16	16	Kodiak Island Borough	East Elementary School Parking Lot Safety Upgrade and Repaving	\$479,534	\$479,534	\$0	\$479,534	\$167,837	\$311,697	\$161,452,164
17	17	17	Yupit	Playground Construction, 3 Sites	\$1,154,192	\$871,176	\$0	\$871,176	\$17,424	\$853,752	\$162,305,916
Totals:					\$185,030,601	\$175,254,502	\$686,523	\$174,567,979	\$12,262,063	\$162,305,916	

**Alaska Department of Education and Early Development
 FY2022 Capital Improvement Projects
 School Construction Grant Fund
 Total Points - Formula Driven and Evaluative
 Final List**

Jan 15 Rank	Dec 18 Rank	Nov 5 Rank	School District	Project Name	School Dist Rank	Weight Avg Age	Prev. 14.11 Fund	Plan and Design	Prior Design Use	Avg Expend Maint	Un-Housed Today	Un-Housed 7 Years	Type of Space	Cond Survey	O&M Rpts	Maint Mgt	Energy Mgt	Cusd Pgm	Maint Train	Capital Plan	Emergency	Life/Safety and Code Conditions	Exist-ing Space	Cost Estimate	Proj vs Oper Cost	Altern at-ives	Options	Total Project Points
1	1	1	Southeast Island	Hollis K-12 School Replacement	27.00	24.26	30.00	10.00	0.00	2.88	26.74	30.00	23.84	10.00	25.00	2.67	3.00	2.67	3.33	3.00	9.00	16.02	22.67	15.67	3.33	3.00	9.33	303.41
2	2	2	Lower Kuskokwim	Anna Tobeluk Memorial K-12 School Renovation/Addition, Nunapitchuk	24.00	21.95	0.00	10.00	0.00	3.20	30.19	23.79	22.21	10.00	30.00	2.67	2.33	2.67	2.33	3.00	0.00	31.91	19.67	12.67	3.33	3.33	11.67	270.91
3	3	5	Yukon-Koyukuk	Minto K-12 School Renovation/ Addition	30.00	23.78	0.00	20.00	0.00	2.82	0.00	3.41	23.85	10.00	25.00	3.67	2.67	3.00	3.33	3.00	0.00	23.58	15.33	18.33	4.00	4.00	13.00	232.77
4	4	3	Lower Kuskokwim	William N. Miller K-12 Memorial School Replacement, Napakiak	30.00	30.00	0.00	10.00	0.00	3.46	1.44	0.86	22.63	10.00	30.00	4.00	2.67	3.33	3.00	3.33	25.00	14.38	0.00	17.67	4.33	3.00	9.67	228.77
5	5	4	Anchorage	Gruening Middle School Non-Seismic Improvements	30.00	23.00	0.00	25.00	0.00	4.82	0.00	0.00	21.11	10.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	10.50	10.67	25.00	1.33	3.00	9.67	224.44
6	6	6	Anchorage	Gruening Middle School Accessibility Upgrades	15.00	19.50	0.00	25.00	0.00	5.00	0.00	0.00	30.00	10.00	25.00	4.33	4.00	4.00	3.00	5.00	0.00	1.75	7.67	25.67	1.33	1.67	4.67	192.58
7	7	7	Hoonah City	Hoonah School Playground Improvements	27.00	30.00	0.00	25.00	0.00	1.72	0.00	0.00	0.00	0.00	30.00	3.00	3.67	3.00	2.33	2.00	0.00	6.34	2.00	29.00	0.00	1.67	8.33	175.06
8	8	8	Anchorage	East High School Bus Driveway Improvements	12.00	30.00	0.00	25.00	0.00	5.00	0.00	0.00	0.00	10.00	25.00	4.33	3.67	4.00	3.00	4.67	0.00	13.00	0.00	24.33	2.33	1.67	5.00	173.00
9	9	9	Lower Kuskokwim	Newtok K-12 School Relocation/Replacement, Mertarvik	21.00	8.86	0.00	0.00	0.00	3.20	4.06	2.44	22.79	0.00	30.00	2.67	2.33	2.67	2.33	3.00	21.33	0.41	6.33	13.00	3.00	4.33	8.00	161.76
10	10	10	Anchorage	Security Vestibules Group 2, 3 Sites	21.00	21.18	0.00	25.00	0.00	4.82	0.00	0.00	0.00	0.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	0.00	6.00	25.67	0.00	3.00	4.67	161.67
11	11	11	Kenai Peninsula Borough	Kenai Middle School Security Remodel	30.00	30.00	0.00	10.00	0.00	3.03	0.00	0.00	0.00	0.00	30.00	3.67	3.00	3.67	2.67	3.67	0.00	2.07	5.33	14.00	0.00	0.00	5.33	146.43
12	12	12	Lower Kuskokwim	Water Storage and Treatment, Kongiganak	18.00	0.00	0.00	20.00	0.00	3.46	0.00	0.00	0.00	8.00	30.00	4.00	2.67	3.33	3.00	3.33	0.00	17.33	0.00	17.33	2.67	2.00	10.33	145.46
13	13	13	Anchorage	Security Vestibules Group 1, 3 Sites	24.00	9.52	0.00	15.00	0.00	4.82	0.00	0.00	0.00	0.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	0.00	6.00	26.00	0.00	3.00	4.67	143.35
14	14	14	Lower Kuskokwim	Bethel Campus Transportation and Drainage Upgrades	6.00	27.80	0.00	10.00	0.00	3.46	0.00	0.00	0.00	8.00	30.00	4.00	2.67	3.33	3.00	3.33	0.00	12.35	0.00	15.00	1.67	2.67	4.33	137.60
15	15	15	Anchorage	Chugiak High School Track Improvements	0.00	4.00	0.00	25.00	0.00	4.82	0.00	0.00	0.00	10.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	2.67	4.00	26.67	0.00	2.67	5.33	135.49
16	16	16	Kodiak Island Borough	East Elementary School Parking Lot Safety Upgrade and Repaving	21.00	30.00	0.00	0.00	0.00	2.83	0.00	0.00	0.00	0.00	25.00	3.00	2.67	3.33	2.67	3.67	0.00	7.00	0.00	12.00	1.67	0.00	2.67	117.50
17	17	17	Yupitit	Playground Construction, 3 Sites	15.00	2.69	0.00	10.00	0.00	1.69	0.00	0.00	0.00	0.00	30.00	3.33	2.67	2.67	2.67	2.67	0.00	12.00	3.67	12.67	0.00	2.00	6.00	109.70

**Alaska Department of Education and Early Development
FY2022 Capital Improvement Projects
Major Maintenance Grant Fund**

Final List

Jan 15 Rank	Dec 18 Rank	Nov 5 Rank	School District	Project Name	Amount Requested	Eligible Amount	Prior Funding	DEED Recommended Amount	Participating Share	State Share	Aggregate Amount
1	1	1	Galena City	Galena Interior Learning Academy Composite Building Renovation	\$6,108,178	\$6,023,865	\$0	\$6,023,865	\$301,193	\$5,722,672	\$5,722,672
2	2	2	Craig City	Craig Middle School Rehabilitation	\$6,104,406	\$6,104,406	\$0	\$6,104,406	\$1,220,881	\$4,883,525	\$10,606,197
3	3	3	Anchorage	Eagle River Elementary School Improvements	\$8,085,765	\$8,085,765	\$0	\$8,085,765	\$2,830,018	\$5,255,747	\$15,861,944
4	4	4	Kake City	Kake Schools Heating Upgrades	\$242,277	\$242,277	\$0	\$242,276	\$48,455	\$193,821	\$16,055,765
5	5	5	Anchorage	West High School Roof Replacement	\$6,948,379	\$6,948,379	\$0	\$6,948,379	\$2,431,933	\$4,516,446	\$20,572,211
6	6	6	Denali Borough	Anderson K-12 School Partial Roof Replacement	\$1,337,610	\$1,337,610	\$0	\$1,337,610	\$267,522	\$1,070,088	\$21,642,299
7	7	7	Chugach	Chenegua Bay K-12 School Renovation	\$5,696,900	\$5,696,900	\$0	\$5,696,900	\$113,938	\$5,582,962	\$27,225,261
8	8	8	Chugach	Tatitlek K-12 School Renovation	\$6,895,952	\$6,895,952	\$0	\$6,895,952	\$137,919	\$6,758,033	\$33,983,294
9	9	9	Juneau Borough	Sayéik: Gastineau Community School Partial Roof Replacement	\$1,550,000	\$1,550,000	\$0	\$1,550,000	\$542,500	\$1,007,500	\$34,990,794
10	10	10	Fairbanks Borough	Administrative Center Air Conditioning and Ventilation Replacement	\$1,404,509	\$1,404,509	\$0	\$1,404,509	\$491,578	\$912,931	\$35,903,725
11	11	11	Anchorage	Service High School Health and Safety Improvements	\$4,790,010	\$4,790,010	\$0	\$4,790,010	\$1,676,503	\$3,113,507	\$39,017,232
12	12	12	Anchorage	Birchwood Elementary School Roof Replacement	\$2,877,004	\$2,877,004	\$0	\$2,877,004	\$1,006,951	\$1,870,053	\$40,887,285
13	13	13	Aleutians East Borough	Sandpoint K-12 School Major Maintenance	\$3,931,263	\$2,877,365	\$0	\$2,877,365	\$1,007,078	\$1,870,287	\$42,757,572
14	14	14	Lower Yukon	Sheldon Point K-12 School Foundation Cooling and Repairs, Nunam Iqaa	\$3,406,798	\$3,406,798	\$0	\$3,406,798	\$68,136	\$3,338,662	\$46,096,234
15	15	15	Anchorage	East High School Gym Improvements	\$8,971,000	\$7,843,975	\$0	\$7,843,975	\$2,745,391	\$5,098,584	\$51,194,818
16	16	16	Nenana City	Nenana K-12 School Flooring and Asbestos Abatement	\$420,041	\$420,041	\$0	\$420,041	\$21,002	\$399,039	\$51,593,857
17	17	17	Iditarod Area	David-Louis Memorial K-12 School HVAC Control Upgrades, Grayling	\$117,406	\$117,406	\$0	\$117,406	\$2,348	\$115,058	\$51,708,915
18	18	18	Iditarod Area	Blackwell K-12 School Fire Alarm Upgrades,	\$81,607	\$81,607	\$0	\$81,607	\$1,632	\$79,975	\$51,788,890
19	19	19	Lower Yukon	Hooper Bay K-12 School Exterior Repairs	\$3,707,895	\$2,296,607	\$0	\$2,296,607	\$45,932	\$2,250,675	\$54,039,565
20	20	20	Yukon-Koyukuk	YKSD District Office Roof Replacement	\$160,325	\$160,325	\$0	\$160,325	\$3,206	\$157,119	\$54,196,684
21	21	21	Ketchikan Borough	Ketchikan High School Security Upgrades	\$498,218	\$498,218	\$0	\$498,218	\$174,376	\$323,842	\$54,520,526
22	22	22	Yukon-Koyukuk	Ella B. Verneti K-12 School Boiler Replacement, Koyukuk	\$493,476	\$493,476	\$0	\$493,476	\$9,870	\$483,606	\$55,004,132
23	23	23	Lower Kuskokwim	Qugcuun Memorial K-12 School Renovation, Oscarville	\$3,887,529	\$3,887,529	\$0	\$3,887,529	\$77,751	\$3,809,778	\$58,813,910
24	24	24	Lower Kuskokwim	Akula Elitnavuk K-12 School Renovation, Kasigluk-Akula	\$4,221,348	\$4,221,348	\$0	\$4,221,348	\$84,427	\$4,136,921	\$62,950,831
25	25	25	Northwest Arctic Borough	Buckland K-12 School HVAC Renewal and Upgrades	\$1,049,278	\$1,049,278	\$0	\$1,049,278	\$209,856	\$839,422	\$63,790,253
26	26	26	Aleutians East Borough	Sandpoint K-12 School Pool Major Maintenance	\$103,788	\$103,788	\$0	\$103,788	\$36,326	\$67,462	\$63,857,715
27	27	27	Nome City	Anvil City Charter School Restroom Renovation	\$395,199	\$395,199	\$0	\$395,199	\$118,560	\$276,639	\$64,134,354
28	28	28	Nome City	Nome Beltz Jr/Sr High School Boiler	\$110,860	\$110,860	\$0	\$110,860	\$33,258	\$77,602	\$64,211,956
29	29	29	Anchorage	Inlet View Elementary School Domestic Water System Improvements	\$458,959	\$458,959	\$0	\$458,959	\$160,636	\$298,323	\$64,510,279
30	30	30	Fairbanks Borough	Ben Eielson Jr/Sr High School Roof Replacement	\$3,493,585	\$3,213,865	\$0	\$3,213,865	\$1,124,853	\$2,089,012	\$66,599,291

**Alaska Department of Education and Early Development
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Jan 15 Rank	Dec 18 Rank	Nov 5 Rank	School District	Project Name	Amount Requested	Eligible Amount	Prior Funding	DEED Recommended Amount	Participating Share	State Share	Aggregate Amount
31	31	31	Fairbanks Borough	Woodriver Elementary School Roof Replacement	\$1,992,289	\$1,465,301	\$0	\$1,465,301	\$512,855	\$952,446	\$67,551,737
32	32	32	Anchorage	Ptarmigan Elementary School Roof Replacement	\$1,981,736	\$1,981,736	\$0	\$1,981,736	\$693,608	\$1,288,128	\$68,839,865
33	33	33	Nenana City	Nenana K-12 School Boiler Replacement	\$187,995	\$187,995	\$0	\$187,995	\$9,400	\$178,595	\$69,018,460
34	34	34	Lower Yukon	Marshall K-12 School Tank Farm Emergency Repair	\$1,880,554	\$1,880,554	\$0	\$1,880,554	\$37,611	\$1,842,943	\$70,861,403
35	35	35	Anchorage	Stellar Secondary School Fire Alarm	\$280,039	\$280,039	\$0	\$280,039	\$98,014	\$182,025	\$71,043,428
36	36	36	Anchorage	Nunaka Valley Elementary School Roof Replacement	\$1,945,769	\$1,945,769	\$0	\$1,945,769	\$681,019	\$1,264,750	\$72,308,178
37	37	37	Nome City	Nome Schools DDC Control Upgrades	\$2,276,102	\$2,276,102	\$0	\$2,276,102	\$682,831	\$1,593,271	\$73,901,449
38	38	38	Chatham	Fire Alarm Upgrades, 3 Sites	\$222,249	\$222,249	\$0	\$222,249	\$4,445	\$217,804	\$74,119,253
39	39	39	Yupit	Tuluksak K-12 School Generator Refurbishment	\$161,019	\$161,019	\$0	\$161,019	\$3,220	\$157,799	\$74,277,052
40	40	40	Anchorage	Northwood Elementary School Partial Roof Replacement	\$2,177,488	\$2,177,488	\$0	\$2,177,488	\$762,121	\$1,415,367	\$75,692,419
41	41	41	Denali Borough	Generator Replacement, 3 Schools	\$1,260,050	\$1,260,050	\$0	\$1,260,050	\$252,010	\$1,008,040	\$76,700,459
42	42	42	Haines Borough	Haines High School Locker Room Renovation	\$934,926	\$934,926	\$0	\$934,926	\$327,224	\$607,702	\$77,308,161
43	43	43	Mat-Su Borough	Big Lake Elementary School Water System Replacement Ph 2	\$875,000	\$875,000	\$0	\$875,000	\$262,500	\$612,500	\$77,920,661
44	44	44	Hoonah City	Hoonah Central Boiler Replacement	\$283,613	\$283,613	\$0	\$283,613	\$85,084	\$198,529	\$78,119,190
45	45	45	Kuspuk	Jack Egnaty Sr K-12 School Roof Replacement, Sleetmute	\$1,435,049	\$1,445,382	\$0	\$1,445,382	\$28,908	\$1,416,474	\$79,535,664
46	46	46	Valdez City	Valdez High and Herman Hutchens Elementary Schools Domestic Water Piping Replacement	\$3,078,355	\$3,078,355	\$0	\$3,078,355	\$1,077,424	\$2,000,931	\$81,536,595
47	47	47	Denali Borough	Tri-Valley School Partial Roof Replacement	\$869,550	\$817,270	\$0	\$817,270	\$163,454	\$653,816	\$82,190,411
48	48	48	Yupit	Tuluksak K-12 School Fuel Tank Replacement	\$5,400,173	\$3,908,907	\$0	\$3,908,907	\$78,178	\$3,830,729	\$86,021,140
49	49	49	Fairbanks Borough	Lathrop High School Partial Roof Replacement	\$610,176	\$610,176	\$0	\$610,176	\$213,562	\$396,614	\$86,417,754
50	50	50	Kodiak Island Borough	Peterson Elementary School Roof Replacement	\$2,400,974	\$2,400,974	\$0	\$2,400,974	\$840,341	\$1,560,633	\$87,978,387
51	51	51	Haines Borough	Haines High School Roof Replacement	\$2,561,841	\$2,565,414	\$0	\$2,565,414	\$897,895	\$1,667,519	\$89,645,906
52	52	52	Anchorage	Bayshore Elementary School Boiler Replacement	\$1,192,000	\$1,192,000	\$0	\$1,192,000	\$417,200	\$774,800	\$90,420,706
53	53	53	Sitka Borough	Keet Gooshi Heen Elementary Covered PE Structure Renovation	\$503,823	\$503,823	\$0	\$503,823	\$176,338	\$327,485	\$90,748,191
54	54	54	Chatham	Klukwan K-12 School Roof Replacement	\$1,560,692	\$1,560,692	\$0	\$1,560,692	\$31,214	\$1,529,478	\$92,277,669
55	55	55	Fairbanks Borough	Anderson Elementary School Renovation	\$6,053,761	\$3,769,777	\$0	\$3,769,777	\$1,319,422	\$2,450,355	\$94,728,024
56	56	56	Bristol Bay Borough	Bristol Bay Elementary School and Gym Roof Replacement	\$2,942,126	\$2,942,126	\$0	\$2,942,126	\$1,029,744	\$1,912,382	\$96,640,406
57	57	57	Iditarod Area	Blackwell K-12 School HVAC Control Upgrades, Anvik	\$205,746	\$205,746	\$0	\$205,746	\$4,115	\$201,631	\$96,842,037
58	58	58	Nome City	Nome Elementary School Fire Alarm	\$464,903	\$464,903	\$0	\$464,903	\$139,471	\$325,432	\$97,167,469
59	59	59	Lower Kuskokwim	Bethel Regional High School Boardwalk Replacement	\$2,122,153	\$1,687,147	\$0	\$1,687,147	\$33,743	\$1,653,404	\$98,820,873
60	60	60	Anchorage	Bear Valley Elementary Domestic Water Replacement	\$3,109,235	\$2,595,307	\$0	\$2,595,307	\$908,357	\$1,686,950	\$100,507,823

**Alaska Department of Education and Early Development
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Jan 15 Rank	Dec 18 Rank	Nov 5 Rank	School District	Project Name	Amount Requested	Eligible Amount	Prior Funding	DEED Recommended Amount	Participating Share	State Share	Aggregate Amount
61	61	61	Kodiak Island Borough	Chiniak K-12 School Water Treatment Code Compliance and Upgrade	\$366,870	\$366,870	\$0	\$366,870	\$128,404	\$238,466	\$100,746,289
62	62	62	Lower Yukon	Hooper Bay K-12 School Emergency Lighting and Retrofit	\$237,242	\$237,242	\$0	\$237,242	\$4,745	\$232,497	\$100,978,786
63	63	63	Lower Yukon	Scammon Bay K-12 School Emergency Lighting and Retrofit	\$120,841	\$120,841	\$0	\$120,841	\$2,417	\$118,424	\$101,097,210
64	64	64	Valdez City	Valdez High School Window Replacement	\$522,837	\$522,837	\$0	\$522,837	\$182,993	\$339,844	\$101,437,054
65	65	65	Kake City	Exterior Upgrades - Main School Facilities	\$395,602	\$395,602	\$0	\$395,602	\$79,120	\$316,482	\$101,753,536
66	66	66	Nome City	Nome Beltz Jr/Sr High School Generator Replacement	\$910,710	\$910,710	\$0	\$910,710	\$273,213	\$637,497	\$102,391,033
67	67	67	Lower Yukon	LYSD Central Office Renovation	\$5,313,034	\$5,313,034	\$0	\$5,313,034	\$106,261	\$5,206,773	\$107,597,806
68	68	68	Saint Marys City	St. Mary's Campus Renewal and Repairs	\$1,207,223	\$201,603	\$0	\$201,603	\$20,160	\$181,443	\$107,779,249
69	69	69	Juneau Borough	Dzantik'I Heeni Middle School Roof Replacement	\$2,650,000	\$2,650,000	\$0	\$2,650,000	\$927,500	\$1,722,500	\$109,501,749
70	70	70	Anchorage	Mears Middle School Roof Replacement	\$7,818,250	\$6,309,376	\$0	\$6,309,376	\$2,208,282	\$4,101,094	\$113,602,843
71	71	71	Nenana City	Nenana K-12 School Fire Suppression System Replacement	\$1,577,044	\$1,577,044	\$0	\$1,577,044	\$78,852	\$1,498,192	\$115,101,035
72	72	72	Lower Kuskokwim	Gladys Jung Elementary School Heating Mains Replacement	\$1,409,057	\$1,168,750	\$0	\$1,168,750	\$23,375	\$1,145,375	\$116,246,410
73	73	73	Mat-Su Borough	Butte and Snowshoe Elementary Schools Water System Replacement	\$1,717,608	\$1,717,608	\$0	\$1,717,608	\$515,282	\$1,202,326	\$117,448,736
74	74	74	Yupit	Gym Floor Replacement, 3 Schools	\$299,204	\$299,204	\$0	\$299,204	\$5,984	\$293,220	\$117,741,956
75	75	75	Kake City	Kake High School Gym Floor and Bleacher Replacement	\$363,339	\$363,339	\$0	\$363,339	\$72,668	\$290,671	\$118,032,627
76	76	76	Valdez City	Valdez High and Herman Hutchens Elementary Schools Generator Replacement	\$819,249	\$819,249	\$0	\$819,249	\$286,737	\$532,512	\$118,565,139
77	77	77	Lower Kuskokwim	Akiuk Memorial K-12 School Renovation, Kasigluk-Akiuk	\$3,481,772	\$3,481,772	\$0	\$3,481,772	\$69,635	\$3,412,137	\$121,977,276
78	78	78	Lower Yukon	Scammon Bay K-12 School Siding Replacement	\$1,198,395	\$1,198,395	\$0	\$1,198,395	\$23,968	\$1,174,427	\$123,151,703
79	79	79	Fairbanks Borough	Tanana Middle School Classroom Upgrades	\$9,152,086	\$7,946,990	\$0	\$7,946,990	\$2,781,446	\$5,165,544	\$128,317,247
80	80	80	Kake City	Kake High School Plumbing Replacement	\$799,681	\$799,681	\$0	\$799,681	\$159,936	\$639,745	\$128,956,992
81	81	81	Iditarod Area	David-Louis Memorial K-12 School Roof Replacement, Grayling	\$2,978,280	\$2,978,280	\$0	\$2,978,280	\$59,566	\$2,918,714	\$131,875,706
82	82	82	Anchorage	West High School Utilidor Improvements	\$2,417,736	\$2,417,736	\$0	\$2,417,736	\$846,208	\$1,571,528	\$133,447,234
83	83	83	Kenai Peninsula Borough	Seward Middle School Exterior Repair	\$976,682	\$976,682	\$0	\$976,682	\$341,839	\$634,843	\$134,082,077
84	84	84	Southeast Island	Thorne Bay K-12 School Fire Suppression	\$542,676	\$542,676	\$0	\$542,676	\$10,854	\$531,822	\$134,613,899
85	85	85	Kodiak Island Borough	East Elementary School Special Electrical and Security	\$1,555,385	\$1,555,385	\$0	\$1,555,385	\$544,385	\$1,011,000	\$135,624,899
86	86	86	Fairbanks Borough	Administrative Center Exterior Renovation	\$4,302,874	\$2,274,780	\$0	\$2,274,780	\$796,173	\$1,478,607	\$137,103,506
87	87	87	Fairbanks Borough	Anne Wien Elementary School Renovation	\$7,215,628	\$4,934,172	\$0	\$4,934,172	\$1,726,960	\$3,207,212	\$140,310,718
88	88	88	Fairbanks Borough	Pearl Creek Elementary School Classroom Upgrades	\$5,636,950	\$4,670,376	\$0	\$4,670,376	\$1,634,632	\$3,035,744	\$143,346,462
89	89	89	Kodiak Island Borough	North Star Elementary School Siding Replacement	\$507,812	\$507,812	\$0	\$507,812	\$177,734	\$330,078	\$143,676,540

**Alaska Department of Education and Early Development
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Jan 15 Rank	Dec 18 Rank	Nov 5 Rank	School District	Project Name	Amount Requested	Eligible Amount	Prior Funding	DEED Recommended Amount	Participating Share	State Share	Aggregate Amount
90	90	90	Southeast Island	Thorne Bay K-12 School Flooring Replacement	\$72,372	\$72,372	\$0	\$72,372	\$1,447	\$70,925	\$143,747,465
91	91	91	Juneau Borough	Riverbend Elementary School Roof Replacement	\$2,800,000	\$2,800,000	\$0	\$2,800,000	\$980,000	\$1,820,000	\$145,567,465
92	92	92	Fairbanks Borough	Weller Elementary School Classroom Upgrades	\$5,963,708	\$4,821,800	\$0	\$4,821,800	\$1,687,630	\$3,134,170	\$148,701,635
93	93	93	Lower Yukon	Ignatius Beans K-12 School Marine Header Pipeline, Mountain Village	\$1,388,860	\$1,388,860	\$0	\$1,388,860	\$27,777	\$1,361,083	\$150,062,718
94	94	94	Mat-Su Borough	Elevator Code and Compliance Upgrades, 6 Sites	\$1,636,582	\$1,636,582	\$0	\$1,636,582	\$490,975	\$1,145,607	\$151,208,325
95	95	95	Southeast Island	Thorne Bay K-12 School Mechanical Control Upgrades	\$1,239,950	\$1,239,950	\$0	\$1,239,950	\$24,799	\$1,215,151	\$152,423,476
96	96	96	Mat-Su Borough	Structural Seismic Upgrades, 5 Sites	\$11,784,140	\$11,784,140	\$0	\$11,784,140	\$3,535,242	\$8,248,898	\$160,672,374
97	97	97	Yupitit	Mechanical System Improvements, 3 Schools	\$811,120	\$811,120	\$0	\$811,120	\$16,222	\$794,898	\$161,467,272
98	98	98	Mat-Su Borough	Talkeetna Elementary School Roof Replacement	\$1,712,769	\$1,712,769	\$0	\$1,712,769	\$513,831	\$1,198,938	\$162,666,210
99	99	99	Mat-Su Borough	Colony and Wasilla Middle Schools Roof Replacement	\$4,195,070	\$4,195,070	\$0	\$4,195,070	\$1,258,521	\$2,936,549	\$165,602,759
100	100	100	Mat-Su Borough	HVAC Control Upgrades, 5 Sites	\$10,167,099	\$10,147,491	\$0	\$10,147,491	\$3,044,247	\$7,103,244	\$172,706,003
101	101	101	Mat-Su Borough	Ceiling and Sprinkler Seismic Mitigation, 5 Sites	\$3,651,237	\$3,651,237	\$0	\$3,651,237	\$1,095,371	\$2,555,866	\$175,261,869
102	102	102	Lower Yukon	Kotlik and Pilot Station K-12 Schools Renewal and Repair	\$4,035,240	\$4,035,240	\$0	\$4,035,240	\$80,705	\$3,954,535	\$179,216,404
103	103	103	Southeast Island	Port Alexander K-12 School Domestic Water Pipe Replacement	\$91,332	\$91,332	\$0	\$91,332	\$1,827	\$89,505	\$179,305,909
104	104	104	Yupitit	Akiachak K-12 School Window Replacement	\$119,128	\$119,128	\$0	\$119,128	\$2,383	\$116,745	\$179,422,654
105	105	105	Lower Yukon	Sheldon Point K-12 School Exterior Repairs, Nunam Iqua	\$1,844,996	\$1,844,996	\$0	\$1,844,996	\$36,900	\$1,808,096	\$181,230,750
106	106	106	Southeast Island	Thorne Bay K-12 School Underground Storage Tank Replacement	\$433,860	\$433,860	\$0	\$433,860	\$8,677	\$425,183	\$181,655,933
107	107	107	Southeast Island	Port Alexander and Thorne Bay K-12 Schools Roof Replacement	\$3,925,991	\$3,925,991	\$0	\$3,925,991	\$78,520	\$3,847,471	\$185,503,404
108	108	108	Lower Yukon	Security Access Upgrades, 6 Sites	\$1,818,377	\$1,818,377	\$0	\$1,818,377	\$36,368	\$1,782,009	\$187,285,413
Totals:					\$262,704,849	\$243,061,522	\$0	\$243,061,521	\$55,776,108	\$187,285,413	

**Alaska Department of Education and Early Development
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Total Points - Formula Driven and Evaluative
Final List**

Jan 15 Rank	Dec 18 Rank	Nov 5 Rank	School District	Project Name	School Dist Rank	Weight Avg Age	Prev. 14.11 Fund	Plan and Design	Prior Design Use	Avg Expend Maint	Un-Housed Today	Un-Housed 7 Years	Type of Space	Cond Survey	O&M Rpts	Maint Mgt	Energy Mgt	Cusd Pgm	Maint Train	Capital Plan	Emergency	Life/Safety and Code Conditions	Exist-ing Space	Cost Esti-mate	Proj vs Oper Cost	Altern at-ives	Options	Total Project Points
1	1	1	Galena City	Galena Interior Learning Academy Composite Building Renovation	30.00	21.25	0.00	25.00	0.00	5.00	0.00	0.00	0.00	10.00	25.00	3.67	3.33	3.33	2.67	3.33	0.00	48.30	5.00	25.00	9.33	0.00	11.67	231.88
2	2	2	Craig City	Craig Middle School Rehabilitation	30.00	28.56	0.00	25.00	0.00	2.15	0.00	0.00	0.00	10.00	25.00	3.00	3.00	3.33	2.33	3.00	0.00	39.33	3.33	23.33	3.67	0.00	9.33	214.37
3	3	3	Anchorage	Eagle River Elementary School Improvements	27.00	30.00	0.00	25.00	0.00	4.82	0.00	0.00	0.00	10.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	28.40	3.00	24.00	2.00	0.00	5.67	210.22
4	4	4	Kake City	Kake Schools Heating Upgrades	30.00	29.39	0.00	25.00	0.00	1.63	0.00	0.00	0.00	8.00	30.00	2.67	3.67	3.00	3.33	3.00	0.00	17.33	3.33	28.33	7.00	0.00	10.00	205.69
5	5	5	Anchorage	West High School Roof Replacement	18.00	30.00	0.00	25.00	0.00	4.78	0.00	0.00	0.00	8.00	30.00	4.00	4.67	3.67	3.33	5.00	0.00	27.67	1.67	27.00	3.67	0.00	7.33	203.78
6	6	6	Denali Borough	Anderson K-12 School Partial Roof Replacement	30.00	30.00	0.00	25.00	0.00	2.93	0.00	0.00	0.00	10.00	30.00	3.33	4.00	3.33	3.33	3.33	0.00	6.00	0.00	27.00	6.33	0.00	15.67	200.27
7	7	7	Chugach	Chenega Bay K-12 School Renovation	30.00	13.88	0.00	20.00	0.00	1.42	0.00	0.00	0.00	10.00	25.00	3.00	3.00	3.33	2.67	2.67	0.00	50.00	1.33	18.33	2.00	0.00	13.33	199.96
8	8	8	Chugach	Tatitlek K-12 School Renovation	27.00	22.12	0.00	20.00	0.00	1.42	0.00	0.00	0.00	10.00	25.00	3.00	3.00	3.33	2.67	2.67	5.00	41.42	0.00	19.33	0.00	0.00	13.33	199.29
9	9	9	Juneau Borough	Sayéik: Gastineau Community School Partial Roof Replacement	30.00	30.00	0.00	25.00	0.00	2.33	0.00	0.00	0.00	5.00	30.00	3.00	2.67	3.67	3.33	4.00	0.00	21.00	0.00	20.67	7.33	0.00	7.00	194.99
10	10	10	Fairbanks Borough	Administrative Center Air Conditioning and Ventilation Replacement	30.00	10.25	0.00	25.00	0.00	3.62	0.00	0.00	0.00	8.00	30.00	4.00	4.33	5.00	3.33	3.33	5.00	10.68	0.00	27.33	7.33	0.00	16.00	193.22
11	11	11	Anchorage	Service High School Health and Safety Improvements	6.00	30.00	0.00	25.00	0.00	4.78	0.00	0.00	0.00	5.00	30.00	4.00	4.33	3.67	3.33	5.00	0.00	37.51	2.00	24.00	2.33	0.00	3.33	190.29
12	12	12	Anchorage	Birchwood Elementary School Roof Replacement	9.00	30.00	0.00	25.00	0.00	4.78	0.00	0.00	0.00	8.00	30.00	4.00	4.33	3.67	3.33	5.00	0.00	19.46	2.00	26.33	3.67	0.00	6.67	185.24
13	13	13	Aleutians East Borou	Sandpoint K-12 School Major Maintenance	30.00	23.82	0.00	10.00	0.00	1.51	0.00	0.00	0.00	10.00	30.00	3.00	2.67	2.67	2.67	2.67	0.00	38.00	0.67	14.67	3.33	0.00	8.67	184.33
14	14	14	Lower Yukon	Sheldon Point K-12 School Foundation Cooling and Repairs, Nunam Iqua	30.00	0.50	0.00	25.00	0.00	2.11	0.00	0.00	0.00	8.00	25.00	3.00	1.33	3.00	2.33	2.67	11.67	29.00	4.00	27.33	0.33	0.00	7.67	182.94
15	15	15	Anchorage	East High School Gym Improvements	0.00	30.00	0.00	25.00	0.00	4.82	0.00	0.00	0.00	10.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	29.16	1.00	26.33	2.33	0.00	2.67	181.65
16	16	16	Nenana City	Nenana K-12 School Flooring and Asbestos Abatement	30.00	30.00	0.00	25.00	0.00	2.97	0.00	0.00	0.00	5.00	30.00	3.67	3.00	2.67	2.00	3.67	0.00	7.00	3.00	24.67	2.33	0.00	6.67	181.64
17	17	17	Iditarod Area	David-Louis Memorial K-12 School HVAC Control Upgrades, Grayling	27.00	16.00	0.00	25.00	0.00	2.53	0.00	0.00	0.00	8.00	25.00	2.00	2.00	2.33	2.33	2.33	5.00	20.71	0.00	28.00	5.67	0.00	7.67	181.58
18	18	18	Iditarod Area	Blackwell K-12 School Fire Alarm Upgrades, Anvik	30.00	30.00	0.00	10.00	0.00	2.66	0.00	0.00	0.00	8.00	25.00	2.00	2.00	2.33	1.67	2.67	10.00	18.00	0.00	28.00	2.67	0.00	5.33	180.33
19	19	19	Lower Yukon	Hooper Bay K-12 School Exterior Repairs	24.00	2.00	0.00	25.00	0.00	2.18	0.00	0.00	0.00	8.00	30.00	3.67	3.33	3.00	3.67	3.00	5.00	20.79	3.33	27.33	4.00	0.00	12.00	180.30
20	20	20	Yukon-Koyukuk	YKSD District Office Roof Replacement	27.00	30.00	0.00	25.00	0.00	2.82	0.00	0.00	0.00	0.00	25.00	3.67	2.67	3.00	3.33	3.00	0.00	7.60	1.00	28.67	5.00	0.00	9.67	177.42
21	21	21	Ketchikan Borough	Ketchikan High School Security Upgrades	30.00	30.00	0.00	25.00	0.00	3.39	0.00	0.00	0.00	0.00	25.00	3.00	3.00	2.33	2.33	3.33	0.00	0.00	0.00	24.00	12.00	0.00	7.33	170.73
22	22	22	Yukon-Koyukuk	Ella B. Vernetti K-12 School Boiler Replacement, Koyukuk	24.00	21.28	0.00	20.00	0.00	2.82	0.00	0.00	0.00	8.00	25.00	3.67	2.67	3.00	3.33	3.00	0.00	19.88	0.00	18.33	4.33	0.00	11.33	170.65
23	23	23	Lower Kuskokwim	Qugcuun Memorial K-12 School Renovation, Oscarville	3.00	26.93	0.00	10.00	0.00	3.20	0.00	0.00	0.00	10.00	30.00	2.67	2.33	2.67	2.33	3.00	0.00	50.00	1.00	14.00	1.67	0.00	5.33	168.13
24	24	24	Lower Kuskokwim	Akula Eliitnavik K-12 School Renovation, Kasiqluk-Akula	15.00	23.26	0.00	10.00	0.00	3.20	0.00	0.00	0.00	10.00	30.00	2.67	2.33	2.67	2.33	3.00	1.67	33.77	1.67	15.67	2.67	0.00	8.00	167.90
25	25	25	Northwest Arctic Borou	Buckland K-12 School HVAC Renewal and Upgrades	30.00	8.15	0.00	25.00	0.00	2.93	0.00	0.00	0.00	5.00	30.00	2.67	2.33	3.00	1.67	3.33	0.00	10.00	1.00	23.00	10.33	0.00	9.00	167.41
26	26	26	Aleutians East Borou	Sandpoint K-12 School Pool Major Maintenance	27.00	22.07	0.00	25.00	0.00	1.52	0.00	0.00	0.00	0.00	30.00	2.67	3.00	2.00	2.67	2.33	0.00	4.00	0.33	29.00	7.67	0.00	6.67	165.92
27	27	27	Nome City	Anvil City Charter School Restroom Renovation	27.00	30.00	0.00	25.00	0.00	1.43	0.00	0.00	0.00	0.00	25.00	3.00	2.33	2.33	2.00	3.00	0.00	4.00	4.33	27.33	2.00	0.00	6.67	165.43

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28	28	28	Nome City	Nome Beltz Jr/Sr High School Boiler Replacement	30.00	30.00	0.00	25.00	0.00	1.43	0.00	0.00	0.00	0.00	25.00	3.00	2.33	2.33	2.00	3.00	0.00	7.36	0.00	24.67	2.67	0.00	6.33	165.13
29	29	29	Anchorage	Inlet View Elementary School Domestic Water System Improvements	0.00	30.00	0.00	25.00	0.00	5.00	0.00	0.00	0.00	10.00	25.00	4.33	4.00	4.00	3.00	5.00	0.00	15.00	0.00	26.67	0.00	0.00	7.33	164.33
30	30	30	Fairbanks Borough	Ben Eielson Jr/Sr High School Roof Replacement	24.00	30.00	0.00	10.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	8.00	0.00	27.33	6.33	0.00	4.67	163.96
31	31	31	Fairbanks Borough	Woodriver Elementary School Roof Replacement	21.00	30.00	0.00	10.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	9.90	0.00	27.33	6.00	0.00	4.67	162.52
32	32	32	Anchorage	Ptarmigan Elementary School Roof Replacement	0.00	21.97	0.00	25.00	0.00	4.78	0.00	0.00	0.00	8.00	30.00	4.00	4.33	3.67	3.33	5.00	0.00	14.83	1.67	26.67	3.00	0.00	5.67	161.92
33	33	33	Nenana City	Nenana K-12 School Boiler Replacement	27.00	30.00	0.00	20.00	0.00	2.97	0.00	0.00	0.00	3.00	30.00	3.67	3.00	2.67	2.00	3.67	0.00	4.00	0.00	20.00	3.00	0.00	6.33	161.30
34	34	34	Lower Yukon	Marshall K-12 School Tank Farm Emergency Repair	27.00	0.00	0.00	20.00	0.00	2.18	0.00	0.00	0.00	10.00	30.00	3.67	3.33	3.00	3.67	3.00	6.00	9.60	0.00	28.00	4.33	0.00	7.00	160.78
35	35	35	Anchorage	Stellar Secondary School Fire Alarm	0.00	30.00	0.00	20.00	0.00	4.78	0.00	0.00	0.00	0.00	30.00	4.00	4.33	3.67	3.33	5.00	0.00	18.04	0.67	27.00	4.00	0.00	5.00	159.82
36	36	36	Anchorage	Nunaka Valley Elementary School Roof Replacement	3.00	30.00	0.00	25.00	0.00	5.00	0.00	0.00	0.00	8.00	25.00	4.33	4.00	4.00	3.00	5.00	0.00	8.91	0.00	25.00	2.67	0.00	6.67	159.58
37	37	37	Nome City	Nome Schools DDC Control Upgrades	21.00	30.00	0.00	25.00	0.00	1.43	0.00	0.00	0.00	0.00	25.00	3.00	2.33	2.33	2.00	3.00	0.00	3.00	1.00	19.00	16.00	0.00	5.33	159.43
38	38	38	Chatham	Fire Alarm Upgrades, 3 Sites	27.00	30.00	0.00	10.00	0.00	1.10	0.00	0.00	0.00	0.00	30.00	3.00	3.00	2.67	3.00	2.67	5.00	7.00	0.00	24.67	0.67	0.00	9.33	159.10
39	39	39	Yupit	Tuluksak K-12 School Generator Refurbishment	30.00	2.50	0.00	25.00	0.00	1.65	0.00	0.00	0.00	0.00	30.00	3.33	2.67	2.00	2.67	2.67	6.33	13.39	0.00	24.00	3.00	0.00	9.67	158.87
40	40	40	Anchorage	Northwood Elementary School Partial Roof Replacement	0.00	30.00	0.00	25.00	0.00	5.00	0.00	0.00	0.00	8.00	25.00	4.33	4.00	4.00	3.00	5.00	0.00	11.00	0.00	24.67	2.67	0.00	7.00	158.67
41	41	41	Denali Borough	Generator Replacement, 3 Schools	27.00	30.00	0.00	10.00	0.00	2.93	0.00	0.00	0.00	10.00	30.00	3.33	4.00	3.33	3.33	3.33	0.00	8.82	0.00	14.67	1.33	0.00	6.00	158.09
42	42	42	Haines Borough	Haines High School Locker Room Renovation	27.00	26.50	0.00	10.00	0.00	1.28	0.00	0.00	0.00	3.00	30.00	2.67	2.67	3.00	2.00	2.67	0.00	21.84	0.00	12.67	3.67	0.00	8.67	157.62
43	43	43	Mat-Su Borough	Big Lake Elementary School Water System Replacement Ph 2	30.00	30.00	0.00	25.00	0.00	2.25	0.00	0.00	0.00	10.00	10.00	3.33	2.33	2.33	0.33	3.33	0.00	12.48	2.33	16.33	1.00	0.00	3.67	154.73
44	44	44	Hoonah City	Hoonah Central Boiler Replacement	30.00	30.00	0.00	10.00	0.00	1.72	0.00	0.00	0.00	8.00	30.00	3.00	3.67	3.00	2.33	2.00	0.00	0.00	0.00	13.67	7.67	0.00	9.67	154.72
45	45	45	Kuspuk	Jack Egnaty Sr K-12 School Roof Replacement, Sleetmute	30.00	30.00	0.00	0.00	0.00	1.99	0.00	0.00	0.00	0.00	30.00	3.00	2.67	2.67	2.33	2.00	8.67	12.92	1.00	14.67	4.33	0.00	8.33	154.58
46	46	46	Valdez City	Valdez High and Herman Hutchens Elementary Schools Domestic Water Piping Replacement	30.00	30.00	0.00	10.00	0.00	1.62	0.00	0.00	0.00	10.00	20.00	2.67	3.00	3.00	3.00	3.00	5.00	10.00	0.00	14.33	2.33	0.00	6.00	153.95
47	47	47	Denali Borough	Tri-Valley School Partial Roof Replacement	24.00	17.75	0.00	10.00	0.00	2.93	0.00	0.00	0.00	10.00	30.00	3.33	4.00	3.33	3.33	3.33	0.00	14.95	2.33	14.00	3.33	0.00	7.00	153.63
48	48	48	Yupit	Tuluksak K-12 School Fuel Tank Replacement	18.00	30.00	0.00	10.00	0.00	1.69	0.00	0.00	0.00	8.00	30.00	3.33	2.67	3.00	3.00	2.67	6.00	10.00	0.00	14.00	2.67	0.00	7.67	152.69
49	49	49	Fairbanks Borough	Lathrop High School Partial Roof Replacement	27.00	19.50	0.00	10.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	7.44	0.00	27.33	0.00	0.00	6.00	150.90
50	50	50	Kodiak Island Borough	Peterson Elementary School Roof Replacement	30.00	30.00	0.00	10.00	0.00	2.83	0.00	0.00	0.00	8.00	25.00	3.00	2.67	3.33	2.67	3.67	0.00	7.18	1.33	14.33	2.33	0.00	4.00	150.34
51	51	51	Haines Borough	Haines High School Roof Replacement	30.00	30.00	0.00	0.00	0.00	1.28	0.00	0.00	0.00	0.00	30.00	2.67	2.67	3.00	2.00	2.67	5.00	15.00	0.00	14.00	3.33	0.00	7.67	149.28
52	52	52	Anchorage	Bayshore Elementary School Boiler Replacement	0.00	29.15	0.00	20.00	0.00	4.82	0.00	0.00	0.00	0.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	12.50	1.00	25.67	1.67	0.00	3.67	148.81
53	53	53	Sitka Borough	Keet Gooshi Heen Elementary Covered PE Structure Renovation	30.00	16.00	0.00	10.00	0.00	1.02	0.00	0.00	0.00	8.00	30.00	3.67	2.00	1.67	1.67	3.00	0.00	10.40	1.33	17.67	2.67	0.00	9.33	148.42

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54	54	54	Chatham	Klukwan K-12 School Roof Replacement	30.00	23.00	0.00	0.00	0.00	1.18	0.00	0.00	0.00	3.00	30.00	2.67	2.67	2.00	2.33	2.67	5.00	16.00	2.00	14.67	4.67	0.00	6.00	147.85
55	55	55	Fairbanks Borough	Anderson Elementary School Renovation	18.00	30.00	0.00	0.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	21.87	0.00	14.33	5.33	0.00	4.67	147.83
56	56	56	Bristol Bay Borough	Bristol Bay Elementary School and Gym Roof Replacement	30.00	18.87	0.00	10.00	0.00	1.00	0.00	0.00	0.00	8.00	25.00	3.00	2.67	2.67	2.67	3.67	0.00	14.00	0.33	16.33	2.33	0.00	7.00	147.54
57	57	57	Iditarod Area	Blackwell K-12 School HVAC Control Upgrades, Anvik	21.00	30.00	0.00	10.00	0.00	2.53	0.00	0.00	0.00	8.00	25.00	2.00	2.00	2.33	2.33	2.33	0.00	15.00	2.33	13.67	2.67	0.00	6.00	147.20
58	58	58	Nome City	Nome Elementary School Fire Alarm Replacement	24.00	17.75	0.00	25.00	0.00	1.43	0.00	0.00	0.00	0.00	25.00	3.00	2.33	2.33	2.00	3.00	5.00	6.33	0.00	22.33	1.33	0.00	6.00	146.85
59	59	59	Lower Kuskokwim	Bethel Regional High School Boardwalk Replacement	9.00	30.00	0.00	10.00	0.00	3.46	0.00	0.00	0.00	10.00	30.00	4.00	2.67	3.33	3.00	3.33	0.00	14.93	0.00	15.00	1.67	0.00	6.33	146.72
60	60	60	Anchorage	Bear Valley Elementary Domestic Water Replacement	0.00	23.00	0.00	20.00	0.00	4.82	0.00	0.00	0.00	0.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	15.95	0.00	26.33	1.67	0.00	2.67	144.77
61	61	61	Kodiak Island Borough	Chiniak K-12 School Water Treatment Code Compliance and Upgrade	27.00	30.00	0.00	10.00	0.00	2.83	0.00	0.00	0.00	0.00	25.00	3.00	2.67	3.33	2.67	3.67	0.00	16.00	0.00	13.33	1.00	0.00	2.67	143.16
62	62	62	Lower Yukon	Hooper Bay K-12 School Emergency Lighting and Retrofit	21.00	1.50	0.00	25.00	0.00	2.11	0.00	0.00	0.00	5.00	25.00	3.00	1.33	3.00	2.33	2.67	0.00	3.02	1.33	28.67	10.67	0.00	7.33	142.97
63	63	63	Lower Yukon	Scammon Bay K-12 School Emergency Lighting and Retrofit	18.00	2.00	0.00	25.00	0.00	2.11	0.00	0.00	0.00	5.00	25.00	3.00	1.33	3.00	2.33	2.67	0.00	3.02	1.33	28.67	10.33	0.00	7.33	140.13
64	64	64	Valdez City	Valdez High School Window Replacement	24.00	30.00	0.00	10.00	0.00	1.62	0.00	0.00	0.00	3.00	20.00	2.67	3.00	3.00	3.00	3.00	0.00	12.00	0.33	15.33	3.00	0.00	5.33	139.29
65	65	65	Kake City	Exterior Upgrades - Main School Facilities	24.00	30.00	0.00	0.00	0.00	1.64	0.00	0.00	0.00	0.00	30.00	3.00	3.33	3.33	3.00	3.00	0.00	13.33	0.00	12.67	2.33	0.00	7.67	137.31
66	66	66	Nome City	Nome Beltz Jr/Sr High School Generator Replacement	18.00	30.00	0.00	10.00	0.00	1.58	0.00	0.00	0.00	0.00	20.00	2.00	2.33	2.00	1.33	3.00	0.00	27.00	0.00	14.33	0.00	0.00	5.00	136.58
67	67	67	Lower Yukon	LYSD Central Office Renovation	9.00	26.19	0.00	0.00	0.00	2.11	0.00	0.00	0.00	0.00	25.00	3.00	1.33	3.00	2.33	2.67	0.00	35.85	0.67	14.33	5.00	0.00	6.00	136.49
68	68	68	Saint Marys City	St. Mary's Campus Renewal and Repairs	30.00	30.00	0.00	10.00	0.00	1.23	0.00	0.00	0.00	0.00	30.00	3.00	3.00	3.33	3.33	3.00	0.00	0.00	0.33	13.00	0.67	0.00	4.67	135.56
69	69	69	Juneau Borough	Dzantik'i Heeni Middle School Roof Replacement	27.00	9.50	0.00	10.00	0.00	2.33	0.00	0.00	0.00	8.00	30.00	2.67	2.67	3.67	3.33	4.00	0.00	8.00	0.00	15.33	3.00	0.00	5.33	134.83
70	70	70	Anchorage	Mears Middle School Roof Replacement	0.00	21.25	0.00	10.00	0.00	4.82	0.00	0.00	0.00	0.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	9.80	2.00	26.67	2.67	0.00	6.33	133.87
71	71	71	Nenana City	Nenana K-12 School Fire Suppression System Replacement	24.00	26.27	0.00	0.00	0.00	2.97	0.00	0.00	0.00	0.00	30.00	3.67	3.00	2.67	2.00	3.67	10.00	2.00	0.00	14.00	1.67	0.00	6.33	132.24
72	72	72	Lower Kuskokwim	Gladys Jung Elementary School Heating Mains Replacement	27.00	1.00	0.00	0.00	0.00	3.46	0.00	0.00	0.00	0.00	30.00	4.00	2.67	3.33	3.00	3.33	5.00	12.80	0.00	27.67	2.00	0.00	6.33	131.59
73	73	73	Mat-Su Borough	Butte and Snowshoe Elementary Schools Water System Replacement	27.00	30.00	0.00	10.00	0.00	2.25	0.00	0.00	0.00	8.00	10.00	3.33	2.33	2.33	0.33	3.33	0.00	13.28	2.33	12.67	1.00	0.00	3.33	131.53
74	74	74	Yupit	Gym Floor Replacement, 3 Schools	24.00	2.19	0.00	20.00	0.00	1.65	0.00	0.00	0.00	0.00	30.00	3.33	2.67	2.00	2.67	2.67	0.00	4.00	0.00	22.00	0.67	0.00	12.67	130.51
75	75	75	Kake City	Kake High School Gym Floor and Bleacher Replacement	21.00	30.00	0.00	0.00	0.00	1.63	0.00	0.00	0.00	0.00	30.00	2.67	3.67	3.00	3.33	3.00	0.00	10.47	0.00	13.33	0.67	0.00	7.00	129.77
76	76	76	Valdez City	Valdez High and Herman Hutchens Elementary Schools Generator Replacement	27.00	29.99	0.00	10.00	0.00	1.62	0.00	0.00	0.00	5.00	20.00	2.67	3.00	3.00	3.00	3.00	0.00	4.00	0.00	11.67	1.00	0.00	4.33	129.28
77	77	77	Lower Kuskokwim	Akiuk Memorial K-12 School Renovation, Kasiqluk-Akiuk	12.00	10.00	0.00	10.00	0.00	3.20	0.00	0.00	0.00	10.00	30.00	2.67	2.33	2.67	2.33	3.00	0.00	17.48	1.67	14.33	2.33	0.00	5.00	129.01
78	78	78	Lower Yukon	Scammon Bay K-12 School Siding Replacement	12.00	2.50	0.00	25.00	0.00	2.18	0.00	0.00	0.00	8.00	30.00	3.67	3.33	3.00	3.67	3.00	0.00	1.90	0.00	16.67	3.33	0.00	9.67	127.91

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Final List**

Jan 15 Rank	Dec 18 Rank	Nov 5 Rank	School District	Project Name	School Dist Rank	Weight Avg Age	Prev. 14.11 Fund	Plan and Design	Prior Design Use	Avg Expend Maint	Un-Housed Today	Un-Housed 7 Years	Type of Space	Cond Survey	O&M Rpts	Maint Mgt	Energy Mgt	Cusd Pgm	Maint Train	Capital Plan	Emergency	Life/Safety and Code Conditions	Exist-ing Space	Cost Esti-mate	Proj vs Oper Cost	Altern at-ives	Options	Total Project Points
79	79	79	Fairbanks Borough	Tanana Middle School Classroom Upgrades	9.00	30.00	0.00	0.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	16.59	0.00	13.67	0.00	0.00	3.33	126.21
80	80	80	Kake City	Kake High School Plumbing Replacement	27.00	30.00	0.00	0.00	0.00	1.63	0.00	0.00	0.00	0.00	30.00	2.67	3.67	3.00	3.33	3.00	0.00	0.00	0.33	14.00	1.00	0.00	5.67	125.30
81	81	81	Iditarod Area	David-Louis Memorial K-12 School Roof Replacement, Grayling	24.00	16.00	0.00	10.00	0.00	2.53	0.00	0.00	0.00	0.00	25.00	2.00	2.00	2.33	2.33	2.33	0.00	10.95	0.00	13.33	3.33	0.00	7.67	123.81
82	82	82	Anchorage	West High School Utilidor Improvements	0.00	30.00	0.00	10.00	0.00	4.82	0.00	0.00	0.00	0.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	10.56	0.33	12.33	1.33	0.00	2.67	122.38
83	83	83	Kenai Peninsula Borough	Seward Middle School Exterior Repair	27.00	2.50	0.00	10.00	0.00	3.03	0.00	0.00	0.00	8.00	30.00	3.67	3.00	3.67	2.67	3.67	0.00	8.00	0.00	12.67	1.00	0.00	3.00	121.86
84	84	84	Southeast Island	Thorne Bay K-12 School Fire Suppression System	30.00	11.42	0.00	10.00	0.00	3.01	0.00	0.00	0.00	8.00	5.00	2.00	2.67	2.00	2.33	2.67	9.33	5.00	0.00	14.33	4.00	0.00	9.00	120.76
85	85	85	Kodiak Island Borough	East Elementary School Special Electrical and Security	18.00	30.00	0.00	10.00	0.00	2.83	0.00	0.00	0.00	0.00	25.00	3.00	2.67	3.33	2.67	3.67	0.00	1.06	1.00	14.33	0.00	0.00	1.67	119.22
86	86	86	Fairbanks Borough	Administrative Center Exterior Renovation	15.00	10.25	0.00	0.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	15.48	0.00	14.00	5.67	0.00	4.67	118.69
87	87	87	Fairbanks Borough	Anne Wien Elementary School Renovation	12.00	8.75	0.00	0.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	19.32	0.00	14.00	4.67	0.00	4.67	117.03
88	88	88	Fairbanks Borough	Pearl Creek Elementary School Classroom Upgrades	6.00	24.75	0.00	0.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	14.07	0.00	13.67	0.00	0.00	3.00	115.11
89	89	89	Kodiak Island Borough	North Star Elementary School Siding Replacement	24.00	9.50	0.00	10.00	0.00	2.83	0.00	0.00	0.00	0.00	25.00	3.00	2.67	3.33	2.67	3.67	0.00	12.00	0.00	14.33	0.00	0.00	1.33	114.33
90	90	90	Southeast Island	Thorne Bay K-12 School Flooring Replacement	15.00	11.42	0.00	25.00	0.00	3.01	0.00	0.00	0.00	0.00	5.00	2.00	2.67	2.00	2.33	2.67	0.00	4.00	0.33	28.67	2.33	0.00	7.67	114.10
91	91	91	Juneau Borough	Riverbend Elementary School Roof Replacement	24.00	7.25	0.00	0.00	0.00	2.33	0.00	0.00	0.00	3.00	30.00	3.00	2.67	3.67	3.33	4.00	0.00	6.56	0.00	15.00	1.67	0.00	7.00	113.47
92	92	92	Fairbanks Borough	Weller Elementary School Classroom Upgrades	3.00	24.75	0.00	0.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	15.12	0.00	13.67	0.00	0.00	3.00	113.16
93	93	93	Lower Yukon	Ignatius Beans K-12 School Marine Header Pipeline, Mountain Village	15.00	7.36	0.00	20.00	0.00	2.11	0.00	0.00	0.00	8.00	25.00	3.00	1.33	3.00	2.33	2.67	0.00	2.00	0.00	13.67	0.00	0.00	6.33	111.80
94	94	94	Mat-Su Borough	Elevator Code and Compliance Upgrades, 6 Sites	18.00	26.50	0.00	10.00	0.00	2.25	0.00	0.00	0.00	10.00	10.00	3.33	2.33	2.33	0.33	3.33	0.00	4.00	0.00	13.33	1.00	0.00	3.00	109.75
95	95	95	Southeast Island	Thorne Bay K-12 School Mechanical Control Upgrades	24.00	11.42	0.00	10.00	0.00	3.01	0.00	0.00	0.00	8.00	5.00	2.00	2.67	2.00	2.33	2.67	1.67	8.00	0.00	14.67	6.67	0.00	5.33	109.43
96	96	96	Mat-Su Borough	Structural Seismic Upgrades, 5 Sites	15.00	30.00	0.00	10.00	0.00	2.25	0.00	0.00	0.00	10.00	10.00	3.33	2.33	2.33	0.33	3.33	0.00	6.00	0.33	10.67	1.00	0.00	2.33	109.25
97	97	97	Yupit	Mechanical System Improvements, 3 Schools	27.00	2.69	0.00	0.00	0.00	1.69	0.00	0.00	0.00	0.00	30.00	3.33	2.67	3.33	2.67	2.67	0.00	3.00	0.00	14.33	7.67	0.00	7.33	108.37
98	98	98	Mat-Su Borough	Talkeetna Elementary School Roof Replacement	24.00	21.20	0.00	10.00	0.00	2.35	0.00	0.00	0.00	8.00	5.00	2.67	2.00	2.33	0.00	3.00	0.00	6.00	3.33	14.00	2.00	0.00	1.67	107.55
99	99	99	Mat-Su Borough	Colony and Wasilla Middle Schools Roof Replacement	21.00	20.90	0.00	10.00	0.00	2.35	0.00	0.00	0.00	8.00	5.00	2.67	2.00	2.33	0.00	3.00	0.00	6.00	1.67	13.67	2.00	0.00	1.67	102.25
100	100	100	Mat-Su Borough	HVAC Control Upgrades, 5 Sites	9.00	23.45	0.00	10.00	0.00	2.25	0.00	0.00	0.00	0.00	10.00	3.33	2.33	2.33	0.33	3.33	0.00	5.60	2.33	13.33	3.67	0.00	3.67	94.97
101	101	101	Mat-Su Borough	Ceiling and Sprinkler Seismic Mitigation, 5 Sites	12.00	29.99	0.00	10.00	0.00	2.25	0.00	0.00	0.00	0.00	10.00	3.33	2.33	2.33	0.33	3.33	0.00	3.00	0.00	11.67	1.00	0.00	2.67	94.25
102	102	102	Lower Yukon	Kotlik and Pilot Station K-12 Schools Renewal and Repair	0.00	4.00	0.00	10.00	0.00	2.18	0.00	0.00	0.00	5.00	30.00	3.67	3.33	3.00	3.67	3.00	0.00	5.25	0.00	13.00	2.67	0.00	5.00	93.76
103	103	103	Southeast Island	Port Alexander K-12 School Domestic Water Pipe Replacement	12.00	22.88	0.00	0.00	0.00	3.01	0.00	0.00	0.00	3.00	5.00	2.00	2.67	2.00	2.33	2.67	5.33	6.98	0.00	13.00	2.67	0.00	6.00	91.54
104	104	104	Yupit	Akiachak K-12 School Window Replacement	21.00	2.19	0.00	0.00	0.00	1.65	0.00	0.00	0.00	0.00	30.00	3.33	2.67	2.00	2.67	2.67	0.00	0.00	0.00	12.33	1.33	0.00	8.33	90.17

**Alaska Department of Education and Early Development
 FY2022 Capital Improvement Projects
 Major Maintenance Grant Fund
 Total Points - Formula Driven and Evaluative
 Final List**

Jan 15 Rank	Dec 18 Rank	Nov 5 Rank	School District	Project Name	School Dist Rank	Weight Avg Age	Prev. 14.11 Fund	Plan and Design	Prior Design Use	Avg Expend Maint	Un-Housed Today	Un-Housed 7 Years	Type of Space	Cond Survey	O&M Rpts	Maint Mgt	Energy Mgt	Cusd Pgm	Maint Train	Capital Plan	Emergency	Life/Safety and Code Conditions	Existing Space	Cost Estimate	Proj vs Oper Cost	Altern at-ives	Options	Total Project Points
105	105	105	Lower Yukon	Sheldon Point K-12 School Exterior Repairs, Nunam Iqua	6.00	1.00	0.00	0.00	0.00	2.18	0.00	0.00	0.00	5.00	30.00	3.67	3.33	3.00	3.67	3.00	0.00	0.62	0.00	13.00	3.33	0.00	7.67	85.46
106	106	106	Southeast Island	Thorne Bay K-12 School Underground Storage Tank Replacement	21.00	11.42	0.00	10.00	0.00	3.01	0.00	0.00	0.00	0.00	5.00	2.00	2.67	2.00	2.33	2.67	0.00	2.00	0.00	14.67	0.00	0.00	4.67	83.43
107	107	107	Southeast Island	Port Alexander and Thorne Bay K-12 Schools Roof Replacement	18.00	11.66	0.00	0.00	0.00	3.01	0.00	0.00	0.00	0.00	5.00	2.00	2.67	2.00	2.33	2.67	0.00	6.00	0.67	13.67	2.00	0.00	5.33	77.00
108	108	108	Lower Yukon	Security Access Upgrades, 6 Sites	3.00	1.93	0.00	0.00	0.00	2.11	0.00	0.00	0.00	0.00	25.00	3.00	1.33	3.00	2.33	2.67	0.00	0.00	0.00	12.33	2.33	0.00	4.33	63.37

**Alaska Department of Education and Early Development
FY2022 Capital Improvement Projects
School Construction and Major Maintenance by Districts**

**Total Points - Formula-Driven and Evaluative
Final List**

School District	Jan 15 Rank	Dec 18 Rank	Nov 5 Rank	MM/SC	Project Name	School Dist Rank	Weight Avg Age	Prev. 14.11 Fund	Plan and Design	Prior Design Use	Avg Expend Maint	Un-Housed Today	Un-Housed 7 Years	Type of Space	Cond Survey	O&M Rpts	Maint Mgt	Energy Mgt	Cusd Pgm	Maint Train	Capital Plan	Emergency	Life/Safety and Code Conditions	Exist-ing Space	Cost Esti-mate	Proj vs Oper Cost	Alter-natives	Options	Total Project Points
Aleutians East Boro	13	13	13	M	Sandpoint K-12 School Major Maintenance	30.00	23.82	0.00	10.00	0.00	1.51	0.00	0.00	0.00	10.00	30.00	3.00	2.67	2.67	2.67	2.67	0.00	38.00	0.67	14.67	3.33	0.00	8.67	184.33
Aleutians East Boro	26	26	26	M	Sandpoint K-12 School Pool Major Maintenance	27.00	22.07	0.00	25.00	0.00	1.52	0.00	0.00	0.00	0.00	30.00	2.67	3.00	2.00	2.67	2.33	0.00	4.00	0.33	29.00	7.67	0.00	6.67	165.92
Anchorage	5	5	4	C	Gruening Middle School Non-Seismic Improvements	30.00	23.00	0.00	25.00	0.00	4.82	0.00	0.00	21.11	10.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	10.50	10.67	25.00	1.33	3.00	9.67	224.44
Anchorage	6	6	6	C	Gruening Middle School Accessibility Upgrades	15.00	19.50	0.00	25.00	0.00	5.00	0.00	0.00	30.00	10.00	25.00	4.33	4.00	4.00	3.00	5.00	0.00	1.75	7.67	25.67	1.33	1.67	4.67	192.58
Anchorage	8	8	8	C	East High School Bus Driveway Improvements	12.00	30.00	0.00	25.00	0.00	5.00	0.00	0.00	0.00	10.00	25.00	4.33	3.67	4.00	3.00	4.67	0.00	13.00	0.00	24.33	2.33	1.67	5.00	173.00
Anchorage	10	10	10	C	Security Vestibules Group 2, 3 Sites	21.00	21.18	0.00	25.00	0.00	4.82	0.00	0.00	0.00	0.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	0.00	6.00	25.67	0.00	3.00	4.67	161.67
Anchorage	13	13	13	C	Security Vestibules Group 1, 3 Sites	24.00	9.52	0.00	15.00	0.00	4.82	0.00	0.00	0.00	0.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	0.00	6.00	26.00	0.00	3.00	4.67	143.35
Anchorage	15	15	15	C	Chugiak High School Track Improvements	0.00	4.00	0.00	25.00	0.00	4.82	0.00	0.00	0.00	10.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	2.67	4.00	26.67	0.00	2.67	5.33	135.49
Anchorage	3	3	3	M	Eagle River Elementary School Improvements	27.00	30.00	0.00	25.00	0.00	4.82	0.00	0.00	0.00	10.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	28.40	3.00	24.00	2.00	0.00	5.67	210.22
Anchorage	5	5	5	M	West High School Roof Replacement	18.00	30.00	0.00	25.00	0.00	4.78	0.00	0.00	0.00	8.00	30.00	4.00	4.67	3.67	3.33	5.00	0.00	27.67	1.67	27.00	3.67	0.00	7.33	203.78
Anchorage	11	11	11	M	Service High School Health and Safety Improvements	6.00	30.00	0.00	25.00	0.00	4.78	0.00	0.00	0.00	5.00	30.00	4.00	4.33	3.67	3.33	5.00	0.00	37.51	2.00	24.00	2.33	0.00	3.33	190.29
Anchorage	12	12	12	M	Birchwood Elementary School Roof Replacement	9.00	30.00	0.00	25.00	0.00	4.78	0.00	0.00	0.00	8.00	30.00	4.00	4.33	3.67	3.33	5.00	0.00	19.46	2.00	26.33	3.67	0.00	6.67	185.24
Anchorage	15	15	15	M	East High School Gym Improvements	0.00	30.00	0.00	25.00	0.00	4.82	0.00	0.00	0.00	10.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	29.16	1.00	26.33	2.33	0.00	2.67	181.65
Anchorage	29	29	29	M	Inlet View Elementary School Domestic Water System Improvements	0.00	30.00	0.00	25.00	0.00	5.00	0.00	0.00	0.00	10.00	25.00	4.33	4.00	4.00	3.00	5.00	0.00	15.00	0.00	26.67	0.00	0.00	7.33	164.33
Anchorage	32	32	32	M	Ptarmigan Elementary School Roof Replacement	0.00	21.97	0.00	25.00	0.00	4.78	0.00	0.00	0.00	8.00	30.00	4.00	4.33	3.67	3.33	5.00	0.00	14.83	1.67	26.67	3.00	0.00	5.67	161.92
Anchorage	35	35	35	M	Stellar Secondary School Fire Alarm	0.00	30.00	0.00	20.00	0.00	4.78	0.00	0.00	0.00	0.00	30.00	4.00	4.33	3.67	3.33	5.00	0.00	18.04	0.67	27.00	4.00	0.00	5.00	159.82
Anchorage	36	36	36	M	Nunaka Valley Elementary School Roof Replacement	3.00	30.00	0.00	25.00	0.00	5.00	0.00	0.00	0.00	8.00	25.00	4.33	4.00	4.00	3.00	5.00	0.00	8.91	0.00	25.00	2.67	0.00	6.67	159.58
Anchorage	40	40	40	M	Northwood Elementary School Partial Roof Replacement	0.00	30.00	0.00	25.00	0.00	5.00	0.00	0.00	0.00	8.00	25.00	4.33	4.00	4.00	3.00	5.00	0.00	11.00	0.00	24.67	2.67	0.00	7.00	158.67
Anchorage	52	52	52	M	Bayshore Elementary School Boiler Replacement	0.00	29.15	0.00	20.00	0.00	4.82	0.00	0.00	0.00	0.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	12.50	1.00	25.67	1.67	0.00	3.67	148.81
Anchorage	60	60	60	M	Bear Valley Elementary Domestic Water Replacement	0.00	23.00	0.00	20.00	0.00	4.82	0.00	0.00	0.00	0.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	15.95	0.00	26.33	1.67	0.00	2.67	144.77
Anchorage	70	70	70	M	Mears Middle School Roof Replacement	0.00	21.25	0.00	10.00	0.00	4.82	0.00	0.00	0.00	0.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	9.80	2.00	26.67	2.67	0.00	6.33	133.87
Anchorage	82	82	82	M	West High School Utilidor Improvements	0.00	30.00	0.00	10.00	0.00	4.82	0.00	0.00	0.00	0.00	30.00	4.33	3.67	3.67	3.67	5.00	0.00	10.56	0.33	12.33	1.33	0.00	2.67	122.38
Bristol Bay Borough	56	56	56	M	Bristol Bay Elementary School and Gym Roof Replacement	30.00	18.87	0.00	10.00	0.00	1.00	0.00	0.00	0.00	8.00	25.00	3.00	2.67	2.67	2.67	3.67	0.00	14.00	0.33	16.33	2.33	0.00	7.00	147.54
Chatham	38	38	38	M	Fire Alarm Upgrades, 3 Sites	27.00	30.00	0.00	10.00	0.00	1.10	0.00	0.00	0.00	0.00	30.00	3.00	3.00	2.67	3.00	2.67	5.00	7.00	0.00	24.67	0.67	0.00	9.33	159.10
Chatham	54	54	54	M	Klukwan K-12 School Roof Replacement	30.00	23.00	0.00	0.00	0.00	1.18	0.00	0.00	0.00	3.00	30.00	2.67	2.67	2.00	2.33	2.67	5.00	16.00	2.00	14.67	4.67	0.00	6.00	147.85
Chugach	7	7	7	M	Chenega Bay K-12 School Renovation	30.00	13.88	0.00	20.00	0.00	1.42	0.00	0.00	0.00	10.00	25.00	3.00	3.00	3.33	2.67	2.67	0.00	50.00	1.33	18.33	2.00	0.00	13.33	199.96
Chugach	8	8	8	M	Tatitlek K-12 School Renovation	27.00	22.12	0.00	20.00	0.00	1.42	0.00	0.00	0.00	10.00	25.00	3.00	3.00	3.33	2.67	2.67	5.00	41.42	0.00	19.33	0.00	0.00	13.33	199.29
Craig City	2	2	2	M	Craig Middle School Rehabilitation	30.00	28.56	0.00	25.00	0.00	2.15	0.00	0.00	0.00	10.00	25.00	3.00	3.00	3.33	2.33	3.00	0.00	39.33	3.33	23.33	3.67	0.00	9.33	214.37
Denali Borough	6	6	6	M	Anderson K-12 School Partial Roof Replacement	30.00	30.00	0.00	25.00	0.00	2.93	0.00	0.00	0.00	10.00	30.00	3.33	4.00	3.33	3.33	3.33	0.00	6.00	0.00	27.00	6.33	0.00	15.67	200.27
Denali Borough	41	41	41	M	Generator Replacement, 3 Schools	27.00	30.00	0.00	10.00	0.00	2.93	0.00	0.00	0.00	10.00	30.00	3.33	4.00	3.33	3.33	3.33	0.00	8.82	0.00	14.67	1.33	0.00	6.00	158.09
Denali Borough	47	47	47	M	Tri-Valley School Partial Roof Replacement	24.00	17.75	0.00	10.00	0.00	2.93	0.00	0.00	0.00	10.00	30.00	3.33	4.00	3.33	3.33	3.33	0.00	14.95	2.33	14.00	3.33	0.00	7.00	153.63
Fairbanks Borough	10	10	10	M	Administrative Center Air Conditioning and Ventilation Replacement	30.00	10.25	0.00	25.00	0.00	3.62	0.00	0.00	0.00	8.00	30.00	4.00	4.33	5.00	3.33	3.33	5.00	10.68	0.00	27.33	7.33	0.00	16.00	193.22
Fairbanks Borough	30	30	30	M	Ben Eielson Jr/Sr High School Roof Replacement	24.00	30.00	0.00	10.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	8.00	0.00	27.33	6.33	0.00	4.67	163.96
Fairbanks Borough	31	31	31	M	Woodriver Elementary School Roof Replacement	21.00	30.00	0.00	10.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	9.90	0.00	27.33	6.00	0.00	4.67	162.52
Fairbanks Borough	49	49	49	M	Lathrop High School Partial Roof Replacement	27.00	19.50	0.00	10.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	7.44	0.00	27.33	0.00	0.00	6.00	150.90

**Alaska Department of Education and Early Development
FY2022 Capital Improvement Projects
School Construction and Major Maintenance by Districts**

**Total Points - Formula-Driven and Evaluative
Final List**

School District	Jan 15 Rank	Dec 18 Rank	Nov 5 Rank	MM/SC	Project Name	School Dist Rank	Weight Avg Age	Prev. 14.11 Fund	Plan and Design	Prior Design Use	Avg Expend Maint	Un-Housed Today	Un-Housed 7 Years	Type of Space	Cond Survey	O&M Rpts	Maint Mgt	Energy Mgt	Cusd Pgm	Maint Train	Capital Plan	Emergency	Life/Safety and Code Conditions	Exist-ing Space	Cost Esti-mate	Proj vs Oper Cost	Alter-natives	Options	Total Project Points
Fairbanks Borough	55	55	55	M	Anderson Elementary School Renovation	18.00	30.00	0.00	0.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	21.87	0.00	14.33	5.33	0.00	4.67	147.83
Fairbanks Borough	79	79	79	M	Tanana Middle School Classroom Upgrades	9.00	30.00	0.00	0.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	16.59	0.00	13.67	0.00	0.00	3.33	126.21
Fairbanks Borough	86	86	86	M	Administrative Center Exterior Renovation	15.00	10.25	0.00	0.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	15.48	0.00	14.00	5.67	0.00	4.67	118.69
Fairbanks Borough	87	87	87	M	Anne Wien Elementary School Renovation	12.00	8.75	0.00	0.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	19.32	0.00	14.00	4.67	0.00	4.67	117.03
Fairbanks Borough	88	88	88	M	Pearl Creek Elementary School Classroom Upgrades	6.00	24.75	0.00	0.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	14.07	0.00	13.67	0.00	0.00	3.00	115.11
Fairbanks Borough	92	92	92	M	Weller Elementary School Classroom Upgrades	3.00	24.75	0.00	0.00	0.00	3.62	0.00	0.00	0.00	0.00	30.00	4.00	4.33	5.00	3.33	3.33	0.00	15.12	0.00	13.67	0.00	0.00	3.00	113.16
Galena City	1	1	1	M	Galena Interior Learning Academy Composite Building Renovation	30.00	21.25	0.00	25.00	0.00	5.00	0.00	0.00	0.00	10.00	25.00	3.67	3.33	3.33	2.67	3.33	0.00	48.30	5.00	25.00	9.33	0.00	11.67	231.88
Haines Borough	42	42	42	M	Haines High School Locker Room Renovation	27.00	26.50	0.00	10.00	0.00	1.28	0.00	0.00	0.00	3.00	30.00	2.67	2.67	3.00	2.00	2.67	0.00	21.84	0.00	12.67	3.67	0.00	8.67	157.62
Haines Borough	51	51	51	M	Haines High School Roof Replacement	30.00	30.00	0.00	0.00	0.00	1.28	0.00	0.00	0.00	0.00	30.00	2.67	2.67	3.00	2.00	2.67	5.00	15.00	0.00	14.00	3.33	0.00	7.67	149.28
Hoonah City	7	7	7	C	Hoonah School Playground Improvements	27.00	30.00	0.00	25.00	0.00	1.72	0.00	0.00	0.00	0.00	30.00	3.00	3.67	3.00	2.33	2.00	0.00	6.34	2.00	29.00	0.00	1.67	8.33	175.06
Hoonah City	44	44	44	M	Hoonah Central Boiler Replacement	30.00	30.00	0.00	10.00	0.00	1.72	0.00	0.00	0.00	8.00	30.00	3.00	3.67	3.00	2.33	2.00	0.00	0.00	0.00	13.67	7.67	0.00	9.67	154.72
Iditarod Area	17	17	17	M	David-Louis Memorial K-12 School HVAC Control Upgrades, Graveling	27.00	16.00	0.00	25.00	0.00	2.53	0.00	0.00	0.00	8.00	25.00	2.00	2.00	2.33	2.33	2.33	5.00	20.71	0.00	28.00	5.67	0.00	7.67	181.58
Iditarod Area	18	18	18	M	Blackwell K-12 School Fire Alarm Upgrades, Anvik	30.00	30.00	0.00	10.00	0.00	2.66	0.00	0.00	0.00	8.00	25.00	2.00	2.00	2.33	1.67	2.67	10.00	18.00	0.00	28.00	2.67	0.00	5.33	180.33
Iditarod Area	57	57	57	M	Blackwell K-12 School HVAC Control Upgrades, Anvik	21.00	30.00	0.00	10.00	0.00	2.53	0.00	0.00	0.00	8.00	25.00	2.00	2.00	2.33	2.33	2.33	0.00	15.00	2.33	13.67	2.67	0.00	6.00	147.20
Iditarod Area	81	81	81	M	David-Louis Memorial K-12 School Roof Replacement, Graveling	24.00	16.00	0.00	10.00	0.00	2.53	0.00	0.00	0.00	0.00	25.00	2.00	2.00	2.33	2.33	2.33	0.00	10.95	0.00	13.33	3.33	0.00	7.67	123.81
Juneau Borough	9	9	9	M	Sayéik: Gastineau Community School Partial Roof Replacement	30.00	30.00	0.00	25.00	0.00	2.33	0.00	0.00	0.00	5.00	30.00	3.00	2.67	3.67	3.33	4.00	0.00	21.00	0.00	20.67	7.33	0.00	7.00	194.99
Juneau Borough	69	69	69	M	Dzantik' Heeni Middle School Roof Replacement	27.00	9.50	0.00	10.00	0.00	2.33	0.00	0.00	0.00	8.00	30.00	2.67	2.67	3.67	3.33	4.00	0.00	8.00	0.00	15.33	3.00	0.00	5.33	134.83
Juneau Borough	91	91	91	M	Riverbend Elementary School Roof Replacement	24.00	7.25	0.00	0.00	0.00	2.33	0.00	0.00	0.00	3.00	30.00	3.00	2.67	3.67	3.33	4.00	0.00	6.56	0.00	15.00	1.67	0.00	7.00	113.47
Kake City	4	4	4	M	Kake Schools Heating Upgrades	30.00	29.39	0.00	25.00	0.00	1.63	0.00	0.00	0.00	8.00	30.00	2.67	3.67	3.00	3.33	3.00	0.00	17.33	3.33	28.33	7.00	0.00	10.00	205.69
Kake City	65	65	65	M	Exterior Upgrades - Main School Facilities	24.00	30.00	0.00	0.00	0.00	1.64	0.00	0.00	0.00	0.00	30.00	3.00	3.33	3.33	3.00	3.00	0.00	13.33	0.00	12.67	2.33	0.00	7.67	137.31
Kake City	75	75	75	M	Kake High School Gym Floor and Bleacher Replacement	21.00	30.00	0.00	0.00	0.00	1.63	0.00	0.00	0.00	0.00	30.00	2.67	3.67	3.00	3.33	3.00	0.00	10.47	0.00	13.33	0.67	0.00	7.00	129.77
Kake City	80	80	80	M	Kake High School Plumbing Replacement	27.00	30.00	0.00	0.00	0.00	1.63	0.00	0.00	0.00	0.00	30.00	2.67	3.67	3.00	3.33	3.00	0.00	0.00	0.33	14.00	1.00	0.00	5.67	125.30
Kenai Peninsula Borough	11	11	11	C	Kenai Middle School Security Remodel	30.00	30.00	0.00	10.00	0.00	3.03	0.00	0.00	0.00	0.00	30.00	3.67	3.00	3.67	2.67	3.67	0.00	2.07	5.33	14.00	0.00	0.00	5.33	146.43
Kenai Peninsula Borough	83	83	83	M	Seward Middle School Exterior Repair	27.00	2.50	0.00	10.00	0.00	3.03	0.00	0.00	0.00	8.00	30.00	3.67	3.00	3.67	2.67	3.67	0.00	8.00	0.00	12.67	1.00	0.00	3.00	121.86
Ketchikan Borough	21	21	21	M	Ketchikan High School Security Upgrades	30.00	30.00	0.00	25.00	0.00	3.39	0.00	0.00	0.00	0.00	25.00	3.00	3.00	2.33	2.33	3.33	0.00	0.00	0.00	24.00	12.00	0.00	7.33	170.73
Kodiak Island Borough	16	16	16	C	East Elementary School Parking Lot Safety Upgrade and Repaving	21.00	30.00	0.00	0.00	0.00	2.83	0.00	0.00	0.00	0.00	25.00	3.00	2.67	3.33	2.67	3.67	0.00	7.00	0.00	12.00	1.67	0.00	2.67	117.50
Kodiak Island Borough	50	50	50	M	Peterson Elementary School Roof Replacement	30.00	30.00	0.00	10.00	0.00	2.83	0.00	0.00	0.00	8.00	25.00	3.00	2.67	3.33	2.67	3.67	0.00	7.18	1.33	14.33	2.33	0.00	4.00	150.34
Kodiak Island Borough	61	61	61	M	Chiniak K-12 School Water Treatment Code Compliance and Upgrade	27.00	30.00	0.00	10.00	0.00	2.83	0.00	0.00	0.00	0.00	25.00	3.00	2.67	3.33	2.67	3.67	0.00	16.00	0.00	13.33	1.00	0.00	2.67	143.16
Kodiak Island Borough	85	85	85	M	East Elementary School Special Electrical and Security	18.00	30.00	0.00	10.00	0.00	2.83	0.00	0.00	0.00	0.00	25.00	3.00	2.67	3.33	2.67	3.67	0.00	1.06	1.00	14.33	0.00	0.00	1.67	119.22
Kodiak Island Borough	89	89	89	M	North Star Elementary School Siding Replacement	24.00	9.50	0.00	10.00	0.00	2.83	0.00	0.00	0.00	0.00	25.00	3.00	2.67	3.33	2.67	3.67	0.00	12.00	0.00	14.33	0.00	0.00	1.33	114.33
Kuspuk	45	45	45	M	Jack Egnaty Sr K-12 School Roof Replacement, Sleetmute	30.00	30.00	0.00	0.00	0.00	1.99	0.00	0.00	0.00	0.00	30.00	3.00	2.67	2.67	2.33	2.00	8.67	12.92	1.00	14.67	4.33	0.00	8.33	154.58
Lower Kuskokwim	2	2	2	C	Anna Tobeluk Memorial K-12 School Renovation/Addition, Nunapitchuk	24.00	21.95	0.00	10.00	0.00	3.20	30.19	23.79	22.21	10.00	30.00	2.67	2.33	2.67	2.33	3.00	0.00	31.91	19.67	12.67	3.33	3.33	11.67	270.91

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Lower Kuskokwim	4	4	3	C	William N. Miller K-12 Memorial School Replacement, Napakiak	30.00	30.00	0.00	10.00	0.00	3.46	1.44	0.86	22.63	10.00	30.00	4.00	2.67	3.33	3.00	3.33	25.00	14.38	0.00	17.67	4.33	3.00	9.67	228.77
Lower Kuskokwim	9	9	9	C	Newtok K-12 School Relocation/Replacement, Mertarvik	21.00	8.86	0.00	0.00	0.00	3.20	4.06	2.44	22.79	0.00	30.00	2.67	2.33	2.67	2.33	3.00	21.33	0.41	6.33	13.00	3.00	4.33	8.00	161.76
Lower Kuskokwim	12	12	12	C	Water Storage and Treatment, Kongiganak	18.00	0.00	0.00	20.00	0.00	3.46	0.00	0.00	0.00	8.00	30.00	4.00	2.67	3.33	3.00	3.33	0.00	17.33	0.00	17.33	2.67	2.00	10.33	145.46
Lower Kuskokwim	14	14	14	C	Bethel Campus Transportation and Drainage Upgrades	6.00	27.80	0.00	10.00	0.00	3.46	0.00	0.00	0.00	8.00	30.00	4.00	2.67	3.33	3.00	3.33	0.00	12.35	0.00	15.00	1.67	2.67	4.33	137.60
Lower Kuskokwim	23	23	23	M	Qugcuun Memorial K-12 School Renovation, Oscarville	3.00	26.93	0.00	10.00	0.00	3.20	0.00	0.00	0.00	10.00	30.00	2.67	2.33	2.67	2.33	3.00	0.00	50.00	1.00	14.00	1.67	0.00	5.33	168.13
Lower Kuskokwim	24	24	24	M	Akula Eitnavik K-12 School Renovation, Kasigluk-Akula	15.00	23.26	0.00	10.00	0.00	3.20	0.00	0.00	0.00	10.00	30.00	2.67	2.33	2.67	2.33	3.00	1.67	33.77	1.67	15.67	2.67	0.00	8.00	167.90
Lower Kuskokwim	59	59	59	M	Bethel Regional High School Boardwalk Replacement	9.00	30.00	0.00	10.00	0.00	3.46	0.00	0.00	0.00	10.00	30.00	4.00	2.67	3.33	3.00	3.33	0.00	14.93	0.00	15.00	1.67	0.00	6.33	146.72
Lower Kuskokwim	72	72	72	M	Gladys Jung Elementary School Heating Mains Replacement	27.00	1.00	0.00	0.00	0.00	3.46	0.00	0.00	0.00	0.00	30.00	4.00	2.67	3.33	3.00	3.33	5.00	12.80	0.00	27.67	2.00	0.00	6.33	131.59
Lower Kuskokwim	77	77	77	M	Akiuk Memorial K-12 School Renovation, Kasigluk-Akiuk	12.00	10.00	0.00	10.00	0.00	3.20	0.00	0.00	0.00	10.00	30.00	2.67	2.33	2.67	2.33	3.00	0.00	17.48	1.67	14.33	2.33	0.00	5.00	129.01
Lower Yukon	14	14	14	M	Sheldon Point K-12 School Foundation Cooling and Repairs, Nunam Iqua	30.00	0.50	0.00	25.00	0.00	2.11	0.00	0.00	0.00	8.00	25.00	3.00	1.33	3.00	2.33	2.67	11.67	29.00	4.00	27.33	0.33	0.00	7.67	182.94
Lower Yukon	19	19	19	M	Hooper Bay K-12 School Exterior Repairs	24.00	2.00	0.00	25.00	0.00	2.18	0.00	0.00	0.00	8.00	30.00	3.67	3.33	3.00	3.67	3.00	5.00	20.79	3.33	27.33	4.00	0.00	12.00	180.30
Lower Yukon	34	34	34	M	Marshall K-12 School Tank Farm Emergency Repair	27.00	0.00	0.00	20.00	0.00	2.18	0.00	0.00	0.00	10.00	30.00	3.67	3.33	3.00	3.67	3.00	6.00	9.60	0.00	28.00	4.33	0.00	7.00	160.78
Lower Yukon	62	62	62	M	Hooper Bay K-12 School Emergency Lighting and Retrofit	21.00	1.50	0.00	25.00	0.00	2.11	0.00	0.00	0.00	5.00	25.00	3.00	1.33	3.00	2.33	2.67	0.00	3.02	1.33	28.67	10.67	0.00	7.33	142.97
Lower Yukon	63	63	63	M	Scammon Bay K-12 School Emergency Lighting and Retrofit	18.00	2.00	0.00	25.00	0.00	2.11	0.00	0.00	0.00	5.00	25.00	3.00	1.33	3.00	2.33	2.67	0.00	3.02	1.33	28.67	10.33	0.00	7.33	140.13
Lower Yukon	67	67	67	M	LYSD Central Office Renovation	9.00	26.19	0.00	0.00	0.00	2.11	0.00	0.00	0.00	0.00	25.00	3.00	1.33	3.00	2.33	2.67	0.00	35.85	0.67	14.33	5.00	0.00	6.00	136.49
Lower Yukon	78	78	78	M	Scammon Bay K-12 School Siding Replacement	12.00	2.50	0.00	25.00	0.00	2.18	0.00	0.00	0.00	8.00	30.00	3.67	3.33	3.00	3.67	3.00	0.00	1.90	0.00	16.67	3.33	0.00	9.67	127.91
Lower Yukon	93	93	93	M	Ignatius Beans K-12 School Marine Header Pipeline, Mountain Village	15.00	7.36	0.00	20.00	0.00	2.11	0.00	0.00	0.00	8.00	25.00	3.00	1.33	3.00	2.33	2.67	0.00	2.00	0.00	13.67	0.00	0.00	6.33	111.80
Lower Yukon	102	102	102	M	Kotlik and Pilot Station K-12 Schools Renewal and Repair	0.00	4.00	0.00	10.00	0.00	2.18	0.00	0.00	0.00	5.00	30.00	3.67	3.33	3.00	3.67	3.00	0.00	5.25	0.00	13.00	2.67	0.00	5.00	93.76
Lower Yukon	105	105	105	M	Sheldon Point K-12 School Exterior Repairs, Nunam Iqua	6.00	1.00	0.00	0.00	0.00	2.18	0.00	0.00	0.00	5.00	30.00	3.67	3.33	3.00	3.67	3.00	0.00	0.62	0.00	13.00	3.33	0.00	7.67	85.46
Lower Yukon	108	108	108	M	Security Access Upgrades, 6 Sites	3.00	1.93	0.00	0.00	0.00	2.11	0.00	0.00	0.00	0.00	25.00	3.00	1.33	3.00	2.33	2.67	0.00	0.00	0.00	12.33	2.33	0.00	4.33	63.37
Mat-Su Borough	43	43	43	M	Big Lake Elementary School Water System Replacement Ph 2	30.00	30.00	0.00	25.00	0.00	2.25	0.00	0.00	0.00	10.00	10.00	3.33	2.33	2.33	0.33	3.33	0.00	12.48	2.33	16.33	1.00	0.00	3.67	154.73
Mat-Su Borough	73	73	73	M	Butte and Snowshoe Elementary Schools Water System Replacement	27.00	30.00	0.00	10.00	0.00	2.25	0.00	0.00	0.00	8.00	10.00	3.33	2.33	2.33	0.33	3.33	0.00	13.28	2.33	12.67	1.00	0.00	3.33	131.53
Mat-Su Borough	94	94	94	M	Elevator Code and Compliance Upgrades, 6 Sites	18.00	26.50	0.00	10.00	0.00	2.25	0.00	0.00	0.00	10.00	10.00	3.33	2.33	2.33	0.33	3.33	0.00	4.00	0.00	13.33	1.00	0.00	3.00	109.75
Mat-Su Borough	96	96	96	M	Structural Seismic Upgrades, 5 Sites	15.00	30.00	0.00	10.00	0.00	2.25	0.00	0.00	0.00	10.00	10.00	3.33	2.33	2.33	0.33	3.33	0.00	6.00	0.33	10.67	1.00	0.00	2.33	109.25
Mat-Su Borough	98	98	98	M	Talkeetna Elementary School Roof Replacement	24.00	21.20	0.00	10.00	0.00	2.35	0.00	0.00	0.00	8.00	5.00	2.67	2.00	2.33	0.00	3.00	0.00	6.00	3.33	14.00	2.00	0.00	1.67	107.55
Mat-Su Borough	99	99	99	M	Colony and Wasilla Middle Schools Roof Replacement	21.00	20.90	0.00	10.00	0.00	2.35	0.00	0.00	0.00	8.00	5.00	2.67	2.00	2.33	0.00	3.00	0.00	6.00	1.67	13.67	2.00	0.00	1.67	102.25
Mat-Su Borough	100	100	100	M	HVAC Control Upgrades, 5 Sites	9.00	23.45	0.00	10.00	0.00	2.25	0.00	0.00	0.00	0.00	10.00	3.33	2.33	2.33	0.33	3.33	0.00	5.60	2.33	13.33	3.67	0.00	3.67	94.97
Mat-Su Borough	101	101	101	M	Ceiling and Sprinkler Seismic Mitigation, 5 Sites	12.00	29.99	0.00	10.00	0.00	2.25	0.00	0.00	0.00	0.00	10.00	3.33	2.33	2.33	0.33	3.33	0.00	3.00	0.00	11.67	1.00	0.00	2.67	94.25
Nenana City	16	16	16	M	Nenana K-12 School Flooring and Asbestos Abatement	30.00	30.00	0.00	25.00	0.00	2.97	0.00	0.00	0.00	5.00	30.00	3.67	3.00	2.67	2.00	3.67	0.00	7.00	3.00	24.67	2.33	0.00	6.67	181.64
Nenana City	33	33	33	M	Nenana K-12 School Boiler Replacement	27.00	30.00	0.00	20.00	0.00	2.97	0.00	0.00	0.00	3.00	30.00	3.67	3.00	2.67	2.00	3.67	0.00	4.00	0.00	20.00	3.00	0.00	6.33	161.30

**Alaska Department of Education and Early Development
FY2022 Capital Improvement Projects
School Construction and Major Maintenance by Districts**

**Total Points - Formula-Driven and Evaluative
Final List**

School District	Jan 15 Rank	Dec 18 Rank	Nov 5 Rank	MM/SC	Project Name	School Dist Rank	Weight Avg Age	Prev. 14.11 Fund	Plan and Design	Prior Design Use	Avg Expend Maint	Un-Housed Today	Un-Housed 7 Years	Type of Space	Cond Survey	O&M Rpts	Maint Mgt	Energy Mgt	Cusd Pgm	Maint Train	Capital Plan	Emergency	Life/Safety and Code Conditions	Exist-ing Space	Cost Esti-mate	Proj vs Oper Cost	Alter-natives	Options	Total Project Points
Nenana City	71	71	71	M	Nenana K-12 School Fire Suppression System Replacement	24.00	26.27	0.00	0.00	0.00	2.97	0.00	0.00	0.00	0.00	30.00	3.67	3.00	2.67	2.00	3.67	10.00	2.00	0.00	14.00	1.67	0.00	6.33	132.24
Nome City	27	27	27	M	Anvil City Charter School Restroom Renovation	27.00	30.00	0.00	25.00	0.00	1.43	0.00	0.00	0.00	0.00	25.00	3.00	2.33	2.33	2.00	3.00	0.00	4.00	4.33	27.33	2.00	0.00	6.67	165.43
Nome City	28	28	28	M	Nome Beltz Jr/Sr High School Boiler Replacement	30.00	30.00	0.00	25.00	0.00	1.43	0.00	0.00	0.00	0.00	25.00	3.00	2.33	2.33	2.00	3.00	0.00	7.36	0.00	24.67	2.67	0.00	6.33	165.13
Nome City	37	37	37	M	Nome Schools DDC Control Upgrades	21.00	30.00	0.00	25.00	0.00	1.43	0.00	0.00	0.00	0.00	25.00	3.00	2.33	2.33	2.00	3.00	0.00	3.00	1.00	19.00	16.00	0.00	5.33	159.43
Nome City	58	58	58	M	Nome Elementary School Fire Alarm Replacement	24.00	17.75	0.00	25.00	0.00	1.43	0.00	0.00	0.00	0.00	25.00	3.00	2.33	2.33	2.00	3.00	5.00	6.33	0.00	22.33	1.33	0.00	6.00	146.85
Nome City	66	66	66	M	Nome Beltz Jr/Sr High School Generator Replacement	18.00	30.00	0.00	10.00	0.00	1.58	0.00	0.00	0.00	0.00	20.00	2.00	2.33	2.00	1.33	3.00	0.00	27.00	0.00	14.33	0.00	0.00	5.00	136.58
Northwest Arctic Borough	25	25	25	M	Buckland K-12 School HVAC Renewal and Upgrades	30.00	8.15	0.00	25.00	0.00	2.93	0.00	0.00	0.00	5.00	30.00	2.67	2.33	3.00	1.67	3.33	0.00	10.00	1.00	23.00	10.33	0.00	9.00	167.41
Saint Marys City	68	68	68	M	St. Mary's Campus Renewal and Repairs	30.00	30.00	0.00	10.00	0.00	1.23	0.00	0.00	0.00	0.00	30.00	3.00	3.00	3.33	3.33	3.00	0.00	0.00	0.33	13.00	0.67	0.00	4.67	135.56
Sitka Borough	53	53	53	M	Keet Gooshi Heen Elementary Covered PE Structure Renovation	30.00	16.00	0.00	10.00	0.00	1.02	0.00	0.00	0.00	8.00	30.00	3.67	2.00	1.67	1.67	3.00	0.00	10.40	1.33	17.67	2.67	0.00	9.33	148.42
Southeast Island	1	1	1	C	Hollis K-12 School Replacement	27.00	24.26	30.00	10.00	0.00	2.88	26.74	30.00	23.84	10.00	25.00	2.67	3.00	2.67	3.33	3.00	9.00	16.02	22.67	15.67	3.33	3.00	9.33	303.41
Southeast Island	84	84	84	M	Thorne Bay K-12 School Fire Suppression System	30.00	11.42	0.00	10.00	0.00	3.01	0.00	0.00	0.00	8.00	5.00	2.00	2.67	2.00	2.33	2.67	9.33	5.00	0.00	14.33	4.00	0.00	9.00	120.76
Southeast Island	90	90	90	M	Thorne Bay K-12 School Flooring Replacement	15.00	11.42	0.00	25.00	0.00	3.01	0.00	0.00	0.00	0.00	5.00	2.00	2.67	2.00	2.33	2.67	0.00	4.00	0.33	28.67	2.33	0.00	7.67	114.10
Southeast Island	95	95	95	M	Thorne Bay K-12 School Mechanical Control Upgrades	24.00	11.42	0.00	10.00	0.00	3.01	0.00	0.00	0.00	8.00	5.00	2.00	2.67	2.00	2.33	2.67	1.67	8.00	0.00	14.67	6.67	0.00	5.33	109.43
Southeast Island	103	103	103	M	Port Alexander K-12 School Domestic Water Pipe Replacement	12.00	22.88	0.00	0.00	0.00	3.01	0.00	0.00	0.00	3.00	5.00	2.00	2.67	2.00	2.33	2.67	5.33	6.98	0.00	13.00	2.67	0.00	6.00	91.54
Southeast Island	106	106	106	M	Thorne Bay K-12 School Underground Storage Tank Replacement	21.00	11.42	0.00	10.00	0.00	3.01	0.00	0.00	0.00	0.00	5.00	2.00	2.67	2.00	2.33	2.67	0.00	2.00	0.00	14.67	0.00	0.00	4.67	83.43
Southeast Island	107	107	107	M	Port Alexander and Thorne Bay K-12 Schools Roof Replacement	18.00	11.66	0.00	0.00	0.00	3.01	0.00	0.00	0.00	0.00	5.00	2.00	2.67	2.00	2.33	2.67	0.00	6.00	0.67	13.67	2.00	0.00	5.33	77.00
Valdez City	46	46	46	M	Valdez High and Herman Hutchens Elementary Schools Domestic Water Piping Replacement	30.00	30.00	0.00	10.00	0.00	1.62	0.00	0.00	0.00	10.00	20.00	2.67	3.00	3.00	3.00	3.00	5.00	10.00	0.00	14.33	2.33	0.00	6.00	153.95
Valdez City	64	64	64	M	Valdez High School Window Replacement	24.00	30.00	0.00	10.00	0.00	1.62	0.00	0.00	0.00	3.00	20.00	2.67	3.00	3.00	3.00	3.00	0.00	12.00	0.33	15.33	3.00	0.00	5.33	139.29
Valdez City	76	76	76	M	Valdez High and Herman Hutchens Elementary Schools Generator Replacement	27.00	29.99	0.00	10.00	0.00	1.62	0.00	0.00	0.00	5.00	20.00	2.67	3.00	3.00	3.00	3.00	0.00	4.00	0.00	11.67	1.00	0.00	4.33	129.28
Yukon-Koyukuk	3	3	5	C	Minto K-12 School Renovation/Addition	30.00	23.78	0.00	20.00	0.00	2.82	0.00	3.41	23.85	10.00	25.00	3.67	2.67	3.00	3.33	3.00	0.00	23.58	15.33	18.33	4.00	4.00	13.00	232.77
Yukon-Koyukuk	20	20	20	M	YKSD District Office Roof Replacement	27.00	30.00	0.00	25.00	0.00	2.82	0.00	0.00	0.00	0.00	25.00	3.67	2.67	3.00	3.33	3.00	0.00	7.60	1.00	28.67	5.00	0.00	9.67	177.42
Yukon-Koyukuk	22	22	22	M	Ella B. Verneti K-12 School Boiler Replacement, Koyukuk	24.00	21.28	0.00	20.00	0.00	2.82	0.00	0.00	0.00	8.00	25.00	3.67	2.67	3.00	3.33	3.00	0.00	19.88	0.00	18.33	4.33	0.00	11.33	170.65
Yupit	17	17	17	C	Playground Construction, 3 Sites	15.00	2.69	0.00	10.00	0.00	1.69	0.00	0.00	0.00	0.00	30.00	3.33	2.67	2.67	2.67	2.67	0.00	12.00	3.67	12.67	0.00	2.00	6.00	109.70
Yupit	39	39	39	M	Tuluksak K-12 School Generator Refurbishment	30.00	2.50	0.00	25.00	0.00	1.65	0.00	0.00	0.00	0.00	30.00	3.33	2.67	2.00	2.67	2.67	6.33	13.39	0.00	24.00	3.00	0.00	9.67	158.87
Yupit	48	48	48	M	Tuluksak K-12 School Fuel Tank Replacement	18.00	30.00	0.00	10.00	0.00	1.69	0.00	0.00	0.00	8.00	30.00	3.33	2.67	3.00	3.00	2.67	6.00	10.00	0.00	14.00	2.67	0.00	7.67	152.69
Yupit	74	74	74	M	Gym Floor Replacement, 3 Schools	24.00	2.19	0.00	20.00	0.00	1.65	0.00	0.00	0.00	0.00	30.00	3.33	2.67	2.00	2.67	2.67	0.00	4.00	0.00	22.00	0.67	0.00	12.67	130.51
Yupit	97	97	97	M	Mechanical System Improvements, 3 Schools	27.00	2.69	0.00	0.00	0.00	1.69	0.00	0.00	0.00	0.00	30.00	3.33	2.67	3.33	2.67	2.67	0.00	3.00	0.00	14.33	7.67	0.00	7.33	108.37
Yupit	104	104	104	M	Akiachak K-12 School Window Replacement	21.00	2.19	0.00	0.00	0.00	1.65	0.00	0.00	0.00	0.00	30.00	3.33	2.67	2.00	2.67	2.67	0.00	0.00	0.00	12.33	1.33	0.00	8.33	90.17



CIP Grant Requests and Funding History FY 12 to FY22

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
CIP Grant Requests											
Total Applications	158	158	137	121	126	127	131	105	86	120	125
Percent of Districts Applying	72%	64%	66%	64%	66%	68%	70%	58%	51%	64%	57%
# Projects Reusing Scores	45	20	52	23	57	27	67	39	24	40	55
Major Maintenance	117	120	111	102	102	98	107	84	72	102	108
MM Total \$ ^(*)	\$275,132,938	\$267,017,375	\$253,682,082	\$183,505,181	\$172,195,526	\$181,570,096	\$164,887,094	\$142,892,281	\$113,787,100	\$148,986,253	\$187,285,413
School Construction	32	27	24	17	18	18	15	11	11	14	17
SC Total \$ ^(*)	\$313,999,772	\$276,691,304	\$284,133,432	\$274,150,436	\$230,920,120	\$206,267,345	\$123,294,419	\$179,214,343	\$190,238,739	\$142,797,809	\$162,305,916

Notes:

(*) Total \$ is State Share

School Construction and Major Maintenance Funding

Grant Projects Funded	\$87,765,592	\$78,952,700	\$94,171,539	\$43,279,791	\$56,728,592	\$74,715,471 ⁽¹⁾	\$53,177,429 ⁽¹⁾	\$82,665,391 ⁽¹⁾	\$42,489,249 ⁽¹⁾	\$1,896,395 ⁽¹⁾
Percent Grant \$ Funded	14.9%	14.5%	17.5%	9.5%	14.1%	8.6%	17.3%	15.5%	14.0%	0.6%
Percent Applications Funded	12.1%	10.9%	11.9%	1.7%	4.2%	3.4%	16.4%	25.3%	3.6%	0.9%
Debt Projects	\$409,400,183 ⁽²⁾	\$78,525,000 ⁽²⁾	\$138,622,000 ⁽²⁾	\$13,353,394 ⁽²⁾	\$0	\$0	\$0	\$0	\$0	\$0

Notes:

Grant Projects Funded includes all reappropriated or reallocated funding, including grant funding from prior fiscal years, as of March 26, 2020

⁽¹⁾ Includes AS 14.11.025 grants

⁽²⁾ SB237 debt projects DEED & voter approved, effective 7/1/2010 - 12/31/2014



PM State-of-the-State

Report of DEED Maintenance Assessments and Related Data

AS OF 08/15/2020

District	Date of Last Visit	Year of Next Visit	Approved FAIS	Maintenance Management	Energy	Custodial	Training	R&R Schedule	Status	Maint. Program	Program Name	CIP Eligible
Alaska Gateway	3/30/2017	2022	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Aleutian Region	7/19/2011	2016	Y	N	Y	Y	Y	Y	5 of 6	W	Dude Solutions	No
Aleutians East	11/12/2019	2025	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Anchorage	1/23/2018	2023	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Annette Island	12/3/2015	2021	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Bering Strait	4/14/2019	2024	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Bristol Bay Borough	1/18/2019	2024	Y	Y	Y ^P	Y	Y	Y	6 of 6	W	MC*	Yes
Chatham	3/6/2017	2022	Y	Y	Y ^P	Y	Y	Y	6 of 6	W	MC*	Yes
Chugach	1/26/2018	2023	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Copper River	3/31/2017	2022	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Cordova	1/15/2020	2025	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Craig City	11/14/2016	2022	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Delta/Greely	3/28/2017	2022	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Denali Borough	12/18/2019	2025	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Dillingham City	2/2/2016	2021	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Fairbanks	3/27/2018	2023	Y	Y	Y	Y	Y	Y	6 of 6	W	Web Help Desk	Yes
Galena	3/22/2018	2023	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Haines	11/17/2015	2021	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Hoonah City	4/17/2017	2022	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Hydaburg City	11/16/2016	2022	Y	N	Y	Y	N	Y	4 of 6	W	MC*	No
Iditarod Area	4/8/2019	2024	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Juneau	11/3/2015	2021	Y	Y	Y	Y	Y	Y	6 of 6	L	TMA	Yes
Kake City	2/4/2020	2025	Y	Y	Y ^P	Y	Y	Y	6 of 6	W	MC*	Yes
Kashunamiut	2/25/2020	2025	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Kenai Peninsula	3/1/2018	2023	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Ketchikan	12/2/2015	2021	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Klawock City	12/19/2016	2022	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Kodiak Island	5/29/2020	2025	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Kuspuk	3/3/2020	2025	Y	Y ^P	Y ^P	Y	Y ^P	Y	6 of 6	W	MC*	Yes
Lake & Peninsula	1/16/2019	2024	Y	Y	N	Y	Y	Y	5 of 6	W	Manager Plus	No
Lower Kuskokwim	3/25/2019	2024	Y	Y	Y ^P	Y	Y ^P	Y	6 of 6	W	Manager Plus	Yes
Lower Yukon	3/20/2019	2024	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Mat-Su Borough	2/3/2017	2022	Y	Y	Y	Y	Y	Y	6 of 6	W	Team Dynamix	Yes
Nenana City	12/17/2019	2025	Y	Y	Y ^P	Y	Y	Y	6 of 6	W	MC*	Yes
Nome City	4/28/2017	2022	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
North Slope Borough	5/21/2018	2023	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Northwest Arctic	2/23/2016	2021	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Pelican City	4/9/2018	2023	Y	Y	Y ^P	Y	Y ^P	Y	6 of 6	W	MC*	Yes
Petersburg City	1/7/2016	2021	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Pribilof Island	5/25/2020	2025	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Sitka City Borough	4/24/2017	2022	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Skagway City	9/5/2018	2024	Y	N	N	Y	N	Y	3 of 6	W	Dude Solutions	No
Southeast Island	11/18/2016	2022	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Southwest Region	2/4/2016	2021	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
St Mary's	3/18/2019	2024	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Tanana City	3/23/2018	2023	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Unalaska City	5/25/2020	2025	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Valdez City	4/18/2018	2023	Y	Y	Y	Y	Y	Y	6 of 6	W	MC	Yes
Wrangell City	1/8/2016	2021	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Yakutat City	1/14/2020	2025	Y	Y	Y ^P	Y	Y ^P	Y	6 of 6	W	MC*	Yes
Yukon Flats	11/12/2018	2024	Y	N	N	Y	N	Y	3 of 6	W	MC*	No
Yukon-Koyukuk	11/15/2018	2024	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Yupit	2/27/2020	2025	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes

In Compliance 53 49 50 53 50 53 48 48

Legend

N = Not in compliance W= Web-based Computerized Maintenance Management System
 Y = In full compliance L = Local Area Network (LAN) Computerized Maintenance Management System
 Y^P = Provisional compliance * = Use MC (Maintenance Connection) through SERRC Service Contract
 FAIS = Fixed Asset Inventory System **Bold** - Site visit pending

"Year of Next Visit" dates are subject to change at the department's discretion. School Districts will be notified in a timely manner if scheduled visit dates listed on this report are altered.

SCHOOL CAPITAL PROJECT FUNDING UNDER SB 237

Excerpts from 2021 Report

Table 11 Total Funding Summary by Fiscal Year

Fiscal Year	Construction City/Borough	Construction REAA	Maintenance City/Borough	Maintenance REAA
FY2011	\$500,000	\$128,500,000	\$112,973,055	\$2,965,455
FY2012	\$317,164,997	\$61,910,901*	\$87,306,741	\$21,752,950
FY2013	\$67,875,000	\$60,973,515	\$12,616,492	\$16,012,693
FY2014	\$36,839,182	\$60,619,572	\$109,210,116	\$15,563,759*
FY2015	\$18,018,647	\$31,516,900	\$7,097,638	\$0
FY2016	\$43,237,400	\$0	\$0	\$2,623,689*
FY2017	\$10,010,000	\$62,867,968	\$0	\$0
FY2018	\$7,238,422	\$39,771,675	\$0*	\$0*
FY2019	\$0*	\$42,527,459*	\$15,378,459*	\$12,274,841*
FY2020	\$0	\$20,082,467*	\$7,365,723	\$0
FY2021	\$0	\$0	\$0	\$34,277*
Totals	\$500,883,648	\$508,770,457	\$351,948,224	\$71,227,664

Table 12 Total Funding Summary by Program

Program	Construction City/Borough	Construction REAA	Maintenance City/Borough	Maintenance REAA
Grant	\$72,248,713	\$508,770,457	\$58,061,217	\$71,227,664
Debt	\$428,634,935	\$0	\$293,887,007	\$0
Totals	\$500,883,648	\$508,770,457	\$351,948,224	\$71,227,664

Table 13 Total Funding Summary by Fiscal Year and Program

Program	Construction City/Borough	Construction REAA	Maintenance City/Borough	Maintenance REAA
FY2011 Grant	\$0	\$128,500,000	\$21,821,504	\$2,965,455
FY2011 Debt	\$500,000	\$0	\$91,151,551	\$0
FY2012 Grant	\$0	\$61,910,901*	\$4,101,741	\$21,752,950
FY2012 Debt	\$317,164,997	\$0	\$83,205,000	\$0
FY2013 Grant	\$0	\$60,973,515	\$1,966,492	\$16,012,693
FY2013 Debt	\$67,875,000	\$0	\$10,650,000	\$0
FY2014 Grant	\$0	\$60,619,572	\$7,427,298	\$15,563,759*
FY2014 Debt	\$36,839,182	\$0	\$101,782,818	\$0
FY2015 Grant	\$11,762,891	\$31,516,900	\$0	\$0
FY2015 Debt	\$6,255,756	\$0	\$7,097,638	\$0
FY2016 Grant	\$43,237,400	\$0	\$0	\$2,623,689*
FY2016 Debt	\$0	\$0	\$0	\$0
FY2017 Grant	\$10,010,000	\$62,867,968	\$0	\$0
FY2017 Debt	\$0	\$0	\$0	\$0
FY2018 Grant	\$7,238,422	\$39,771,675	\$0*	\$0*
FY2018 Debt	\$0	\$0	\$0	\$0
FY2019 Grant	\$0*	\$42,527,459*	\$15,378,459	\$12,274,841
FY2019 Debt	\$0	\$0	\$0	\$0
FY2020 Grant	\$0	\$20,082,467*	\$7,365,723	\$0
FY2020 Debt	\$0	\$0	\$0	\$0
FY2021 Grant	\$0	\$0	\$0	\$34,277*
FY2021 Debt	\$0	\$0	\$0	\$0
Totals	\$500,883,648	\$508,770,457	\$351,948,224	\$71,227,664

Regional Education Attendance Area & Small Municipality Grant Fund (FU 1222) Balance

as of 9-Mar-2021 prepared by Finance & Support Services / Facilities

											Projected		
Deposits											FY2022	Total	
	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021				
REAA Fund Capitalization	35,512,300	35,200,000	39,921,078	38,789,000	31,230,000	40,640,000	39,661,000	19,694,500	-	17,119,000		297,766,878	
Interest Earned (Actual as of 7/7/17)	118,206	368,142	383,180	-	-	-	-	-	-	-		869,528	
Subtotal Deposits	35,630,506	35,568,142	40,304,258	38,789,000	31,230,000	40,640,000	39,661,000	19,694,500	-	17,119,000		298,636,406	
											Projected	Total	
Grant #	AR	REAA-funded Capital Project Funded Projects	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	
GR-14-014	059021421	Nightmute School Renovation/Addition	-	32,965,301	-	-	-	-	-	-	-	-	32,965,301
GR-14-015	059021422	Kuinerramiut Elitnaurviat K-12 Renovation/Addition, Quinhagak	-	13,207,081	-	-	-	-	-	(5,041,059)	-	-	8,166,022
GR-14-016,	059621440	Kwethluk K-12 Replacement School	-	25,008,100	31,516,900	-	-	-	-	(10,000,000)	-	-	46,525,000
GR-15-002	059621442	St. Mary's Andreafski High School Gym Construction	-	-	8,958,100	-	-	-	-	-	-	-	8,958,100
GR-17-002	059070002	[see FU1080] Bethel Regional High School Multipurpose Addition	-	-	-	-	7,129,765	-	-	-	-	-	7,129,765
GR-17-003	059680002	Lewis Angapak K-12 School Renovation/Addition, Tuntutuliak	-	-	-	-	40,343,416	704,620	-	-	-	-	41,048,036
GR-17-004	059680001	Jimmy Huntington K-12 Renovation/Addition, Huslia	-	-	-	-	15,394,787	980,000	-	-	-	-	16,374,787
GR-18-002	059680003	Shishmaref K-12 School Renovation/Addition	-	-	-	-	-	16,184,008	490,000	-	-	-	16,674,008
	059680005,												
GR-18-003,	05969001	J Alexie Memorial K-12 School Replacement, Atmautluak	-	-	-	-	-	3,261,667	39,556,086	-	-	-	42,817,753
GR-18-004	059680004	Auntie Mary Nicoli Elementary School Replacement, Aniak	-	-	-	-	-	18,641,380	-	-	-	-	18,641,380
GR-19-002	059690002	Eek K-12 School Renovation/Addition	-	-	-	-	-	-	2,481,373	34,450,733	-	-	36,932,106
GR-19-008	059690003	St. Mary's Campus Upgrades (1st MM project under HB 212)	-	-	-	-	-	-	3,449,928	-	-	-	3,449,928
GR-20-002	059600002	Hollis K-12 School Replacement	-	-	-	-	-	-	-	672,793	-	9,476,008	10,148,801
GR-21-001	059010001	St. Paul K-12 School Roof Replacement and Structural Repair (MM)	-	-	-	-	-	-	-	-	722,546	-	722,546
		Subtotal Fund Activity	-	71,180,482	40,475,000	-	62,867,968	39,771,675	45,977,387	20,082,467	722,546	9,476,008	290,553,533
		Lapsing or Reapprop'd Funds	-	-	-	-	-	-	-	(15,041,059)	-	-	(15,041,059)
		Funded Projects	-	71,180,482	40,475,000	-	62,867,968	39,771,675	45,977,387	35,123,526	722,546	9,476,008	296,118,584
Reconciliation of Available REAA Funds:			35,630,506	18,166	(152,576)	38,636,424	6,998,456	7,866,781	1,550,394	1,162,427	439,881	8,082,873	

Statewide School Capital Funding Forecast Database

FY2021 Request: \$240,000
Reference No: 62855

AP/AL: Appropriation

Project Type: Education

Category: Education

Location: Statewide

House District: Statewide (HD 1-40)

Impact House District: Statewide (HD 1-40)

Contact: Tim Mearig

Estimated Project Dates: 07/01/2020 - 06/30/2025 **Contact Phone:** (907)465-6909

Brief Summary and Statement of Need:

This project will build a database of school facility conditions, school space, and student population to forecast the need for school construction and major maintenance in the state. The project will also construct a funding rubric that incorporates available/proposed local, state, and federal funding and provide a dashboard analytic for differing levels of funding support from these funding sources and how they could combine to address the need. This database will be managed and maintained by the Department of Education & Early Development. This is a one-time capital project expenditure with an annual operating expenditure for maintenance of the database of \$15,000.

Funding:	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
1030 School Fnd	\$240,000						\$240,000
Total:	\$240,000	\$0	\$0	\$0	\$0	\$0	\$240,000

<input type="checkbox"/> State Match Required	<input checked="" type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input type="checkbox"/> Ongoing
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	15,000	0
<u>One-Time Startup:</u>	0	
Totals:	15,000	0

Prior Funding History / Additional Information:

Project Description/Justification:

Following the passage and signing of SB237 (Chapter 93 SLA 2010), state aid for the funding of K-12 school capital projects was significantly altered. The legislation added a third grant fund, the Regional Educational Attendance Area and Small Municipal School District School Fund (AS 14.11.030) (REAA Fund). The funding source for the REAA Fund is the state's operating budget and is indexed to the annual amount of state aid expended on the reimbursement of local debt issued in support of approved school capital projects (AS 14.11.100). This indexing was intended to resolve legal claims of school capital project funding inequity between 'urban' (debt) and 'rural' (grant) school districts.

A provision in SB237 requires an annual report on the effectiveness of the school construction and major maintenance grants, state aid for school construction in Regional Educational Attendance Areas (REAAAs), and state aid for costs of school construction debt under AS 14.11. The report must include an analysis of funding sources and the short-term and long-term fiscal effects of the funding on the state. In February 2021, the department will provide its 9th report. To date, these reports have

Statewide School Capital Funding Forecast Database

FY2021 Request: \$240,000

Reference No: 62855

contained available information on the funding which has occurred in each of the funds and in the debt reimbursement program. They have not provided analysis regarding the effects of the funding which may have been provided year-by-year.

It is implied in the requirement to analyze the fiscal effect and answer the question, "Was the funding effective in meeting the need?" In order to answer this question, the department needs data on the need for school capital projects. This data should be by-facility, by-district. The department has identified various data groups and elements that will be needed, as well as options for gathering this data and miscellaneous features.

**Department of Education
& Early Development**

FINANCE & SUPPORT SERVICES

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THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

To: Bond Reimbursement & Grant Review Committee
From: School Facilities
Date: April 14, 2021

FY2022 CIP APPLICATION BRIEFING

Reconsideration and Appeal

The department is seeking committee input on the term “receipt” in the context of the appeal process. The department routinely sends its reconsideration determination to districts by email as well as certified mail. Districts have 15 calendar days to request an appeal. Statute states requests are due “within 15 days after the date of the department’s decision”. Regulation states receipt of requests “within 15 calendar days after the receipt of that decision”. In today’s context, what is the determination of “receipt”? For the FY2022 appeal period the department based the appeal request deadline based on the date of the receipt of the email.

Protection of Structure / Life Safety / Code Deficiencies

See separate briefing paper.

Unhoused Students

The assignment of points for unhoused students—crowding—has significant weighting in the current CIP scoring and prioritization process. Crowding is a recognized ‘emergency’ in the sense of its adverse impact on teaching and learning. In measuring this condition, the department assigns a significant point value to current crowding conditions but also allows for priority points related to an increasing or forecasted condition. In forecasting crowding, the process allows for population projections of between five and eight years depending on scheduled completion of the proposed project.

During the FY22 CIP, a district sought consideration for potentially unhoused students due to a different type of ‘forecasted emergency’. In the specific case, erosion was projected to impact existing space making it unavailable to house students. Since this scoring element only applies to current, available school space, not future school space, no additional consideration was available to the district. For the committee’s consideration, this scoring element could be revised to include both the impact of projected populations on crowding, and the impact of projected facility loss on crowding. The challenge in accepting this new condition is the inability to accurately forecast facility loss. This inability will significantly increase the amount of subjective evaluation within this formula-driven scoring element. We recommend tempering this uncertainty by reducing the available points by 50% when unhoused students are calculated based on the forecasted loss of school space from that amount allowed when the calculation is based on a forecasted population increase. In addition, there would need to be a preponderance of evidence that the loss was imminent and would occur within the next two years. A district would need to provide a specific plan for how it was going to do without the building when the time came and how the building would be disposed of.

Preventive Maintenance and Facility Management Scoring

Matrices for scoring preventive maintenance and facility management narrative questions were presented and approved for inclusion in the March meeting. These questions currently do not have detailed scoring information, and rater's and applicants were guided by five to six bulleted questions per narrative. Instructions for the narrative questions were updated to reflect the itemized language of the matrices.

Proposed FY2023 Application Changes

The following changes have been identified as potential changes to the FY2023 CIP application and support materials.

Application Changes

Conforming changes to fiscal year information.

Sec. 5 Unhoused Students

- Add additional data items to confirm space eligibility.

Attachment Checklist

- Add item to "District eligibility attachments" for preventive maintenance narrative supplemental documents.

Application Instruction Changes

Adjustments will be made to the Application Instructions that correspond to the above Application Changes. In addition --

Sec. 3 Project Information

- Add language regarding regulatory timelines for reimbursement.

Sec. 5 Unhoused Students

- Add language regarding calculation of existing and eligible square footage.
- Add language to specifically allow an unhoused projection due to loss of facility.

Sec. 6 Project Planning & Design

- Update energy standard reference from ASHRAE 90.1-2010 to ASHRAE 90.1-2016.
- Add clarification that prior building system design must be formally adopted.

Sec. 7 Cost Estimate

- Add note regarding cost estimate format.

Sec. 9. Preventive Maintenance & Facility Management

- Add language regarding supplemental documents with narratives (Q.9a, 9e, 9g, 9h, 9i).

Eligibility Form Changes

No proposed changes.

Rater's Guide Changes

- Add new matrix for preventive maintenance narrative (Q.9a, 9e, 9g, 9h, 9i).

Rating Form Changes

No proposed changes.

Department of Education & Early Development

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THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

To: Bond Reimbursement & Grant Review Committee
From: School Facilities
Date: April 14, 2021

LIFE SAFETY MATRIX DISCUSSION PAPER

Background

Life Safety/Code Weighted Scoring FY21 CIP

FY21 was the second year of utilizing the “*Code Deficiency, Protection of Structure, Life Safety*” (LS) matrix. Over that period, the weighting of points on mixed scope projects surfaced as a concern. The method of weighting scores solely on the ratio of the cost of LS/Code work to the total construction costs was fine for most projects. However, if a project included a high point value item (e.g., Building Egress [25]) that could be resolved at a small cost, the effect was to over-inflate the importance of that work in the point value assigned. As shown in the table below, the net effect of this factor resulted in a significant increase in both the number of high-scoring projects and in the top scores being assigned. Prior to the LS/Code Matrix, the raters would have adjusted for this situation using the consensus process. However, in an effort to keep this scoring element as objective as possible, the department—based on extensive analysis—proposed a formula based weighting calculation. The committee approved that weighting formula for use in the FY22 CIP rating year.

Life Safety/Code Weighted Scoring FY22 CIP

After two cycles of utilizing the “*Code Deficiency, Protection of Structure, Life Safety*” (LS) matrix, for FY22, the Committee—on recommendation from the Facilities staff—did its first substantive overhaul of the matrix. The FY22 LS matrix introduced two additional condition and deleted one, added some flexibility in assigning condition points by raters, and implemented the new weighting calculation for projects with a mix of LS and non-LS conditions. As scores were calculated, the new weighting factor did not seem to achieve the desired results. It also returned some peculiar results on some projects by increasing an individual condition’s weighting beyond the baseline of the cost of all LS/Code work to the total construction costs. As a result, the jump in scores from pre-matrix (FY19 and earlier) to post-matrix remains a concern. The table below shows the top 20 scores awarded (and reused) in the LS category over the past 10 CIP years. Of particular interest is the continued upward trend (4%) in the average of these scores in spite of the introduction of the new weighting factor. We anticipated the opposite result, that the FY22 weighting factor would moderate the scores and reduce this average in the 4% range.

					*			**		FY22 (Init)
	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	
<i>High</i>	23.33	21.00	20.00	23.33	35.00	30.67	30.67	39.50	50.00	50.00
<i>2nd</i>	20.33	20.67	19.67	21.33	31.33	29.67	29.33	39.41	42.00	50.00
<i>3rd</i>	20.33	20.00	18.00	19.67	30.67	29.33	29.00	29.64	40.64	50.00
<i>4th</i>	19.33	19.33	18.00	18.33	29.33	29.33	27.00	29.63	39.50	41.42
<i>5th</i>	18.67	18.00	17.33	18.00	28.33	29.00	24.33	27.48	37.51	39.33
<i>6th</i>	18.67	17.67	17.00	18.00	28.33	28.33	24.33	26.67	35.85	38.00
<i>7th</i>	18.00	17.33	16.67	17.33	28.33	27.00	22.67	23.21	34.91	37.51
<i>8th</i>	17.67	17.33	16.00	17.33	27.33	26.67	21.67	21.67	33.77	35.85
<i>9th</i>	17.33	16.67	15.33	17.00	27.33	26.67	21.00	21.28	31.91	33.77
<i>10th</i>	17.33	16.67	15.00	15.33	26.67	26.33	21.00	20.67	29.64	31.91
<i>11th</i>	16.33	16.67	15.00	15.00	26.33	26.33	20.67	19.67	29.63	29.16
<i>12th</i>	16.33	16.33	14.33	14.67	26.33	26.33	20.33	19.00	29.00	29.00
<i>13th</i>	16.00	16.00	14.00	14.00	26.33	26.00	20.00	18.18	27.67	28.40
<i>14th</i>	15.67	16.00	14.00	13.67	26.00	25.67	20.00	18.00	27.48	27.67
<i>15th</i>	15.67	15.67	14.00	13.67	25.67	25.33	20.00	17.33	27.00	27.00
<i>16th</i>	14.67	15.67	13.67	13.33	25.67	25.00	19.67	17.33	26.67	23.58
<i>17th</i>	14.67	15.67	13.67	13.33	25.67	24.67	19.67	17.13	24.00	21.87
<i>18th</i>	14.00	15.67	13.33	13.33	25.33	24.33	19.67	16.67	23.21	21.84
<i>19th</i>	14.00	15.67	13.33	13.33	25.00	24.33	19.67	15.58	21.59	21.00
<i>20th</i>	13.67	15.00	13.00	13.00	24.67	24.00	19.33	15.33	21.28	20.79
<i>Average of above</i>	17.10	17.15	15.57	16.15	27.48	26.75	22.50	22.67	31.66	32.91

Notes: * Application re-write completed in FY17 with a stated purpose of assigning higher scores to projects, utilizing a broader range in the LS scoring category.

** Introduction of the new LS matrix in FY20.

At the December 2, 2020 BRGR meeting, the department proposed another revision to the weighting of LS/Code and non-LS/Code work in a single project. On February 25, 2021, the department presented three options for a revised weighting calculation but noted that additional historical comparison was needed. This paper presents data for consideration of a final revision for use in the FY23 CIP application.

Discussion

In developing the weighting factor calculation for the FY22 CIP, the department selected a method based on a graphical analysis of a condition’s point value and that same condition’s dollar value (i.e., cost) compared to the total construction cost. In reviewing this graphical analysis on several projects, it appeared this correlation between points and cost percentage would yield the most useful weighting modifier. In retrospect, the decision to correlate point values and cost percentages was not sustainable across all projects. In the FY22 cohort, 12 of 75 projects exhibited unexpected anomalies that increased scores in one or more conditions beyond the baseline percentage of LS/Code work to all project work.

The department went back to the data and developed some more traditional correlations using ‘percent’ as the comparative metric. In that analysis (2/25/2021), all conditions were evaluated for where the ratio of cost-to-correct to project-cost became a material difference in the weighting of points. After running several scenarios, it was determined that materiality occurred when that cost ratio was greater than twice the point ratio of the condition-points to the total-points. After hitting that materiality threshold for a specific condition, the following options were explored:

Option 1 – Condition Points Modified by Condition Cost to Total Cost

Option 1 Variations – set minimum weighted point values:

Opt. 1 with a minimum 1 point floor

Opt. 1 with a minimum score of 10% of a condition’s assigned points

Option 2 – Condition Points Modified by Condition Points to Total Points

Option 2 Variation – set minimum weighted point values:

Opt. 2 with a minimum 1 point floor

Option 3 – Condition Points Modified by Condition Cost to Total Cost with Additional Modifier of Condition Points to Total Points

Recommendation

The department recommends Option 2 with a minimum 1 point floor. In the attached Project Comparison, that method resulted in an incremental increase in the lowest scores, an identical or similar score at quartiles 25, 50 and 75%, and a moderation of the maximum score by 27%.

Note: A project-by-project comparative score will be provided as a supplement to the packet for the CIP years FY20, FY21 and FY22.

ProjectName	Raw Points	Current FY22 Weighting Pts	Opt 1 LS\$/Total\$	Opt 1 w 1pt min	Opt 1 w 10%pt min	Option 2	Opt 2 w 1pt min	Option 3	LS Construction Cost	Total Construction Cost	% LS Cost / Const Cost	# of Conditions
Chenega Bay K-12 School Renovation	118.00	59.04	30.46	36.45	33.95	36.85	41.00	53.10	\$1,613,138	\$2,697,018	60%	14
East High School Gym Improvements	112.00	29.78	19.11	23.71	23.81	29.12	31.07	26.72	\$2,120,966	\$4,524,782	47%	14
Tatitlek K-12 School Renovation	110.00	42.66	26.31	33.54	32.24	34.01	38.58	39.06	\$2,074,436	\$2,789,093	74%	16
Galena Interior Lighting Academy Composite Building Renovation	107.00	54.62	36.06	40.72	39.62	40.75	43.24	47.08	\$1,444,022	\$2,206,076	65%	16
Sandpoint K-12 School Major Maintenance	100.00	38.11	20.85	23.83	26.13	32.00	32.84	32.62	\$1,658,165	\$2,377,987	70%	11
Minto K-12 School Renovation/Addition	93.00	25.17	3.96	12.10	10.60	12.63	16.85	17.02	\$1,117,211	\$4,254,939	26%	13
Hollis K-12 School Replacement	87.00	16.78	2.36	11.04	9.14	13.95	19.05	12.53	\$799,324	\$4,598,821	17%	12
Craig Middle School Code and Security Improvements	78.00	39.27	30.70	35.26	33.16	32.99	35.54	35.36	\$1,891,300	\$3,062,930	62%	13
Eagle River Elementary School Improvements	76.00	28.89	16.77	20.36	18.96	23.93	25.85	22.91	\$2,725,589	\$5,214,921	52%	7
William N. Miller K-12 Memorial School Replacement, Napakiak	58.00	10.75	1.81	7.32	6.32	11.08	13.37	4.78	\$3,078,522	\$18,694,518	16%	8
Tri-Valley School Partial Roof Replacement	45.00	17.73	7.64	8.29	8.29	19.66	19.66	11.84	\$101,147	\$284,939	35%	3
Gruening Middle School Improvements	37.00	8.06	0.47	8.00	3.70	7.05	11.57	4.79	\$1,902,686	\$14,688,709	13%	8
Mears Middle School Roof Replacement	35.00	9.78	9.20	10.02	11.42	25.48	25.48	9.28	\$4,514,206	\$5,504,890	82%	3
Hooper Bay K-12 School Exterior Repairs	33.00	20.93	8.60	9.56	8.86	19.52	20.25	9.95	\$2,179,699	\$3,056,908	71%	4
Haines High School Locker Room Renovation	32.00	20.15	12.66	13.61	12.81	16.60	17.48	17.01	\$235,507	\$373,975	63%	7
Bear Valley Elementary Domestic Water Replacement	29.00	15.93	10.15	11.14	10.44	15.05	15.74	13.71	\$598,861	\$1,012,421	59%	3
Anderson Elementary Renovation	27.00	21.92	13.55	13.55	13.55	17.51	17.51	15.26	\$1,513,008	\$1,864,032	81%	2
Bayshore Elementary School Boiler Replacement	25.00	12.53	10.70	11.64	11.04	11.28	11.64	10.96	\$313,537	\$618,560	51%	2
West High School Utilidor	24.00	10.50	10.50	11.50	10.80	10.88	11.50	10.50	\$484,148	\$968,295	50%	3
Anne Wien Elementary Renovation	23.00	19.27	7.92	8.82	8.12	13.35	13.96	9.63	\$2,021,533	\$2,412,891	84%	3
Koyukuk K-12 School Boiler Replacement	23.00	20.52	20.52	20.52	20.52	20.52	20.52	20.52	\$185,380	\$207,755	89%	2
Tanana Middle School Classroom Upgrades	21.00	16.62	15.09	16.04	15.24	15.23	16.04	15.57	\$3,111,587	\$3,930,900	79%	6
Pearl Creek Elementary Classroom Upgrades	21.00	14.05	10.46	11.03	10.63	11.75	11.75	11.53	\$1,500,468	\$2,242,869	67%	4
Weller Elementary School Classroom Upgrades	21.00	15.20	11.28	11.86	11.46	12.57	12.57	12.35	\$1,676,042	\$2,315,588	72%	4
Water Storage And Treatment, Kongiganak	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	\$1,313,004	\$1,313,004	100%	2

ProjectName	Raw Points	Current FY22 Weighting Pts	Opt 1 LS\$/Total\$	Opt 1 w 1pt min	Opt 1 w 10%pt min	Option 2	Opt 2 w 1pt min	Option 3	LS Construction Cost	Total Construction Cost	% LS Cost / Const Cost	# of Conditions
Bethel Campus High School Boardwalk Replacement	20.00	15.92	13.13	13.74	13.14	13.54	13.74	14.70	\$528,786	\$664,164	80%	3
Jack Egnaty Sr. K-12 School Roof Repalcement, Sleetmute	19.00	13.00	6.37	7.96	7.26	11.69	12.22	6.76	\$397,120	\$399,930	99%	3
Keet Gooshi Heen Elementary Covered PE Structure Renovation	19.00	9.81	4.06	5.10	4.40	10.73	11.68	4.97	\$128,100	\$248,150	52%	3
Bristol Bay Elementary and Gym Roof Replacement	18.00	9.02	5.29	6.00	6.00	10.56	10.56	5.52	\$810,424	\$1,295,426	63%	7
Administrative Center Renovation, Phase 2	18.00	15.45	6.40	7.32	6.62	11.07	11.57	8.66	\$854,110	\$995,310	86%	3
Blackwell K-12 School Fire Alarm Upgrades, Anvik	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	\$74,912	\$74,912	100%	2
Gladys Jung Elementary School Heating Mains Replacement	16.00	12.80	12.80	12.80	12.80	12.80	12.80	12.80	\$850,000	\$1,062,500	80%	1
Butte And Snowshoe Elementary Schools Water System Replacement	16.00	13.31	13.31	13.31	13.31	13.31	13.31	13.31	\$664,268	\$798,572	83%	1
Marshall K-12 School Emergency Tank Farm Repair	15.00	9.60	9.60	9.60	9.60	9.60	9.60	9.60	\$1,047,277	\$1,636,371	64%	1
Generator Replacement, 3 Schools	14.00	8.86	4.07	4.73	4.73	10.87	10.87	4.20	\$825,000	\$885,000	93%	2
Exterior Upgrades- Main School Facilities	14.00	14.00	4.04	4.04	4.04	12.29	12.29	4.38	\$120,816	\$120,816	100%	2
Bethel Campus Transportation and Drainage Upgrades	13.00	12.35	8.75	9.55	8.95	9.78	9.78	9.20	\$296,806	\$312,427	95%	3
Big Lake Elementary School Water System Replacement #2	13.00	12.48	3.03	3.96	3.26	7.54	7.84	3.95	\$362,774	\$377,773	96%	3
Administrative Center Air Conditioning and Ventilation Replacement	12.00	10.68	3.35	4.04	3.84	8.37	8.37	3.51	\$849,229	\$1,117,748	76%	2
Playground Construction, 3 Schools	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	\$344,627	\$344,627	100%	1
Woodriver Elementary School Roof Replacement	11.00	9.87	9.87	9.87	9.87	9.87	9.87	9.87	\$1,187,720	\$1,324,307	90%	2
Tuluksak K-12 School Fuel Tank Replacement	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	\$3,063,370	\$3,063,370	100%	1
Ben Eielson Jr/Sr High School Roof Replacement	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	\$2,975,300	\$2,975,300	100%	1
Riverbend Elementary School Roof Replacement	8.00	6.56	6.56	6.56	6.56	6.56	6.56	6.56	\$912,600	\$1,112,800	82%	1
Kenai Middle School Security Remodel	8.00	2.19	0.85	2.27	0.97	3.40	3.40	1.57	\$186,502	\$681,147	27%	3

ProjectName	Raw Points	Current FY22 Weighting Pts	Opt 1 LS\$/Total\$	Opt 1 w 1pt min	Opt 1 w 10%pt min	Option 2	Opt 2 w 1pt min	Option 3	LS Construction Cost	Total Construction Cost	% LS Cost / Const Cost	# of Conditions
Seward Middle School Upgrades	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	\$385,000	\$385,000	100%	2
HVAC Control Upgrades #2, 6 Sites	8.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60	\$3,754,615	\$5,363,735	70%	1
Nome Beltz Jr/Sr High School Boiler Replacement	8.00	7.34	7.34	7.34	7.34	7.34	7.34	7.34	\$89,246	\$97,246	92%	1
YKSD District Office Roof Repalcement	8.00	7.60	7.60	7.60	7.60	7.60	7.60	7.60	\$147,559	\$155,325	95%	1
Fire Alarm Upgrades, 3 Sites	7.00	7.00	6.03	7.00	6.10	6.14	7.00	6.20	\$179,785	\$179,785	100%	2
Kotlik And Pilot Station K-12 Schools Renewal and Repair	7.00	5.24	5.24	5.24	5.24	5.24	5.24	5.24	\$818,540	\$1,094,207	75%	2
Anderson K-12 School Partial Roof Replacement	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	\$1,044,027	\$1,044,027	100%	1
District Seismic Upgrades, 5 Sites	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	\$9,779,369	\$9,779,369	100%	1
Nome Elementary Fire Alarm Replacement	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	\$257,599	\$257,599	100%	1
District Elevators, 6 Sites	5.00	4.00	2.00	2.00	2.00	4.00	4.00	2.30	\$558,160	\$697,700	80%	2
Chugiak High School Track Improvements	4.00	2.00	2.00	2.00	2.00	4.00	4.00	2.00	\$293,434	\$586,868	50%	1
Anvil City Charter School Restroom Renovation	4.00	4.00	1.52	2.00	1.30	3.25	3.25	1.69	\$320,693	\$320,693	100%	2
Ceiling And Sprinkler Upgrades, 5 Sites	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	\$1,882,751	\$1,882,751	100%	1
Nome Schools DDC Control Upgrades	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	\$1,324,895	\$1,324,895	100%	1
Mechanical System Improvements, 3 Sites	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	\$233,950	\$233,950	100%	1
Scammon Bay K-12 School Siding	2.00	1.90	1.90	1.90	1.90	1.90	1.90	1.90	\$925,327	\$976,126	95%	1
Sheldon Point K-12 School Exterior	2.00	0.63	0.63	1.00	0.20	2.00	2.00	0.63	\$313,658	\$997,853	31%	1
Minimum	2.00	0.63	0.47	1.00	0.20	1.90	1.90	0.63				
Q1	8.00	7.09	4.05	5.70	5.33	6.68	7.09	5.04				
Average	27.85	14.39	9.54	10.89	10.46	12.84	13.52	11.73				
Median	17.00	11.38	7.78	8.56	8.21	10.97	11.61	9.24				
Q3	28.50	17.49	12.49	12.63	12.60	15.19	17.32	13.61				
Maximum	118.00	59.04	36.06	40.72	39.62	40.75	43.24	53.10				
Note: Any score that achieves greater than 50 points will be capped at 50 points in the ranking process.												

Summary of Changes: FY2023 CIP Application & Instructions

Question	Application	Instructions	Magnitude of Change
Preparing & Submitting	--	Split mailing address versus physical delivery address.	Minor
3f	--	Add language providing regulatory guidance on timeline for submitting for reimbursement of project costs.	Minor
4a	Correct Roof/Envelope 12 point condition “Windows, age >20” to “>30” (conforms to FY22 & FY23 Rater’s Guide)	--	Minor
5e	--	Add notation on reduced percentage of projected unhoused points for projects utilizing imminent loss of facility.	Moderate
5g	Add additional inputs to confirm gross square footage eligibility.	Add guidance on existing space is used for calculating existing gross square footage and instruction for new inputs.	Minor
5g	--	Add language specifying that the existing GSF can be reduced based on environmental factors causing an imminent loss of buildings and providing certain conditions.	Moderate
6c	--	Update ASHRAE 90.1 reference to 2016 edition. Add clarification that prior building system standards must be adopted, not just a previously bid specification.	Minor
Table 7.2	--	Add note on cost estimate format.	Minor
Sec. 9	--	Add language identifying supplemental documents for each narrative; conforms to <i>Guidelines for Raters</i> draft PM matrices. Provide additional guidance on narrative development.	Major
District Attachment	Add language regarding Sec. 9 supplemental preventive maintenance documents.	--	Moderate
All	Footer: conforming changes for new fiscal year and form	Footer: conforming changes for new fiscal year and form	Minor

For changes to the *Guidelines for Raters*, see draft.



Application for Funding
Capital Improvement Project by Grant
or
State Aid for Debt Retirement

FY2022

PREPARING & SUBMITTING THIS APPLICATION

For each funding request, submit one original and three complete copies of this application and two copies of each attachment. Attachments can be provided in a single copy if electronic files of the attachments are also provided in a portable document file (pdf) format. PDF files of all documents are requested but not required. The grant application deadline is September 1st.

When answering application questions, provide verifiable supporting documentation. Answers that cannot be verified will be considered unsubstantiated and may result in the department finding the application ineligible due to incompleteness.

The department will only score ten project applications from each district during a single rating period. In addition, a district can submit a letter to request reuse of an application's score for one year after the application was filed; or, if the project was substantially complete at the time of the application, the district can request reuse of the application's score for up to five years after the application was filed.

For instructions on completing this application, please refer to the department's Capital Improvement Project Application and Support webpage (education.alaska.gov/facilities/FacilitiesCIP.html).

PROJECT INFORMATION

School District: _____
Community: _____
School Name: _____
Project Name: _____

CERTIFICATION

I hereby certify that this information is true and correct to the best of my knowledge, and that the application has been prepared under the direction of the district school board and is submitted in accordance with law.

Superintendent or Chief School Administrator Date

SEC. 1. CATEGORY OF FUNDING AND PROJECT TYPE

1a. Type of funding requested. Choose only **one** funding source.

- Grant Funding Aid for Debt Retirement (Bonding)

1b. Primary purpose of project. Choose only **one** category. The department will change a project category as necessary to reflect the primary purpose of the project.¹

Grant Funding Categories per AS 14.11.013(a)(1)	Debt Funding Categories per AS 14.11.100(j)(4)
<p>School Construction:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Health and life-safety (Category A) <input type="checkbox"/> Unhoused students (Category B) <input type="checkbox"/> Improve instructional program (Category F) <p>Major Maintenance:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Protection of structure (Category C) <input type="checkbox"/> Building code deficiencies (Category D) <input type="checkbox"/> Achieve operating cost savings (Category E) 	<ul style="list-style-type: none"> <input type="checkbox"/> Unhoused students <input type="checkbox"/> Health and safety or building code deficiencies <input type="checkbox"/> Achieve operating cost savings <input type="checkbox"/> Improve instructional program

1c. Phases of project to be covered by this funding request. Indicate **all** applicable phases:

- Planning (Phase I) Design (Phase II) Construction (Phase III)

SEC. 2. ELIGIBILITY REQUIREMENTS TO SUBMIT AN APPLICATION

Questions 2a-2e require a “yes” response, with substantiating documentation as necessary, in order to be eligible for review and rating.

2a. Has a six-year Capital Improvement Plan (CIP) been approved by the district school board? yes no

(Refer to AS 14.11.011(b), and 4 AAC 31.011(c); attach a copy of the 6-year plan.)

2b. Does the school district have a functional fixed asset inventory system? yes no

2c. Is evidence of required insurance attached to this application *or* has evidence been submitted as required to the department? yes no

¹ The department’s authority to assign a project to its correct category is established in AS 14.11.013(c)(1) and in AS 14.11.013(a)(1) under its obligation to verify a project meets the criteria established by the Bond Reimbursement & Grant Review Committee under AS 14.11.014(b).

2d. Is the project a capital improvement project and not part of a preventive maintenance program or custodial care? yes no

(Supporting evidence must be outlined in the project description, question 3d. Reference AS 14.11.011(b)(3))

2e. Is the district’s preventive maintenance program certified by the department? yes no

2f. Districtwide replacement cost insurance for the last five years will be gathered by the department from annual insurance certification and schedule of values.

SEC. 3. PROJECT INFORMATION

3a. Priority assigned by the district. (Up to 30 points)

What is the rank of this project under the district’s six-year Capital Improvement Plan?

Rank: _____

3b. School facilities within scope (Up to 30 points)

What buildings or building portion (i.e., original building or addition) will be included in the scope of work of the project? (Add additional rows as needed to include all affected buildings or building portions.)

(The department will utilize GSF records to establish project points (up to 30) in the “Weighted Average Age of Facilities” scoring element. For facility number, name, year, and size information on record, refer to the DEED Facilities Database (education.alaska.gov/Facilities/SchoolFacilityReport/SearchforSchoolFac.cfm).

DEED Facility #	Building or Building Portion	Year Built	GSF
TOTAL GSF			

3c. Facility status. Does this project change the status of any facility within the project scope to one of the below? The existing building(s) will be (check all that apply):

renovated added to demolished surplusd other

NOTE: If the project changes the current status of a facility to “demolished” or “surplusd,” a transition plan is required as part of this application. For state-owned or state-leased facilities, the transition plan should describe how surplusd facilities will be secured and maintained during transition. See instructions.

3d. Project description/Scope of work. The project description and scope of work narratives are a required elements of this application (Reference AS 14.11.013(c)(3)(A)). Ensure project aligns with selected funding category.

Project description

In the space below, provide a clear, detailed description of the project. At a minimum, include the following:

- Facilities impacted by the project
- Age of facility/system(s)
- Facility/system conditions requiring capital improvement
- Explain why this project is not preventive maintenance
- Other discussion describing project

Scope of work

In the space below, provide a clear, detailed, and itemized description of the scope of work that addresses the items in the project description. At a minimum, include the following:

- Work items to be completed with this project
- Work items already completed (if any)
- Other discussion pertaining to scope of work

3e. Project schedule. Provide estimated or actual dates for the following project milestones.

Estimated receipt of funding date	_____
Contract with design team	_____
Begin design	_____
Design work 100% complete	_____
Project out to bid	_____
Begin construction	_____
Complete construction	_____

Provide additional information regarding the project schedule, if needed (including whether an alternative project delivery method is anticipated).

3f. Is the work identified in this project request partially or fully complete? yes no

If the answer is yes, attach 2 copies of documentation that establishes compliance with the department’s requirements for bids and awards of construction contracts. (Reference 4 AAC 31.080)

Provide DEED recovery of funds project number: # _____

3g. Will this project require acquisition of additional land or utilization of a new school site? yes no

If the answer is yes, attach site description or site requirements. If a new site has been identified, attach the site selection analysis used to select the new site. Note the attachment on the last page of the application.

3h. If the project is a multiple-school or districtwide project, provide justification for cost-effectiveness and how the district intends to award as a single contract.

SEC. 4. CODE DEFICIENCY / PROTECTION OF STRUCTURE / LIFE SAFETY

4a. Code deficiency / Protection of structure / Life safety (Up to 50 points)

Describe in detail the issue, impact, and severity of code deficiency, protection of structure, and/or life safety conditions; attach supporting documentation. Check the box of the specific scoring conditions corrected by the scope of the project and where the supporting documentation is located in the attachments.

Structural

- | | | | |
|--|--------------------------|---|--------------------------|
| Seismic - no restrictions (3 pts) | <input type="checkbox"/> | Upper Floor Structure - PE eval (20 pts) | <input type="checkbox"/> |
| Foundation/Floor - no PE eval (4 pts) | <input type="checkbox"/> | Vertical Structure – PE eval (20 pts) | <input type="checkbox"/> |
| Seismic - minimal restrictions (6 pts) | <input type="checkbox"/> | Roof Structure - PE eval (24 pts) | <input type="checkbox"/> |
| Upper Floor Structure - no PE eval (9 pts) | <input type="checkbox"/> | Seismic/Gravity Partial Closure (28 pts unless does not qualify for space, then 15 pts) | <input type="checkbox"/> |
| Vertical Structure - no PE eval (9 pts) | <input type="checkbox"/> | Seismic/Gravity Full Closure (50 pts unless does not qualify for space, then 15 pts) | <input type="checkbox"/> |
| Roof Structure - no PE eval (10 pts) | <input type="checkbox"/> | | |
| Foundation/Floor – PE eval (15 pts) | <input type="checkbox"/> | | |
| Seismic - moderate restriction (15 pts) | <input type="checkbox"/> | | |

Provide description of structural-related conditions and specific references to title and page of support documents.

Roof/Envelope

- | | | | |
|-----------------------------------|--------------------------|--|--------------------------|
| Siding Failure, age <25yr (2 pts) | <input type="checkbox"/> | ASHRAE 90.1 Insulation (10 pts) | <input type="checkbox"/> |
| Siding Finish (2 pts) | <input type="checkbox"/> | Siding, age >25yr (12 pts) | <input type="checkbox"/> |
| Door, age >20yr (3 pts) | <input type="checkbox"/> | Windows, age > 20yrs 30yrs (12 pts) | <input type="checkbox"/> |
| Roof, age >Warranty +5 (3 pts) | <input type="checkbox"/> | Siding Failure, age <30yr (15 pts) | <input type="checkbox"/> |
| Roof, age Warranty +10 (6 pts) | <input type="checkbox"/> | Roof Leaks, avg WO >3/yr (15 pts) | <input type="checkbox"/> |
| Roof Leaks - avg WO<3/yr (8 pts) | <input type="checkbox"/> | Doors w/Egress issues (15 pts) | <input type="checkbox"/> |
| ASHRAE 90.1 Windows (8 pts) | <input type="checkbox"/> | Roof Leaks affect space (25 pts) | <input type="checkbox"/> |

NOTE: If condition is based on an average number of work orders per year (“avg WO”), provide work orders. Average is over prior three years. See application instructions.

If condition is based on ASHRAE 90.1 code deficiency, provide existing R-value or code violation of system

Provide description of roof or building envelope-related conditions and specific references to title and page of support documents.

Architectural/Interior/ADA

- | | | | |
|------------------------------------|--------------------------|-------------------------------------|--------------------------|
| ADA - 1 issue (1 pts) | <input type="checkbox"/> | Elevator Code Deficiencies | <input type="checkbox"/> |
| ADA - 2 issues (2 pts) | <input type="checkbox"/> | ADA - 4 issues (4 pts) | <input type="checkbox"/> |
| DEC Sanitation (2 pts) | <input type="checkbox"/> | Floor Finishes >15yr (4 pts) | <input type="checkbox"/> |
| ADA - 3 issues (3 pts) | <input type="checkbox"/> | Building Egress (10 pts) | <input type="checkbox"/> |
| Ceiling Finishes age >25yr (3 pts) | <input type="checkbox"/> | Rated Assemblies (12 pts) | <input type="checkbox"/> |
| Wall Finishes age >25yr (3 pts) | <input type="checkbox"/> | Codes + Arch (each system) (+3 pts) | <input type="checkbox"/> |

Provide description of architectural, interior, or ADA-related conditions and specific references to title and page of support documents.

Mechanical

DDC Deficiency (3 pts)	<input type="checkbox"/>	Codes: Ventilation (12 pts)	<input type="checkbox"/>
Narrative, System age >30yr (4 pts)	<input type="checkbox"/>	Codes: Plumbing (12 pts)	<input type="checkbox"/>
Ventilation, WO <3/yr (5 pts)	<input type="checkbox"/>	Codes: Heating (13 pts)	<input type="checkbox"/>
Plumbing, WO <3/yr (6 pts)	<input type="checkbox"/>	Codes + PE eval (each system) (+3 pts)	<input type="checkbox"/>
Heating, WO <3/yr (7 pts)	<input type="checkbox"/>	Boilers, 1 of 2 Non-op (13 pts)	<input type="checkbox"/>
Pneumatic Controls (8 pts)	<input type="checkbox"/>	HVAC age >40yr (15 pts)	<input type="checkbox"/>
Ventilation, WO >3/yr (9 pts)	<input type="checkbox"/>	Boilers, 2 of 3 Non-op (18 pts)	<input type="checkbox"/>
Plumbing, WO >3/yr (10 pts)	<input type="checkbox"/>	Mechanical Systems, WO >5/yr2 (21 pts)	<input type="checkbox"/>
Heating, WO >3/yr (11 pts)	<input type="checkbox"/>	Heating Failure (25 pts)	<input type="checkbox"/>

NOTE: If condition is based on an average number of work orders per year (“avg WO”), provide work orders. Average is over prior three years. See application instructions.

Provide description of mechanical-related conditions and specific references to title and page of support documents.

Electrical

Narrative, Lighting age >25yr (2 pts)	<input type="checkbox"/>	Intercom Issues, WO >3/yr (8 pts)	<input type="checkbox"/>
Narrative, Electrical age >30yr (4 pts)	<input type="checkbox"/>	Codes, Lighting (10 pts)	<input type="checkbox"/>
Power, WO <3/yr (4 pts)	<input type="checkbox"/>	Codes, Power (10 pts)	<input type="checkbox"/>
Lighting, WO <3/yr (4 pts)	<input type="checkbox"/>	Codes + PE eval (each system) (+3 pts)	<input type="checkbox"/>
Egress/EM lights, WO <3/yr (5 pts)	<input type="checkbox"/>	Intercom Failure (10 pts)	<input type="checkbox"/>
Back-up Generator In-operable (5 pts)	<input type="checkbox"/>	Electrical, age >40yr (15 pts)	<input type="checkbox"/>
Power, WO >3/yr (7 pts)	<input type="checkbox"/>	Light Levels, <50% of code (16 pts)	<input type="checkbox"/>
Lighting, WO >3/yr (7 pts)	<input type="checkbox"/>	Electrical Systems, WO >5/yr (21 pts)	<input type="checkbox"/>
Egress/EM lights, WO >3/yr (8 pts)	<input type="checkbox"/>	Power Failure (25 pts)	<input type="checkbox"/>

NOTE: If condition is based on an average number of work orders per year (“avg WO”), provide work orders. Average is over prior three years. See application instructions.

Provide description of electrical-related conditions and specific references to title and page of support documents.

Fire Alarm/Sprinkler

Narrative, Fire Alarm age >15yr (2 pts)	<input type="checkbox"/>	Heads Failing, age >40yr (10 pts)	<input type="checkbox"/>
Narrative, Sprinkler >30yr (2 pts)	<input type="checkbox"/>	Fire Alarm/Sprinkler, WO >3/yr (15 pts)	<input type="checkbox"/>
Heads Failing, age >30yr (5 pts)	<input type="checkbox"/>	Fire Alarm Non-op, <3 floors (17 pts)	<input type="checkbox"/>
Sprinkler Coverage Gaps (5 pts)	<input type="checkbox"/>	Fire Alarm/Sprinkler, WO >5/yr (20 pts)	<input type="checkbox"/>
Non-addressable Fire Alarm (6 pts)	<input type="checkbox"/>	Fire Alarm Non-op, >3 floors (25 pts)	<input type="checkbox"/>
Fire Alarm/Sprinkler, WO >1/yr (8 pts)	<input type="checkbox"/>	Sprinkler Non-op (30 pts)	<input type="checkbox"/>

NOTE: If condition is based on an average number of work orders per year (“avg WO”), provide work orders. Average is over prior three years. See application instructions.

Provide description of fire alarm or sprinkler-related conditions and specific references to title and page of support documents.

Site

- | | | | |
|-------------------------------|--------------------------|-----------------------------|--------------------------|
| Vehicle Surfaces (3 pts) | <input type="checkbox"/> | Power Issues (15 pts) | <input type="checkbox"/> |
| Walkways and Surfaces (4 pts) | <input type="checkbox"/> | Wastewater Issues (15 pts) | <input type="checkbox"/> |
| Drainage Issues (6 pts) | <input type="checkbox"/> | Water Issues (16 pts) | <input type="checkbox"/> |
| Playground Code (12 pts) | <input type="checkbox"/> | Wastewater Failure (24 pts) | <input type="checkbox"/> |
| | | Water Failure (25 pts) | <input type="checkbox"/> |

Provide description of site-related conditions and specific references to title and page of support documents.

UST/AST/HazMat

- | | | | |
|--|--------------------------|--------------------------------------|--------------------------|
| HazMat (all) Low Exposures (3 pts) | <input type="checkbox"/> | UST/AST Leak (7 pts) | <input type="checkbox"/> |
| Narrative, UST age >30yr (2 pts) | <input type="checkbox"/> | USCG/40 CFR Cite (10 pts) | <input type="checkbox"/> |
| Narrative, AST age >40yr (5 pts) | <input type="checkbox"/> | HazMat (all) Mod Exposures (10 pts) | <input type="checkbox"/> |
| Sewage Lagoon Failure/Exposure (5 pts) | <input type="checkbox"/> | HazMat (all) High Exposures (22 pts) | <input type="checkbox"/> |

Provide description of UST, AST, or HazMat-related conditions and specific references to title and page of support documents.

SEC. 5. REQUIREMENTS FOR SPACE TO BE ADDED OR REPLACED

NOTE: If this project is classified as Major Maintenance (Category C, D, or E) and is not including any new space, skip to 5j. **All applications requesting new or replacement space, or classified as School Construction (Category A, B, or F), must provide the information requested in this section.** For the purposes of this section, gross square footage is calculated in accordance with 4 AAC 31.020(e). Worksheets to be completed are available at the department’s website at: Education.Alaska.Gov/facilities/FacilitiesCIP.html

5a. Indicate the student grade levels to be housed in the proposed project facility: _____

5b. Is there any work (other than this project) within the attendance area that has been approved by local voters, or has been funded, or is in progress that houses any student grade levels included in the proposed project? yes no

If the answer is yes, in the table below, identify the project and provide information about size, grades to be served, and student capacity.

Project Name	GSF	Grades	Student Capacity

5c. Are there school facilities within the attendance area that house any student grade levels included in the proposed project? yes no

If the answer is yes, in the table below, identify the school and provide information about size, grades served, and student capacity.

School Name	GSF	Grades	Student Capacity

In lieu of data in the format above for questions 5b and 5c, we are providing detailed attachments. yes no

5d. What is the anticipated date of occupancy for the proposed facility? _____

5e. Unhoused students (Up to 80 points)

In the table below, provide the attendance area’s current and projected ADM:

Table 5.1 ATTENDANCE AREA ADM			
School Year	K-6 ADM	7-12 ADM	Total ADM
2019-2020			
2020-2021			
2021-2022			
2022-2023			
2023-2024			
2024-2025			
2025-2026			
2026-2027			
2027-2028			
2028-2029			

5f. Were the ADM projections used by the district based on the department’s worksheets? yes no

Attach calculations and justifications.

5g. Confirm space eligibility:

Total Existing SF

Remaining Existing SF

Total Eligible SF

Qualifies for _____ additional SF

Applying for _____ additional SF

5h. Regional community facilities (Up to 5 points)

List below any alternative regional, community, and school facilities in the area that are capable of meeting all, or part, of the project needs. Identify the facility by name, its condition, and provide the distance from current school. If attached documentation is intended to address this question, note the attachment on the last page of the application.

5i. Are educational specifications attached? yes no

ALL PROJECTS CONTINUE FROM THIS POINT

5j. Project space utilization (Up to 30 points)

Completion of this table is **mandatory for all projects that add space or change existing space utilization**. If the project does not alter the configuration of the existing space, it is not necessary to complete this table. Use gross square feet for space entries in this table.

Table 5.2 PROJECT SPACE EQUATION

	A	I	II	III	IV	B
Space Utilization	Existing Space	Space to remain "as is"	Space to be Renovated	Space to be Demolished	New Space	Total Space upon Completion
Elem. Instructional/Resource						
Sec. Instructional/Resource						
Support Teaching						
General Support						
Supplementary						
Total School Space						

SEC. 6: PROJECT PLANNING & DESIGN

NOTE: Reference Appendix B of the instructions for required elements. More developed design documents can be attached in lieu of previous documents.

6a. Condition/Component survey (0 to 10 points)

1. Is a facility or component condition survey attached? yes no

Document title: _____

Date prepared: _____

6b. Use of prior school design (up to 10 points)

1. Is the district proposing to use a previously department-approved design for this project? yes no
2. If yes, in addition to the space eligibility analysis in Section 5, has the district attached design plans and a cost analysis that includes both design and construction costs demonstrating how the use will result in cost savings for the project? yes no

6c. Use of building system design standard (up to 10 points; 2 points per qualified system)

1. Is the district proposing to use one or more previously approved building system design standard for this project? yes no
2. If yes, provide supporting information on each specific system showing that the building system(s) conform to a published district or municipal building standard.

6d. Planning/Concept design (0 or 10 points, all elements required for 10 points)

1. Has an architectural or engineering consultant been selected (as required)? yes no
2. Are concept design studies/planning cost estimates attached? yes no
3. New construction projects: are educational specifications, site selection analysis, and student population projections attached (as required)? yes no

6e. Schematic design - 35% (0 or 10 points, all elements required for 10 points as applicable to the project)

1. Are complete schematic design documents attached? Schematic design documents include approximate dimensioned site plans, floor plans, elevations, and engineering narratives for all necessary disciplines. If the answer is no and project is complete, provide a justification for why documents are not needed. yes no
2. Is a schematic design level cost estimate attached? yes no

6f. Design development - 65% (0 or 5 points, all elements required for 5 points as applicable to the project)

- 1. Are design development documents attached? Design development documents include dimensioned site plans, floor plans, complete exterior elevations, draft technical specifications and engineering plans. If the answer is no and project is complete, provide justification as to why documents are not needed. yes no
- 2. Is a design development cost estimate attached? yes no

6g. Planning/Design team List parties who have contributed to the evaluation and/or design services thus far for this project. When applicable, a district employee with special expertise should be listed, along with the basis for his or her expertise.

<u>Provider</u>	<u>Expertise</u>
_____	_____
_____	_____
_____	_____
_____	_____

SEC. 7: COST ESTIMATE

Cost estimate for total project cost (Up to 30 points)

7a. Project cost estimate Complete the following tables using the Department of Education & Early Development’s current Cost Model edition or an equivalent cost estimate. Completion of the tables is mandatory.

Percentages are based on construction cost. See Appendix C for additional information. If the project exceeds the recommended percentages, provide a detailed justification for each item exceeding the percentage. The total of all additive percentages should not exceed 130%. If the additive percentages exceed 130%, a detailed explanation must be provided or the department will adjust the percentages to meet the individual and overall percentage guidelines.

Table 7.1. TOTAL PROJECT COST ESTIMATE

Project Budget Category	Maximum % without justification	I Prior AS 14.11 Funding	II Current Project Request	III % of Total Construction Cost	IV Project Total
CM - By Consultant ¹	2 - 4%				
Land ²	n/a				
Site Investigation ²	n/a				
Seismic Hazard ³	n/a				
Design Services	6 - 10%				
Construction ⁴	n/a				
Equipment & Technology ^{2,5}	up to 4%				
District Administrative Overhead ⁶	up to 9%				
Art ⁷	0.5% or 1%				
Project Contingency	5%				
Project Total	up to 130%				

1. Percentage is established by AS 14.11.020(c) for consultant contracts (Maximum allowed percentage by total project cost: \$0-\$500,000 – 4%; \$500,001- \$5,000,000 – 3%; over \$5,000,000 – 2%).
2. Include only if necessary for completion of this project; address need in the project description (Question 3d). Amounts included for Land and Site Investigation costs need to be supported in the cost estimate discussion (Question 7c), and supporting documentation should be provided in the attachments.
3. Costs associated with assessment, design, design review, and special construction inspection services associated with seismic hazard mitigation of a school facility. This amount needs to be provided by a design consultant, and should not be estimated based on project percentage.
4. Attach detailed construction cost estimate and life cycle cost if project is new-in-lieu-of-renovation.
5. Equipment and technology costs should be calculated based on the number of students to be served by the project. See the department’s publication, *Guidelines for School Equipment Purchases* for calculation methodology (2016). Technology is included with Equipment.
6. Includes district/municipal/borough administrative costs necessary for the administration of this project (for maximum indirect percentage based on project cost, see 4 AAC 31.023); this budget line will also include any in-house construction management cost, reduced for CM percentage.
7. Only required for renovation and construction projects over \$250,000 that require an Educational Specification (AS 35.27.020(d)).

Table 7.2 CONSTRUCTION COST ESTIMATE						
Construction Category	New Construction			Renovation		
	Cost	GSF	Unit Cost	Cost	GSF	Unit Cost
Base Building Construction ¹						
Special Requirements ²		n/a			n/a	
Sitework and Utilities		n/a			n/a	
General Requirements		n/a			n/a	
Geographic Cost Factor		n/a			n/a	
Size/Dollar Adj. Factor		n/a			n/a	
Contingency		n/a			n/a	
Escalation		n/a			n/a	
Construction Total						

1. If using the Cost Model, Base Construction is equal to Divisions (1.0+2.0) for new construction, and Division 11.00 for Renovation, otherwise, Base Construction is equal to the total construction cost less the costs that correspond with other cost categories in the table.
2. Explain in detail and justify special requirements in Question 7c.

7b. Cost estimate source. Identify and describe as needed the specific source of the costs provided in Table 7.1 (e.g. professional estimators, solicited vendor quotes, paid invoices).

7c. Cost estimate discussion & justifications. Identify and explain cost estimate assumptions, lump sums, and percentages in excess of the recommended percentages in Table 7.1. Provide a detailed justification for each item exceeding a recommended percentage.

SEC. 8: ADDITIONAL PROJECT FACTORS

Emergency conditions are those that pose a high level of threat for building use by occupants.

8a Is this project an emergency? (Up to 50 points) yes no

Has the district submitted an insurance claim? yes no

If no, explain below.

If the project is an emergency, describe below in detail the nature, impact, and immediacy of the emergency and actions the district has taken to mitigate the emergency conditions.

Categorize the issues described and explained above by checking the boxes that apply to the building condition(s).

<u>Category of Conditions</u>	<u>Applicable</u>
Building is destroyed or rendered functionally unsafe for occupancy and requires the building to be demolished and rebuilt. (50 points)	<input type="checkbox"/>
Building is unsafe and the entire student population is temporarily unhoused. The building requires substantial repairs to be made safe for the student population to occupy the building. (25-45 points)	<input type="checkbox"/>
Building is occupied by the student population. A local or state official has issued an order that the building will need to be repaired by a certain date or the district will have to vacate the building. (5-25 points)	<input type="checkbox"/>
A portion of the building requires significant repair or replacement of damaged portion of building. The damaged portion of the building cannot be used for educational purposes. (5-45 points)	<input type="checkbox"/>
A major building component or system has completely failed and is no longer repairable. The failed system or component has rendered the facility unusable to the student population until replaced. (25-45 points)	<input type="checkbox"/>
A major building component or system has a high probability of completely failing in the near future. The component or system has failed, but has been repaired and may have limited functionality. If the component fails, the district may be required to restrict use of the building until the component or system is repaired or replaced. (5-25 points)	<input type="checkbox"/>

8b. Inadequacies of existing space (Up to 40 points)

Describe how the inadequacies of the existing space impact mandated instructional programs or existing or proposed local programs and how the project will improve the existing facilities to support the instructional programs.

8c. Other options (Up to 25 points)

Describe, in addition to the proposed project, at least two or more viable and realistic options that have been considered in the planning and development of this project to address the best solution for the facility.

Major maintenance projects should include consideration of project design options, material or component options, phasing, cost comparisons, or other considerations.

New school construction or addition/replacement of space projects should include a discussion of existing building renovation versus new construction, acquisition or use of alternative facilities, a life cycle cost analysis and cost benefit analysis, service area boundary changes where there are adjacent attendance areas, or other considerations.

8d. Annual operating cost savings (Up to 30 points)

Quantify the project’s annual operational cost savings, if any, in relation to the project total cost.

8e. Phased funding (Up to 30 points)

Provide AS 14.11 administered grants that have been appropriated by the legislature as partial funding in support of this project. This category is score-able only in instances where project funding was intentionally phased.

Applications seeking funds for cost overages, change in scope, or other actions not noted in the original application or legislative appropriation will not be considered eligible for these points.

DEED grant #: _____

8f. Is the district applying for a waiver of participating share? yes no

Only municipal districts with a full value per ADM less than \$200,000 are eligible to apply for a waiver of participating share. REAA’s are not eligible to request a waiver of participating share.

(If the district is applying for a waiver, attach justification. Refer to AS 14.11.008(d) and Appendix F of the application instructions.)

SEC. 9. DISTRICT PREVENTIVE MAINTENANCE & FACILITY MANAGEMENT**District preventive maintenance and facility management** (60 points possible)

Ensure that documents related to the district's maintenance and facility management program have been provided with district CIP submittals. Include management reports, renewal and replacement schedules, work orders, energy reports, training schedules, custodial activities, and any other documentation that will enhance the requirements listed in the instructions; these are district eligibility attachments, only two copies are required regardless of the number of application submitted by the district. Include the following documents:

- 9a.** Maintenance Management Narrative (Up to 5 Evaluative Points)
- 9b.** Maintenance Labor Reports (Up to 15 Formula-Driven Points)
- 9c.** PM/Corrective Maintenance Reports (Up to 10 Formula-Driven Points)
- 9d.** 5-Year Average Expenditure on Maintenance. Districtwide maintenance expenditures for the last 5 years will be gathered by the department from audited financial statements. (Up to 5 Formula-Driven Points)
- 9e.** Energy Management Narrative (Up to 5 Evaluative Points)
- 9f.** Energy Consumption Reports (Up to 5 Formula-Driven Points)
- 9g.** Custodial Narrative (Up to 5 Evaluative Points)
- 9h.** Maintenance Training Narrative (Up to 5 Evaluative Points)
- 9i.** Capital Planning Narrative (Up to 5 Evaluative Points)

ATTACHMENTS CHECKLIST

Note all attachments included with the application.

Project eligibility attachments: Eligibility item is required on all projects. Submit two copies, regardless of the number of project applications.

- Six-year Capital Improvement Plan (CIP) (question 2a)

District eligibility attachments: Submit two copies, regardless of the number of project applications.

- Preventive maintenance and facility management narratives [and supplemental documents: sample work orders, custodial plan\(s\), training schedules and logs, renewal and replacement schedules](#) (questions 9a, 9e, 9g-9i)
- Preventive maintenance reports (questions 9b, 9c, 9f)

Project description attachments: List all attachments referred to or noted in the application. Some items may not be applicable to a specific project. Submit two copies of each attachment with application.

- Transition plan for state-owned or state-leased properties (question 3c)
- Alternative project delivery request or approval; solicitation documents (question 3e)
- For fully or partially completed projects: documentation establishing compliance with 4 AAC 31.080, including solicitation documents (question 3f)
- Site description, site requirements, and/or site selection analysis (question 3g)
- Condition support documents (*e.g., maintenance work orders, warranties, etc.*) (question 4a)
- Facility condition survey (question 6a)
- Published district building system design standard (question 6c)
- Facility appraisal (question 6d)
- Educational specification (question 5i, 6d)
- Concept design documentation (question 6d)
- Schematic design documentation (question 6e)
- Design development documentation (question 6f)
- Cost estimate worksheets (question 7a)
- Appropriate compliance reports (*i.e., Fire Marshal, AHERA, ADA, etc.*) (questions 4a, 8a)
- Cost/benefit analysis (questions 8c, 8d)
- Life cycle cost analysis (questions 8c, 8d)
- Value analysis (questions 8c, 8d)
- Justification for waiver of participating share (question 8f)
- Capacity calculations of affected schools in the attendance area/areas (question 5e)
- Enrollment projections and calculations (question 5e)
- Other: _____

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Instructions for completing the Application for Funding for a Capital Improvement Project

FY2023

*These instructions support DEED Form #05-~~2021-044~~XXX
Application for Funding Capital Improvement Project by Grant or State Aid for Debt Retirement.*

PREPARING & SUBMITTING THIS APPLICATION

Answer all questions: Each question on the application form must be answered in order for the application to be considered complete. **Only complete applications will be accepted. Incomplete applications will be considered ineligible and returned unranked.** If a question is not applicable, please note as NA. The department has the authority to reject applications due to incomplete information or documentation provided by the district. The grant application deadline is September 1st (postmarked or shipped on or before September 1st is acceptable).

Project name to be accurate and consistent: The project name on the first page of the application should be consistent with project titles approved by the district school board and submitted with the six-year Capital Improvement Plan (CIP). The project name should begin with the name of the school and type of school (ex: K-12). Multi-school projects should list the schools that are part of the scope unless the work is districtwide at most or all school sites in the district.

Limited to ten applications: The department will only score up to ten individual project applications from each district during a single rating period. In addition, a district can submit a letter to request reuse of an application's score for one year after the application was filed; or, if the project was substantially complete at the time of the application, the district can request reuse of the application's score for up to five years after the application was filed.

The department may adjust parts of the application: Project scope and budget may be altered based on the department's review and evaluation of the application. The department will correct errors noted in the application and make necessary increases or decreases to the project budget. The department may decrease the project scope, but will not increase the project scope beyond that requested in the original application submitted by the September 1st deadline.

Authorizing signature: The application must be signed by the appropriate official. Unsigned applications cannot be accepted for ranking.

Application packages should be submitted to:
Alaska Department of Education & Early Development
Division of Finance & Support Services, Facilities

[Mailing Address](#)
P.O. Box 110500
[Juneau, AK 99811-0500](#)

[Physical Deliveries](#)
801 W. 10th Street, Suite 200
Juneau, AK 99811-0500

For further information contact:
School Facilities Manager

Alaska Department of Education & Early Development

1. CATEGORY OF FUNDING AND PROJECT TYPE

1a. Type of funding requested.

Check **one** box to indicate which type of state aid is being requested.

Grant Funding: applications are submitted to the department by September 1st of each year, or on a date at the beginning of September designated by the department in the event that the 1st falls on a weekend or holiday (postmarked or shipped on or before September 1st is acceptable).

Aid for Debt Retirement: applications can be submitted at any time during the year if there is an authorized debt program in effect. **To verify if there is an authorized debt program in effect, contact the department.**

1b. Primary purpose.

Based on whether the application is for grant funding or aid for debt retirement, check **one** box in the appropriate column to indicate the primary purpose of the project. Each application should be for a single project for a particular facility, and should be independently justified. The district may include work in other categories in a proposed project. These projects will be reviewed and evaluated as mixed-scope projects. Refer to Appendix A of these instructions for descriptions of categories and the limitations associated with grant category C, category D, and category E projects. Application of scoring criteria will be on a weighted basis for mixed scope projects. The department will change a project category as necessary to reflect the primary purpose of the project.¹

1c. Phases of project.

Check the applicable phase(s) covered by this funding request. Refer to Appendix B for descriptions of phases.

2. ELIGIBILITY REQUIREMENTS TO SUBMIT AN APPLICATION

2a. District six-year plan.

Attach a current six-year Capital Improvement Plan (CIP) for the district. Use DEED Form 05-19-051. The project requested in the application must appear on the district's six-year plan in order to be considered for either grant funding or debt reimbursement.

2b. Fixed asset inventory system.

The district does not need to submit any fixed asset inventory system information to the department as part of the CIP application. The department will verify the existence of a Fixed Asset Inventory System during its on-site Preventive Maintenance program review every five years. The department will annually review the district's most recently submitted annual audit for information regarding its fixed asset inventory system. School districts that

¹ The department's authority to assign a project to its correct category is established in AS 14.11.013(c)(1) and in AS 14.11.013(a)(1) under its obligation to verify a project meets the criteria established by the Bond Reimbursement & Grant Review Committee under AS 14.11.014(b)

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do not have an approved fixed asset inventory system, or a functioning fixed asset inventory system (i.e., cannot be audited) will be ineligible for grant funding under AS 14.11.011.

2c. Property insurance.

The department may not award a school construction grant to a district that does not have replacement cost property insurance. AS 14.03.150, AS 14.11.011(b)(2) and 4 AAC 31.200 set forth property insurance requirements. The district should annually review the level of insurance coverage as well as the equipment limitations of the policy, and the per-site and per-incident limitations of the policy to assure compliance with state statute and regulation.

2d. Capital improvement project.

AS 14.11.011(b)(3) requires a district to provide evidence that the funding request should be a capital project and not part of a preventive maintenance or regular custodial care program. Refer to Appendix E for an explanation of maintenance activities. Scope of work will be modified by the department during review of the application to remove items deemed to be preventive maintenance or custodial.

2e. Preventive maintenance program.

Under AS 14.11.011(b)(4), a district must have a certified preventive maintenance program to be eligible for funding. Initial notification of district certification is provided by June 1; final determination of a district maintenance program is issued August 15. For more information contact the department.

2f. Insurance.

District facility insurance data is required to be provided by each district to the department under AS 14.03.150 and 4 AAC 31.200. Insured replacement value will include all district facilities reported in the department's School Facility database:

<https://education.alaska.gov/Facilities/SchoolFacilityReport/SearchforSchoolFac.cfm>

Note: This information is used in calculating scores for question 9d. The five-year average expenditure for maintenance is divided by the five-year average insured replacement value, districtwide.

3. PROJECT INFORMATION

3a. Priority assigned by the district. (30 points possible)

The district ranking of each project application must be a unique number approved by the district school board and must place each discrete project in priority sequence. The project having the highest priority should receive a ranking of one, and each additional project application of lower priority should be assigned a unique number in priority order. The department will accept only one project with a district ranking of priority one. The ranking of each application should be consistent with the board-approved six-year Capital Improvement Plan. Refer to AS 14.11.013(b)(2). Both major maintenance projects and school construction projects should be combined into a single six-year plan. There are up to

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30 points available for a district's #1 priority. Points drop off in increments of 3 for each corresponding drop in district priority ranking.

The district should provide a listing of *projects anticipated for the full six years* of the district's six-year plan, not just the first year of the plan.

3b. School facilities within scope. (30 points possible)

This question requests information on the year the facility was constructed and size of each element of the facility to establish the "weighted average age of facilities" score. If a project's scope of work is limited to a portion of a building (i.e., the original or a specific addition), the age of *that building portion* will be used in the "weighted average age of facilities" point calculation. If the project's scope of work expands to multiple portions of a building, the ages of *all building portions receiving work* will be used in the "weighted average age of facilities" point calculation. *Year built* refers to the year the original facility and any additions were completed or were first occupied for educational purposes. If a date of construction is not available, use an estimate indicated by an (*). *Gross square footage (GSF)* of each addition should be the amount of space added to the original facility. *Total size* should equal the total square footage of the existing facility. There are up to 30 points possible depending on the age of the building. Facility number, name, year built, and size are available online at:

<http://education.alaska.edu/Facilities/SchoolFacilityReport/SearchforSchoolFac.cfm>

Department data will be used for calculations, if there is an error in the database, contact the department prior to September 1.

3c. Facility status.

The response to this question should be consistent with column III of the space utilization table in question 5i. Projects that will result in demolition or surplus of existing owned or leased facilities must include a detailed plan for the transition from existing facilities to replacement facilities. If a facility is to be demolished or surplus, the project must provide for the abatement of all hazardous materials as part of the project scope. The transition plan should describe how surplus state-owned or state-leased facilities will be secured and maintained during transition. The detailed plan for demolishing or surplus state-owned or -leased properties should incorporate a draft of the department's Form 05-96-007, Excess Building. For the CIP process, furnish building data and general information; signatures and board resolutions may be excluded.

3d. Project description/Scope of work.

Describe the scope of work of the entire project. The project description/scope of work should include: (1) a detailed description of the project, (2) documentation of the conditions justifying the project, and (3) a description of the scope of the project and what the project will accomplish. The scope should also contain sufficient quantifiable analysis to show how the project is in the best interest of both the district and the state.

The description of project scope should include information that will allow the department to evaluate the criteria specified in AS 14.11.013; ensure project aligns with selected category.

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Project scope should be sufficiently defined to assure bidding a single contract. If proposing a “districtwide” project, applicant should provide justification in question 3h of how it is more cost-effective to combine multi-site (multi-community) projects.

It is helpful to identify the question number if you are providing detail to support another application question in the project description.

Question 2d: AS 14.11.011(b)(3) requires the district to provide sufficient evidence that the funding request should be a capital improvement project and not preventive maintenance (including routine maintenance) or custodial care. Refer to Appendix E of these instructions for information regarding the definitions of maintenance terms related to this question.

Question 3b: If the project impacts multiple facilities, the project description shall identify the facilities impacted and describe how each will be impacted. For facilities with both Original and Addition space, identify the discrete section(s) of the portion being impacted. For “districtwide” projects, a detailed description and scope is required for each facility.

Question 3c: Projects that will result in demolition or surplusing of existing owned or leased facilities must include a detailed plan for the transition from existing facilities to replacement facilities.

Question 3g: Site description should include location, size, availability, cost, and other pertinent information as appropriate. If a site selection and evaluation report is attached, the information can be referenced with a brief summary, rather than being reproduced in this section.

Question 3f: If project is complete or partial complete, identify which scope elements have been completed.

Question 5c: If this project will (1) result in renovated or additional educational space, and (2) serve students of the same grade levels currently housed or projected to be housed in other schools, the project description should indicate the:

- attendance areas that will be impacted (i.e. will contribute students) by this project,
- current and projected student populations in each facility (school) affected by the project, and
- DEED gross square footage for each affected facility (school) in the attendance area.

Question 6a-6d: If a facility condition survey, facility appraisal, schematic design, and/or design development documents are attached, they can be summarized and referenced, rather than reproduced in the description of project need, justification, and scope. If project is complete, and schematic design or design development documents are not attached, provide a justification for why documents are not needed.

Question 8c: When a new, renovation, new-in-lieu-of-renewal, or Category E project is proposed, the project description should include a brief discussion of the cost/benefit and life cycle cost principles which guided this project solution. The detailed cost/benefit analysis

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and life cycle cost analysis documents shall provide data documenting conditions that justify the project [AS 14.11.011(b)(1)]. If these documents are attached, they can be referenced and summarized, rather than reproduced in the project description.

3e. Project Schedule.

Provide an estimated project timeline that includes, at a minimum, the estimated date for receipt of funding, estimated construction start date, and estimated construction completion date. Identify any additional project schedule milestones or special circumstances that are applicable to the project. Include any schedule changes anticipated if alternative delivery is considered for the project. An alternative project delivery method is required to be approved by the department. If an alternative project delivery method is proposed for the project (including in-house), provide completed request or department approval with application, including any bid documents, etc.

3f. Complete or partially completed project.

Indicate whether the work identified by the project request is partially or fully complete. In question 3d, clearly identify which scope elements have been completed. If the construction work is partially or fully complete, attach documentation that establishes that the construction was procured in accordance with 4 AAC 31.080.

- Competitive sealed bids must be used unless alternative procurement has been previously approved by the department.
- Projects under \$100,000 can be constructed with district employees if prior approval is received from the department. For projects that utilized in-house labor, attach the DEED approval of the use of in-house labor [4 AAC 31.080(a)]. If a project utilized in-house labor, or was constructed with alternative procurement methods, and does not have prior approval from the department, the project's construction budget will be reduced [4 AAC 31.080(e)].
- For construction contracts under \$100,000, districts may use any competitive procurement method practicable. Provide an explanation of circumstances requiring selected procurement method with attachment.

For projects with contracted construction services, attach construction and bid documents utilized to bid the work, advertising information, bid tabulation, construction contract, and performance and payment bonds for contracts exceeding \$100,000. Projects shall be advertised three times beginning a minimum of 21 days before bid opening. The bid protest period shall be at least 10 days. Construction awards must NOT include provisions for local hire. Provide bid documents and bid tabulations as projects attachments.

If district has been working with the department for approval of project delivery method, design, and construction, provide the DEED recovery of funds project number in the space provided.

[A district can submit for reimbursement of project costs for work completed up to 36 months prior to the initial submission of the application with a substantially identical scope. This can include costs in any phase: planning \(e.g. condition survey\), design, and construction. A district can submit for reimbursement of costs for site acquisition approved under 4 AAC](#)

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[31.025 and incurred up to 120 months before the initial submission of the application with a substantially identical scope.](#)

3g. Acquisition of additional land.

Acquisition of additional land refers to expansion of an existing school site using property immediately adjacent to, or in close proximity to, the existing school site. Land acquisition may result from long-term lease, purchase, or donation of land. *Utilization of a new school site* refers to use of a site previously acquired by the district, or a new site acquired as a result of this application and not previously utilized as a public school.

If the project site is not yet known, the site description should be the district's best estimate of specific site requirements for the project, and it should be included in the project description. The department's 2011 publication, *Site Selection Criteria and Evaluation Handbook*, may be useful in responding to this question. A site selection study is required for those projects involving new sites in order to qualify for schematic design points (reference Appendix B).

3h. Multiple-school or districtwide project.

Explain how a multiple site project is cost effective and in the state's best interest and how the district will provide for a single contract in either design or construction. Provide justification of need for multiple contracts.

4. CODE DEFICIENCY / PROTECTION OF STRUCTURE / LIFE SAFETY

4a. Code deficiency / Protection of structure / Life safety. (Up to 50 points)

Describe in detail the issue, impact, and severity of code deficiency, protection of structure, and life safety conditions being addressed by the project scope in question 3d; attach supporting documentation. If construction of a new school is proposed, describe any code issues at existing facilities in the attendance area that will be relieved by the project.

Code deficiency, protection of structure, and life safety-related categories:

Code Deficiency: Deficiencies related to building code conditions where there is no threat to life safety. This includes compliance with various current building and accessibility codes.

Protection of Structure: Deficiencies that, when left unrepaired, will lead to new or continued damage to the existing structure, building systems, and finishes resulting in a shortened life of the facility.

Life Safety: Deficiencies representing unsafe conditions threatening the health and life safety of students, staff, and the public. For example, required fire alarm and/or suppressant systems are non-existent or inoperative posing a life safety risk.

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Note: Complete or imminent building failure caused by code deficiency, protection of structure, or life safety conditions resulting in unhoused students may be viewed as a more critical project.

The project could contain a single severe condition or multiple moderate conditions. Multiple conditions will be rated collectively, but may not necessarily rank as high as a single severe condition. For projects, such as districtwide projects, that combine critical and non-critical work, points for the critical portion of the project will be weighted proportionally.

The scoring matrix for this category (ref. Guidelines for Raters of the CIP Application) is reproduced in the application, and groups deficiencies into the following eight categories: Site, Structural, Roof/Envelope, Arch/Interior/ADA, Mechanical, Electrical, Fire Alarm/Sprinkler, and UST/AST/Hazmat. Identify the condition from the matrix and provide a relevant description of the conditions with references to supporting documentation. While extensive, the discrepancies listed in the matrix may not be exhaustive. If a deficiency is not listed, note that in the description and use the listed deficiencies as a context for determining appropriate documentation.

As indicated in the matrix, code deficiency, protection of structure, or life safety conditions scoring incorporates ranges based on the established severity ranges of the conditions and upon the documentation provided to support the reported severity. Supporting documentation of the conditions is critical. Documentation that supports the conditions can be documents such as: condition surveys, third party communications, maintenance work orders, or other records verifying the conditions. This is not an exclusive list and applicants are encouraged to provide other sources of quantitative information to support the building or component condition. The primary purpose of this documentation is to present objective, primary, specific, and verifiable data.

For matrix scores based on average number of work orders over time, include copies of the relevant work orders. Work order detail should match that required under 4 AAC 31.013(a)(1).

Supporting documentation elsewhere in the application can be summarized and referenced, rather than reproduced in the narrative. When citing information elsewhere in the application or application attachments, provide the specific location of the referenced information.

5. REQUIREMENTS FOR SPACE TO BE ADDED OR REPLACED

NOTE: Gross square footage entries in this section should reflect the measurements specified by 4 AAC 31.020. Space variance requests not already approved by the department must be submitted in accordance with 4 AAC 31.020 by the application deadline in order to receive consideration with the current request. The department will not consider space variance requests during the application review process for work proposed in the application.

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5a. Project grade levels.

The response to this question should reflect the grade levels that will be served by the facility at the completion of the project.

5b. District voter-approved projects.

Any additional square footage that is funded for construction or approved by local voters for construction should be listed with a descriptive project name, additional GSF, grade levels to be served, and anticipated student capacity. Include these projects in any capacity/unhoused calculations provided in the year of anticipated occupancy.

5c. Other school facilities.

List all schools in the attendance area that serve grade levels equivalent to those of the proposed project. If the project includes any elementary grades, all schools in the attendance area serving elementary students are to be listed. If the project includes any secondary grades, all schools in the attendance area serving secondary students are to be listed. For each school listed, include its size, the grades served, and the school's total student capacity. Use the department's "2017 Attendance Area ADM & GSF Calculations" MS Excel worksheet to calculate the total student capacity for each school. A link to this form and the "Attendance Areas" report can be found under at <http://education.alaska.gov/facilities/FacilitiesCIP.html>

5d. Date of anticipated occupancy.

The date provided here should be the anticipated date the facility will be occupied. This will be the starting point for looking at five-year post-occupancy population projections. If a project schedule is available, it should be provided to substantiate the projected date.

5e. Unhoused students. (80 points possible)

All projects that are adding new space or replacing existing space must complete Table 5.1 ATTENDANCE AREA ADM and worksheets in the department's MS Excel workbook, "217 Attendance Area ADM & GSF Calculations" found under "Space Guidelines" at <http://education.alaska.gov/facilities/FacilitiesCIP.html>. These worksheets are the tools for determining space eligibility.

Include copies of the worksheets "ADM", "Current Capacity", and "Projected Capacity" with the application. The department may adjust the submitted ADMs and allowable space as necessary for corrections.

The points for this question are based on the following formulas:

1. Current Unhoused Students: If current capacity is at or below 100%, 0 points will be awarded. If current capacity is over 100%, then one point for every 3% percent over 100% capacity will be awarded. For projects that have a current capacity over 250%, the full 50 points will be awarded.
2. Unhoused Students in Seven Years: If capacity five years post-occupancy is at or below 100%, 0 points will be awarded. If capacity five years post-occupancy is over 100%, then one point for every 5% over 100% capacity will be awarded. For projects that have a capacity five years post-occupancy over 250%, the full 30 points will be awarded.

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Scoring for projected unhoused due to facility loss by environmental factors is scored at half points: If capacity five years post-occupancy is over 100%, then one point for every 10% over 100% capacity will be awarded.

5f. ADM projection method.

Identify the method(s) that were utilized to determine the student population projections listed in Table 5.1. The department will compare the projections to historic growth trends for the attendance area. The department will revise population projections that exceed historical growth rates, show disparate growth between elementary and secondary populations, or are unlikely to be sustained as an attendance area's overall population grows.

Inclusion of a charter school population housed in lease space due to terminate within two years may be included; include a copy of the lease as an attachment to the application. The application should include student population projection calculations and sufficient demographic information (e.g., housing construction, economic development, etc.) to justify the project's population projection.

5g. Confirm space eligibility.

Existing space is determined as all permanent facility gross square footage (GSF) within an attendance area as reported in the DEED School Facility Database; for attendance areas with multiple main schools serving a type of school (elementary, secondary, K-12, mixed grade) this will include more facilities than are reported in question 3b "school facilities within scope" or included in question 5j "project space utilization" (Table 5.2).

Utilize data from the ADM projections/GSF calculations workbook to complete this question. For "Total Existing SF", enter all GSF from permanent facilities serving the same school type within the attendance area. For "Remaining Existing SF", ~~minus~~ subtract any square footage that will be demolished or disposed of from the "Total Existing SF" and enter the remainder. For "Total Eligible SF", enter the total of the square footage calculation based on the school's average daily membership (ADM). For "Qualifies for additional SF", enter ~~T~~ the amount of additional qualified square footage by subtracting the "Remaining Existing SF" from the "Total Eligible SF" ~~from the GSF calculations workbook should be entered on "qualifies for additional SF" line.~~ For "Applying for additional SF", enter ~~T~~ the amount of additional square footage that will be added in this ~~project should be entered on the "applying for additional SF" line.~~ The amount of square footage that is applied for may be the same or less than the amount of the qualified square footage.

A district may submit a future unhoused projection based on an imminent loss of a facility due to certain environmental factors like erosion. To support the projection, the district must provide credible evidence and documentation that the facility will be lost or unsafe for occupancy within two years. A district would also need to provide a specific plan for how it will ~~do~~ accommodate students without the facility, should the facility become incapable of housing students, and address how the facility will be disposed of in the transition plan (Question 3c).

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5h. Regional community facilities. (5 points possible)

Statutes require an evaluation of other facilities in the area that may serve as an alternative to accomplishing the project as submitted. Information regarding the availability of such facilities and the effort (e.g. cost, time, etc.) required to make the facility usable for the school needs represented by the project should be provided. The area is not restricted to the attendance area served by the project.

Projects in Category F, which may not relate to providing alternate facilities for unhoused students, should describe existing community facilities (parking, sporting, or outdoor recreation areas) related to the project scope.

There are up to 5 points available for an adequate description showing that the district has considered alternatives to the proposed project for housing unhoused students or providing the desired feature.

Statutory and Regulatory Reference: AS 14.11.013(b)(4), 4 AAC 31.022(c)(5)

5i. Educational Specifications.

A district planning a project to add or reconfigure space is required to develop an educational specifications document and provide it to the department for review. [See AS 14.07.020(11), 4 AAC 31.010] For projects adding or reconfiguring space, an educational specification is a required planning document in Appendix B for planning/concept design points.

5j. Project space utilization. (30 points possible)

Table 5.2 Project Space Equation summarizes space utilization in the proposed project expressed in gross square feet. Space figures represented should tabulate to match the gross building square footages reported in question 3b as well as those shown in Table 7.2 of the cost estimate section. The worksheet at Appendix D lists types of school space that fit in each category. There are up to 30 points possible on the school construction list for the type of space being constructed.

6. PROJECT PLANNING & DESIGN

There are four distinct items in this question. Each one has the potential to generate points.

6a. Condition/Component survey. (0 to 10 points possible – refer to Rater Guidelines for scoring criteria)

A *facility condition survey* is a technical survey of facilities and buildings, using the department's Guide for School Facility Condition Survey or a similar format, for the purpose of determining compliance with established building codes and standards for safety, maintenance, repair, and operation. Portions of the condition survey, such as that information pertaining to building codes and analysis of structural and engineered systems including site assessment may be completed by an architect, engineer, or personnel with documented expertise in a building system. For project scopes that are component or system

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renovations, a condition survey of the component or system is acceptable.

A facility condition survey is required for major rehabilitation projects to receive further planning and design points. Projects with scopes that warrant identification of in-depth examination of deteriorated systems will require a scope-specific facility or component condition survey to receive points beyond Phase I Planning/Concept Design. Condition surveys should be clearly identified and establish a specific date or date range when the survey occurred or was produced.

The department does not consider submittal of a Spill Prevention, Control, and Countermeasures (SPCC) Plan as a condition survey for fuel tank or fuel facility projects. In addition, an energy audit, although useful and informative, will not receive condition survey points if the project's scope warrants additional facility condition survey data.

6b. Use of prior school design (10 points possible)

Statutes require that the department shall encourage school districts to use previously approved school design if the use will result in a cost savings for the project. Provide the following information regarding plan availability and the costs to revise the plan to meet the needs of the current project:

- Complete documents of the proposed reused school plans.
- Evidence of ownership of proposed reused school plans.
- An analysis of the anticipated deviations and revisions from the proposed reused school plans along with an estimated cost of those deviations (+ or -).
- An estimate of the design and construction costs for the proposed reused school plans along with an estimate of the cost of design and construction for a project alternative for a new school design. If a district does not own the school plan proposed for reuse, estimate must include cost of purchasing design or of another arrangement.

Five measures are identified to determine the range of effectiveness in using a prior school design:

1. The district's ownership and legal ability to effectively use the prior design.
2. The age of the prior design.
3. The amount of change to the prior design anticipated to be needed in the current project.
4. The estimated cost savings in construction costs achieved by the reuse.
5. The estimated cost savings in design services achieved by the reuse.

Up to 10 points are available (2 points for each of the identified measures) for a project that reuses a department-approved school design. This point category is only applicable to construction projects.

Statutory and Regulatory Reference: AS 14.11.013(a)(4) and (b)(7)

6c. Use of prior building system design (10 points possible)

Statutes require that the department shall encourage school districts to use previously approved building systems if the use will result in a cost savings for the project. Five

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building system categories are available for evaluation of prior design use: 1) Building Envelope, 2) Plumbing, 3) HVAC, 4) Lighting, and 5) Power. A project application can receive points for capital renewal of: a complete system, a subsystem, or a component of system, once in each of these categories when evaluated against whether it is part of a published district or municipal facility standard that meets ASHRAE 90.1-2010 requirements. [Standard must be adopted by the entity; prior use of a system specification in a bid solicitation is not sufficient to meet the criteria.](#)

The ASHRAE-compliant district or municipal standard must be provided with the application in order for the department to evaluate this criteria.

There are up to 10 points possible for a project that provides support for using a cost-effective building system standard; up to 2 points per qualified system category. This point category is not applicable to projects receiving scores for use of a prior school design.

Statutory and Regulatory Reference: AS 14.11.013(a)(4) and (b)(7)

6d. Planning / Concept design. (0 or 10 points possible)

Planning work includes the items listed under planning in Appendix B of this document. At the planning phase, existing conditions may be assumed based on standard life expectancies and other industry norms. Condition/component surveys are only required for projects proposing major rehabilitation. Some projects may not require the services of an architect or engineer; typically these projects are limited in scope where drawings and extensive technical specifications are not necessary in order to issue an Invitation to Bid. Provide a justification in question 6e if no consultant was selected. Some projects do not require concept design or educational specifications. Reference Appendix B for projects which require these planning documents. The department's Program Demand Cost Model is acceptable as a planning/concept level cost estimate. There are 10 points possible for completed planning/concept design work.

If design has progressed further than planning/concept design, then schematic design (35%) design development (65%), or construction level drawings and cost estimates may be submitted in lieu of concept design documents.

A *facility appraisal* is an educational adequacy appraisal following the format or similar formats of the Council of Educational Facility Planners, International "Guide for School Facility Appraisal". An appraisal is optional; however, an appraisal document is useful to the department in evaluating the overall merits of the project request.

6e. Schematic design – 35%. (0 or 10 points possible)

Schematic design work includes the items listed under schematic design in Appendix B of this document. There are 10 points possible for completed schematic design work.

Project development to schematic design on most projects requires a condition/component survey to assess existing conditions. Condition/component surveys are required for projects

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proposing major rehabilitation and may be required for other projects if necessary to adequately support the scope of the proposed work.

Some projects may not require a schematic design in order to issue an Invitation to Bid. Typically these projects are limited in scope where drawings and extensive technical specifications are not necessary. Provide a justification if schematic design documents were not needed. The department's Program Demand Cost Model is not an acceptable Schematic level estimate.

If design has progressed further than schematic design (35%), then design development (65%) or construction level drawings and cost estimates may be submitted in lieu of schematic design documents.

6f. Design development – 65%. (0 or 5 points possible)

Design development work includes items listed under design development in Appendix B of this document. There are 5 points possible for completed design development work.

Project development to schematic design on most projects requires a condition/component survey to assess existing conditions. Condition/component surveys are required for projects proposing major rehabilitation and may be required for other projects if necessary to adequately support the scope of the proposed work.

Construction level drawings and cost estimates may be submitted in lieu of design development documents.

6g. Planning / Design team.

The application needs to identify the district's architectural or engineering (A/E) consultant for the Condition Survey, Planning, Schematic Design and Design Development work. Certain projects of limited scope may not require consultant selection to qualify for planning/concept level design point, but may be required for schematic design or design development levels, depending on project complexity. If there is no consultant, the district must provide a detailed explanation of why a consultant is not required for the project. For others besides licensed design professionals currently registered in the State of Alaska, provide the qualifications for design team members that the district accepted. For example, if one is a school board member who is also an electrician, please note both. Likewise, note a district employee with X years as a licensed roofing contractor, or a maintenance person with X years as the lead mechanical custodian for the district.

7. COST ESTIMATE

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Cost estimate for total project cost. (30 points possible)

7a. Project cost estimate.

For all applications, including those for planning and design, cost estimates should be based on the district's most recent information and should address the project being requested. Refer to Appendix C for descriptions of elements of the total project cost. The cost estimate should be of sufficient detail that its reasonableness can be evaluated. If a project is projected to cost significantly more than would be predicted by the Department's current Program Demand Cost Model, provide attachments justifying the higher cost. If there are special requirements, a detailed explanation and justification should be provided in question 7c.

Table 7.1 Total Project Cost Estimate.

In Table 7.1, all prior AS 14.11 funding for this project should be listed by category and totaled in Column I. If a grant has not been issued, but an appropriation has been made, use the appropriated amount plus participating share in lieu of the issued grant or bond amount. Column II should list the amount of funding being requested in this application, by category and in total. Column III should show a percentage breakdown for the total project allocated costs as a percentage of the total construction cost. Column IV should list the total project cost estimate from inception to completion, all phases. Calculate the percent of construction for all cost categories except Land, Site Investigation, and Seismic Hazard. To calculate the percent of construction, divide the category costs by the Construction cost and multiply by 100%. Use Column IV costs to calculate the percent of construction. Other categories should be within the ranges listed. Construction Management (CM) by consultant must be less than 4% if the total project cost is less than or equal to \$500,000; 3% for project costs between \$500,000 - \$5,000,000; and 2% for projects of \$5,000,000 or greater [AS 14.11.020(c)]. The percent for art, required for all renovation and construction projects with a cost greater than \$250,000, and which requires an Educational Specification, is given a separate line. Project Contingency is fixed at 5%. The total project cost should not exceed 130% of construction cost, excluding land and site investigation. If the project exceeds the recommended percentages, add a detailed justification in question 7c.

Seismic Hazard costs include the costs required to assess, design, and perform special construction inspections for a school facility. These costs include the costs for an assessment of seismic hazard at the site by a geologist or geotechnical engineer with experience in seismic hazard evaluation, an initial rapid visual screening of seismic risk, investigation of the facility by a structural engineer, design of mitigation measures by a structural engineer, third party review of seismic mitigation measures, and special inspections required during construction of the seismic mitigation components of the project. The costs associated with this budget item must be prepared by a licensed professional engineer with experience in seismic design. The district should refer to the ~~department's website to review information on~~ Peak Ground Acceleration information for various areas of the state available on the [department's CIP website](http://education.alaska.gov/Facilities/FacilitiesCIP.html) (education.alaska.gov/Facilities/FacilitiesCIP.html)

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Table 7.2 Construction Cost Estimate.

This summarization of construction costs is structured to be consistent with the DEED cost model. Other estimating formats may not provide an exact correlation; however, the following categories **MUST** be reported to allow adequate comparisons between projects: basic building, site work and utilities, general requirements, contingency, and escalation. Do not blank out or write over this table. If the application includes a cost estimate from a designer or professional cost estimating firm, Table 7.2 must still be filled out as described above.

[Note: Although not required for a project application, cost estimates provided as a submittal for a project awarded a grant allocation will need to conform to the DEED CostFormat.](#)

Up to 30 points are possible for reasonableness and completeness of the cost estimate provided in support of the project.

7b. Cost estimate source.

Identify the source of the cost estimate. A cost estimate could be from a professional design or estimating firm, vendor quotes, actual invoices, or based on the documented costs of a similar project in the district.

7c. Cost estimate discussion and justifications.

Provide sufficient information to support meaningful evaluation of the project cost and the reasonableness of the cost estimate. Though basic cost information is incorporated into Tables 7.1 and 7.2, many cost elements reported in standard estimates will require further explanation or support. Please refer to Appendix C for guidelines covering project cost estimate percentages for factored cost items. Provide justification for any lump-sum elements used in the cost estimate, including site work and utilities. If the project exceeds a recommended percentage for a specific category or if the project is requesting more than 30% in additional percentage costs, provide a detailed justification. The project scope and cost estimate should be increasingly detailed as project phases advance.

Identify attachments with additional information regarding project cost that may aid in evaluating the reasonableness of the cost estimate. Documents may include a life cycle cost analysis, cost benefit analysis, bid documents, actual cost estimates, final billing statement for completed projects, and any additional supporting documentation justifying project costs.

8. ADDITIONAL PROJECT FACTORS

8a. Emergency conditions. (50 points possible)

Emergencies are conditions that pose a high level of threat for building use by occupants. An emergency exists when students are currently unhoused due to the loss of the facility, or damage to the facility due to circumstances associated with the emergency. An emergency also exists when the district's ability to utilize the facility is impacted or there is an immediate or high probability of a threat to property, life, health, or safety.

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Not all systems or components that have reached the end of their useful life or are starting to fail are considered to be emergencies. A system or component that has reached the end of its useful life or has started to fail, but routine or preventive maintenance prolongs the life of the system or component, is not considered to be an emergency. Example: A roof that has started to leak and the leaking is stopped with routine maintenance would not constitute an emergency. A roof that is leaking, where rot has been found in the structure of the roof and routine maintenance no longer prevents water from entering the building, could be considered an emergency.

Describe in detail the nature, impact, and immediacy of the emergency and actions the district has taken to mitigate the emergency conditions. At a minimum, include the following:

- the nature of the emergency,
- the facility condition related to the emergency,
- the threat to students and staff,
- the consequence of continued utilization of the facility,
- the individuals or groups affected by the condition,
- what action the district has taken to mitigate the emergency conditions, and
- the extent to which any portion of the project is eligible for insurance reimbursement or emergency funding from any state or federal agency.

Supporting documentation of the conditions is critical. Documentation that supports the conditions can be documents such as: condition surveys, photos, third party communications, insurance claims, or other records verifying the conditions. This is not an exclusive list and applicants are encouraged to provide other sources of quantitative information to support the emergency condition. The primary purpose of this documentation is to present objective, primary, specific, and verifiable data.

The emergency descriptions with check boxes contained in question 8a are to help the applicant identify the type of emergency the project is resolving. The applicant must provide a description of the particular emergency in the application and include all relevant documentation that supports the immediacy or high probability of the threat or emergency. An application that checks an emergency building condition box without a description of the emergency will receive no points.

The matrix below incorporates the emergency conditions categories listed in the application with supporting examples.

Building

Building is destroyed or rendered functionally unsafe for occupancy and requires the building to be demolished and rebuilt. Example: A flood or fire event has destroyed or left the building so structurally compromised that the building must be demolished.

Building is unsafe and the entire student population is temporarily unhoused. The building requires substantial repairs to be made safe for the student population to occupy

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the building. Example: The roof of a school came off in a severe wind storm with water damage to interior finishes.

Building is occupied by the student population. A local or state official has issued an order that the building will need to be repaired by a certain date or the district will have to vacate the building. Example: It is discovered that the building does not meet current specified safety standards and the building will need to be made current with the standards within the next 90 days. Documentation substantiating the order needs to be supplied.

A portion of the building requires significant repair or replacement of damaged portion of building. The damaged portion of the building cannot be used for educational purposes. Example: The roof leaked over a classroom causing structural damage to the walls, which restricts the use of the room until the repairs are made.

Components or Systems

A major building component or system has completely failed and is no longer repairable. The failed system or component has rendered the facility unusable to the student population until replaced. Example: The heating plant has completely failed leaving the building unusable to the student population and susceptible to freezing and further damage.

A major building component or system has a high probability of completely failing in the near future. The component or system has failed, but has been repaired and has limited functionality. If the component fails, the district may be required to restrict use of the building until the component or system is repaired or replaced. Example: A fire alarm system has a history of components failing and given the age of the system, parts are no longer available. The system has a high probability of failing completely and district may have to vacate the building.

Statutory and Regulatory Reference: AS 14.11.013(b)(1)

8b. Inadequacies of space. (40 points possible)

Describe how the project will improve existing facilities to support the instructional program. The response should address how the inadequacies of the facility impact the instructional program and whether that instructional program is a mandatory, existing local, or a proposed new local program. Types of inadequacies addressed may include the quality of space, amount of space, or configuration of the space.

Statutory and Regulatory Reference: AS 14.11.013(b), 4 AAC 31.022(c)(4)

8c. Other options. (25 points possible)

In an effort to support the project submitted as the best possible, districts should consider a full range of options during planning and project development.

- A cost/benefit analysis, life cycle cost analysis, or other evaluative processes used by the district in reaching its design solution should be included. See also Item I, Project Eligibility Checklist, which requires a life cycle cost analysis, a cost benefit analysis, or

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any other quantifiable analysis, when needed, to demonstrate that the project is in the best interest of the district and the state.

- A project that proposes component replacement should discuss the merits of alternative products, material options, construction methods, alternative design, or other solutions to the problem as applicable.
- A project that proposes roof replacement should discuss the merits of different roofing materials, the addition of insulation, or altering the roof slope and provide an explanation as to why these options were not selected.
- If the proposed project will add new or additional space, districts may consider options such as double shifting, service area boundary changes, and any space available in adjacent attendance areas that are connected by road. In districts that contain adjacent attendance areas, at least one of the options considered must be an evaluation of potential boundary changes.
- Projects that propose construction of a new school should discuss other options, such as renovation of the existing building or acquisition of alternative facilities, and provide an explanation as to why these options were not selected.
- Scoring in this area will be related to factors such as: the range of options, the rigor of comparison, the viability of options considered, and the quality of data supporting the analysis of the option. Options also need to consider the results of cost benefit analysis, life cycle cost analysis, and value analysis as necessary.

There are up to 25 points available for a documented comprehensive discussion on the options considered by the district that would accomplish the same goals as the proposed project.

Statutory and Regulatory Reference: AS 14.11.013(b)(6), 4 AAC 31.022(c)(6)

8d. Annual operating cost savings. (30 points possible)

Information (and evaluation points) related to operational costs is not limited to Category E projects. Explain and document ways in which the completion of the project would reduce current operational costs. This analysis should be consistent with a life cycle cost analysis or cost benefit analysis. Consider energy costs, costs related to wear-and-tear, maintenance of existing facilities costs, and costs incurred by current functional inadequacies at the facility and attendance area level. Provide benchmark values such as fuel costs, specific labor costs affected by the project, and historical record of problems to be addressed by this project.

For new facilities, discuss design choices that will provide periodic and long-term savings in the operation and maintenance of the facility. Although the addition of square footage may increase overall operational costs, project descriptions for this category of project should include information on methods and strategies used to minimize operational costs over the life of the building. Include cost benefit analyses that were accomplished on building systems and materials.

Up to 30 points are possible based on the projected cost savings payback with a full and complete description.

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Statutory and Regulatory Reference: AS 14.11.013(b), 4 AAC 31.022(c)(3)

8e. Phased funding. (30 points possible)

Prior state funding refers to **grant funds appropriated by the legislature to the department and administered under AS 14.11 as partial funding for this project only.** Any amounts noted here should also be included in Table 7.1 of the Cost Estimate, question 7a. No other fund sources apply, including debt retirement. There are up to 30 points available if a project includes previous grant funding under AS 14.11, and the project was intentionally short funded.

8f. Participating share waiver.

Waivers of participating share should be in accordance with AS 14.11.008(d). Justification should be documented. See Appendix F in the attachments to these instructions for detailed information. Only municipal districts with a full value per ADM less than \$200,000 that are not REAAs are eligible to request a waiver of participating share. Contact the department for a district's most recent full-value per ADM calculation.

9. DISTRICT PREVENTIVE MAINTENANCE & FACILITY MANAGEMENT

District preventive maintenance and facility management. (60 points possible)

AS 14.11.011(b)(1) and 4 AAC 31.011(b)(2) require each school district to include with its application submittals a description of its preventive maintenance program, as defined by AS 14.11.011(b)(4), AS 14.14.090(10), and 4 AAC 31.013. Refer to Appendix E for details.

The scoring criteria for this area reflect efforts beyond just preventive maintenance. For each element of a qualifying plan outlined in 4 AAC 31.013, documents, including reports, narratives, and schedules, have been identified for nine separate evaluations. These documents will establish the extent to which districts have moved beyond the minimum eligibility criteria and have tools in place for the active management of all aspects of their facility management. The documents necessary for each evaluation are listed below. They are grouped according to the five areas of effort established in statute and are annotated as to the type of evaluation (i.e., evaluative or formula-driven). Refer to the Guidelines for Raters of the CIP Application for additional information on scoring.

Up to 60 points possible for a clear and complete reporting of the district's maintenance program.

Only two sets, one of which may be an electronic copy, should be provided by the district, regardless of the number of submitted applications.

Maintenance Management

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9a. Maintenance management narrative (Evaluative) (up to 5 points available)

Provide a narrative description of the effectiveness of your work order-based maintenance management system along with supporting documents. Full points will be assigned where the following is provided:

- A narrative fully describes the maintenance management (MM) program and all of the following: maintenance structure and staffing, the work order program and process including work order classification, scheduling, tracking, and completion or deferral; how work orders are initiated and by whom; how component work order history and trends are used, how work orders are scheduled, or deferred.
- Provides sample work order types showing PM, routine maintenance, and corrective work; includes cost of labor and materials.
- Provides sample component-based work orders (with component ID) that include component-specific checklist of preventive and routine maintenance.
- Provides sample routine or corrective work orders showing progression of scheduling from initial response to completion to deferral.
- Provides sample PM work orders showing progression from PM to routine or corrective work.
- Provides a component report for a minimum of 10% of main school facilities showing the date of installation and date of scheduled renewal or replacement; includes components from each building system listed in DEED's R&R schedule.

Scores will be reduced incrementally where information or supporting documents are not provided.

~~How effective is the district's work order based maintenance management system? How does the district assess the program's effectiveness? Describe the formal system in place that tracks timing and costs as stated in regulation and attach documentation (sample work orders, etc.). Discuss the quality of the program as it is reflected in the submitted formula-driven reports for 9b (i.e., diversity in work types, hours available is accurate, there is a high percentage of reported hours).~~

9b. Maintenance labor reports (Formula-Driven) (up to 15 points available)

Item A: Produce a districtwide report showing total maintenance labor hours collected on work orders by type of work (e.g., preventive, corrective, operations support, etc.) vs. labor hours available by month for the previous 12 months.

Item B: Produce a districtwide report that shows a comparison of completed work orders to all work orders initiated, by month, for the previous 12 months.

Item C: Produce a districtwide report showing the number of incomplete work orders sorted by age (30 days, 60 days, 90 days, etc.) and status for the previous 12 months (deferred, awaiting materials, assigned, etc.).

These reports will demonstrate a district's ability to manage maintenance activities related to the level and scope of labor requirements. Recommended to review management reports to ensure that the reports make sense – internally consistent and reflective of work performed. Discuss discrepancies in narrative, Question 9a.

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9c. PM/corrective maintenance reports (Formula-Driven) (up to 10 points available)

Item A: Provide a districtwide report that compares scheduled (preventive) maintenance work order hours to unscheduled maintenance work order hours by month for the previous 12 months.

Item B: Provide a districtwide report with monthly trend data for unscheduled work orders showing both hours and numbers of work orders by month for the previous 12 months.

These reports support the district's ability to manage maintenance activities related to scheduled (preventive) maintenance and unscheduled work (repairs). One factor in determining the effectiveness of a preventive maintenance program is a comparison of the time and costs of scheduled maintenance in relation to the time and costs of unscheduled maintenance.

9d. 5-year average expenditure for maintenance (Formula-Driven) (5 points available)

Districtwide maintenance expenditures for the last five years will be gathered by the department from audited financial statements. (Costs for teacher housing, utilities, or expenditures for which reimbursement is being sought will be excluded.) The department will calculate these items based on the Alaska Department of Education & Early Development Uniform Chart of Accounts and Account Code Descriptions for Public School Districts, 2018 Edition annual audited district-wide operations expenditure as the sum of Function 600 Operations & Maintenance of Plant expenditures in Fund 100 General Fund, excluding Object Code 430 Utilities, Object Code 435 Energy, Object Code 445 Insurance, all expenditures for teacher housing, and capital projects funded through AS 14.11. In addition, expenditures included in this calculation will not be eligible for reimbursement under AS 14.11.

The five-year average expenditure for maintenance is divided by the five-year average insured replacement value, districtwide. Insured value will include all district facilities reported in the department's facility database:

<https://education.alaska.gov/Facilities/SchoolFacilityReport/SearchforSchoolFac.cfm>

No information need be submitted with the application for this question.

Energy Management

9e. Energy management narrative (Evaluative) (up to 5 points available)

Provide a narrative description of the district's energy management program ~~and energy reduction plan~~ along with supporting documentation. Full points will be assigned where the following is provided:

~~Address how the district is engaged in reducing energy consumption in its facilities. Energy management should address energy utilization with the goal of reducing consumption. This objective can be achieved through a number of methods: some related to the building's systems (including regular evaluation of need for commissioning an existing building), some related to the way the facilities are being used. The results of the energy management program should also be discussed.~~

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- Narrative fully describes the Energy Management program including all of the following energy policy, program structure including roles, and responsibilities, occupant comfort and safety standards, energy consumption monitoring, benchmarking, energy audits and assessments, and implementation/execution of energy efficiency measures (EEMs).
- Provide data showing the program tracks energy by facility and calculates an energy use intensity (EUI) for each main school facility over the prior five years-by energy type. Further shows how this is used to prioritize energy efficiency projects.
- Provides an energy management guideline or manual issued/updated within the past five years covering the items above which is made available to district staff in electronic or print medium.
- Provides a report showing a five-year history of implemented EEMS. The report shows how much energy was saved or usage was avoided and provides records demonstrating the savings.

Scores will be reduced incrementally where information or supporting documents are not provided.

9f. Energy consumption reports (Formula-Driven) (5 points available)

Item A: Provide site-specific reports that compares monthly consumption for energy and utilities for all main schools over the previous 5 years.

These reports support the district's ability to manage energy use and establish the ability to evaluate usage trends over time in support of building performance.

Custodial Program

9g. Custodial narrative (Evaluative) (up to 5 points available)

Provide a narrative description of the district's custodial program along with supporting documentation. Full points will be assigned where the following is provided:~~and evidence to show it was developed using data related to inventories and frequency of care.~~

~~Minimal custodial programs do not have to be quantity-based nor time-based relative to the level of care. Quality custodial programs take both these factors into account and customize a custodial plan for a facility on the known quantities and industry standards for a given activity (e.g., vacuuming carpet, dusting horizontal surfaces, etc.). Describe how the scope of custodial services is directly related to the type of surfaces and fixtures to be cleaned, the quantity of those items, and the frequency of the care for each. Describe how the district has customized its program to deal with different surfaces and care needs on a site-by-site basis.~~

- Narrative fully describes the Custodial program including all of the following: custodial policy and purpose, program structure including staffing, roles and responsibilities, integration with district maintenance processes, worker and occupant safety, adopted custodial standards, performance verification/quality control, and implementation/execution of program enhancement and efficiency measures.
- Provides custodial program guideline or manual issued/updated within the past five years covering the items above which is made available to responsible district staff in electronic or print medium.

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- Includes information or supplements that are specific to each main school facility and list types and quantities of surfaces and fixtures to be cleaned, and frequency of care for each based on the industry practice. Lists staffing requirements for the facility based on these metrics and industry standards for productivity.
- Provides a report which tabulates the preceding information (types and quantities of information, etc.) for all main schools in the district, including staffing requirements.

OR

- Provides no less than two facility examples each year of submission with no repeats within a five-year period. If the district operates fewer than 10 schools, provided one-third of all facilities each year.
- Provides at least 10 work orders generated by the custodial program in the previous 12 months.
- Provides complete sets of quality control and inspection checklists and reports, with photographs, for no less than two facilities for the previous fiscal year period.
- Provides a report showing a sample of implemented program enhancements and efficiency
- Measures in the previous five years.

Scores will be reduced incrementally where information or supporting documents are not provided.

Maintenance Training

9h. Maintenance training narrative (Evaluative) (up to 5 points available)

Provide a narrative description of the district's training program along with supporting documentation. Full points will be assigned where the following is provided:~~including, but not limited to: identification of training needs, training methods, and numbers of staff receiving building-system specific training in the past 12 months. In addition to the narrative description, provide a copy of the district's training log for the past year. The training log should include the name of the person trained, the training received, and the date training was received. Districts utilizing a computerized maintenance management system can track training and job shadowing activities through work orders and labor hours.~~

~~Training may include on the job training of junior personnel by qualified technicians on staff. For systems or components that are scheduled for replacement, or have been replaced as part of a capital project, manufacturer or vendor training could be made available to the maintenance staff to attain these goals and objectives. In-service training as well as on-line training could be provided for the entire staff. Safety and equipment specific videos are also an inexpensive training resource.~~

- Narrative fully describes the Training program including all of the following: training policy, program structure including roles and responsibilities, identification of training needs for custodians and maintenance personnel, training methods and types, training scheduling and tracking, and measurement of program effectiveness.

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- Identifies training needs based on staff positions, job functions, and building systems supported, identifies training methods and types, and assigns training on an individual basis.
- Provides two sample position descriptions each from custodial and maintenance fields that identify knowledge, skills and abilities.
- Provides a list of job functions (e.g., driving work order management, etc) and required building system knowledge (e.g., boiler tuning, lock-out/tag-out, etc.) for each job classification.
- Provides a training plan, by individual, for training scheduled in the current school year, by training title and method or type.
- Provides a log of completed training (up to 5yrs), by individual.
- Provides an assessment of the effectiveness of the training program which, at a minimum includes data on scheduled versus completed training.

Scores will be reduced incrementally where information or supporting documents are not provided.

Capital Planning (Renewal & Replacement)

9i. Capital planning narrative (Evaluative) (up to 5 points available)

Provide a narrative description of the district's capital planning program along with supporting documentation. Full points will be assigned where the following is provided:~~Provide a narrative giving evidence the district has a process for developing a long-range plan for capital renewal.~~

- Narrative fully describes the Capital Planning program including all of the following: capital planning policy and procedure including structure, responsibilities and staffing, capital needs forecasting based on system renewal and program/population changes, forecast verification based on condition assessments, user input and maintenance work order history/trends, development of CIP projects and 6-yr plans, identification of capital project resources and funding, and measurement of program effectiveness.
- Provides capital planning report issued/updated within the past 12 months and 6-yr CIP plan with at least one project in every year of the plan and includes capital projects programmed from all fund sources, local, state, and federal.
- Provides a Facility Condition Index (FCI) for every main school based on a facility condition assessment not older than five years.
- Provides a student population projection for a minimum of five years beyond the current fiscal year for every attendance area in the district.
- Provides a condition assessment for every project requesting state-aid in the first year of the 6-yr CIP plan.
- Provides an assessment of the effectiveness of the capital planning program which, at a minimum includes a districtwide trend for combined FCI for a minimum of five prior years and tracks districtwide capital expenditures for main schools for a minimum of five prior years.

Scores will be reduced incrementally where information or supporting documents are not provided.

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10. ATTACHMENTS CHECKLIST

Eligibility and project description attachments.

An application must include adequate documentation to verify the claims made in the application. The department may reject an application that does not have complete information or adequate documentation. See AS 14.11.013(c)(3)(A) and 4 AAC 31.022(d)(1). The eligibility and project description attachments checklist is provided to identify required materials and additional materials that are referenced in support of the project. The eligibility attachments are required for all projects. Projects with missing eligibility attachments will not be ranked. Check to see that your application is complete and indicate additional attachments the department should be referencing while evaluating the project.

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APPENDIX A: CATEGORIES OF GRANTS

Adopted by the Bond Reimbursement & Grant Review Committee

April 17, 2019

AS 14.11.013(a)(1) - annually review the six-year plans submitted by each district under AS 14.11.011(b) and recommend to the board a revised and updated six-year capital improvement project grant schedule that serves the best interests of the state and each district; in recommending projects for this schedule, the department shall verify that each proposed project meets the criteria established under AS 14.11.014(b) and qualifies as a project required to:^{1, 2}

- A. "Avert imminent danger or correct life threatening situations." This category is generally referred to as "Health and Life Safety." A project classified under "A" must be documented as having unsafe conditions that threaten the physical welfare of the occupants. Examples might be that the seismic design of structure is inadequate; that the required fire alarm and/or suppressant systems are non-existent or inoperative; or that the structure and materials are deteriorated or damaged seriously to the extent that they pose a health/life-safety risk. The district must document what actions it has taken to temporarily mitigate a life-threatening situation.
- B. "House students who would otherwise be unhoused." This category is referred to as "Unhoused Students." A project to be classified under "B" must have inadequate space to carry out the educational program required for the present and projected student population. Documentation should be based on the current Department of Education & Early Development Space Guidelines. (Refer to 4 AAC 31.020)
- C. "Protection of the structure of existing school facilities." This category is intended to include projects that will protect the structure, enclosure, foundations and systems of a facility from deterioration and ensure continued use as an educational facility. Work on individual facility systems may be combined into one project. However, the work on each system must be able to be independently justified and exceed \$50,000. The category is for major projects, which are not a result of inadequate preventive, routine, and/or custodial maintenance. An example could be a twenty-year-old roof that has been routinely patched and flood coated, but is presently cracking and leaking in numerous locations. A seven-year-old roof that has numerous leaks would normally only require preventive maintenance and would not qualify. In addition, no new space for unhoused students is permitted in this category, limiting its ability to be combined with other project types.
- D. "Correct building code deficiencies that require major repair or rehabilitation in order for the facility to continue to be used for the educational program." This category, Building Code Deficiencies, was previously referred to as "Code Upgrade." The key words are "major repair." A "D" project corrects major building, fire, mechanical, electrical, environmental, disability (ADA), and other conditions required by codes. Work on individual facility

¹ Projects can combine work in the different categories with the majority of work establishing the project's type. For the purpose of review and evaluation, projects which include significant work elements from categories other than the project's primary category will be evaluated as **mixed scope** projects [4 AAC 31.022(c)(8)].

² Projects will be considered for replacement-in-lieu-of-renewal when project costs exceed 75% of the current replacement cost of the existing facility, based on a twenty-year life cycle cost analysis that includes disposition costs of the existing facility.

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systems may be combined into one project. However, the work on each system must be able to be independently justified and exceed \$50,000. An example could be making all corridors one-hour rated. Making one or two toilet stalls accessible would not fit this category. In addition, no new space for unhoused students is permitted in this category, limiting its ability to be combined with other project types.

- E. "Achieve an operating cost saving." This category is intended to improve the efficiency of a facility and therefore, save money. Examples that might qualify are increasing insulation, improving doors and windows, modifying boilers and heat exchange units for more energy efficiency. The project application must include an economic analysis comparing the project cost to the operating cost savings generated by the project. In addition, no new space for unhoused students is permitted in this category, limiting its ability to be combined with other project types.
- F. "Modify or rehabilitate facilities for purpose of improving the instructional unit." Category "F", Improve Instructional Program, was previously referred to as "Functional Upgrade." This category is limited to changes or improvements within an existing facility such as, modifications for science programs, computer installation, conversion of space for special education classes, or increase of resource areas. It also covers improvements to outdoor education and site improvements to support the educational program.
- G. "Meet an educational need not specified in (A)-(F) of this paragraph, identified by the department." Any situation not covered by (A)-(F), and mandated by the Department of Education. (Currently, there are no such mandates.)

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APPENDIX B: CAPITAL IMPROVEMENT PROJECT PHASES
 Adopted by the Bond Reimbursement & Grant Review Committee
 April 4, 2018

The application form requires designation of the phase(s) for which the district requests funding. Below is a basic scope of effort for each phase. Items marked **Required** are mandatory (where project scope dictates) in order for projects to receive planning, schematic design and/or design development points. Required documents must be submitted by September 1st.

CONDITION/COMPONENT SURVEY (0 to 10 points possible)**PHASE I - PLANNING/CONCEPT DESIGN (0 or 10 points possible)**

1. Select architectural or engineering consultants (4 AAC 31.065) - **(Required if necessary to accomplish scope of project)**
2. Prepare a school facility appraisal (optional)
3. Include a condition/component survey as referenced above - **(Required if project is a major rehabilitation¹)**
4. Identify need category of project - **(Required)**
5. Verify student populations and trends - **(Required for new facilities and additions to existing facilities)**
6. Complete education specifications (4 AAC 31.010) - **(Required for new facilities, additions, and for projects that reconfigure or repurpose existing space)**
7. Complete concept design studies - **(Required for new facilities, additions, and for projects that reconfigure or repurpose existing space)**
8. Complete planning cost estimate – **(Required)**
9. Identify site requirements and potential sites - **(Required for new facilities)**

PHASE IIA - SCHEMATIC DESIGN – 35% (0 or 10 points possible)

1. Perform site evaluation and site selection analysis (4 AAC 31.025) - **(Required for new facilities)**
2. Prepare plan for transition from old site to new site, if applicable - **(Required for new facilities)**
3. Accomplish site survey and perform preliminary site investigation (topography, geotechnical) - **(Required for new facilities)**
4. Obtain letter of commitment from the landowner allowing for purchase or lease of site - **(Required for new facilities)**
5. Complete schematic design documents including development of approximate dimensioned site plans, floor plans, elevations and engineering narratives for all necessary disciplines - **(Required if necessary to adequately scope and complete the project)**
6. Complete preliminary cost estimate appropriate to the phase - **(Required)**
7. Accomplish a condition/component survey relevant to scope - **(Required if project is a major rehabilitation¹ or is necessary to adequately scope and complete the project.)**

PHASE IIB - DESIGN DEVELOPMENT – 65% (0 or 5 points possible)

1. Complete required elements of planning/design not finished in the previous phases - **(Required)**
2. Review and confirm planning (4 AAC 31.030)
3. Accomplish a condition/component survey relevant to scope - **(Required if project is a major rehabilitation¹ or is necessary to adequately scope and complete the project.)**

¹ Under 4 AAC 31.900(7): “rehabilitation” means adapting an existing facility to improve the opportunity to provide a contemporary educational program; and includes major remodeling, repair, renovation, and modernization with related capital equipment.

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4. Obtain option to purchase or lease site at an agreed upon price and terms - **(Required for new facilities)**
5. Complete design development documents, including dimensioned site plans, floor plans, complete exterior elevations, draft technical specifications, and engineering plans - **(Required if necessary to adequately scope and complete the project)**
6. Prepare proposed schedule and method of construction
7. Prepare revised cost estimate appropriate to the phase - **(Required)**
8. Energy consumption and cost report

PHASE III - CONSTRUCTION

1. Complete required elements of planning and design not previously completed - **(Required)**
2. Prepare final cost estimate - **(Required)**
3. Complete final contract documents and legal review of construction documents (4 AAC 31.040)
4. Advertising, bidding and contract award (4 AAC 31.080) - **(Required for contracts over \$100,000)**
5. Submit signed construction contract
6. Construct project
7. Procure furniture, fixtures, and equipment, if applicable
8. Substantial completion
9. Final completion and move-in
10. Post occupancy survey
11. Obtain project audit/close out

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APPENDIX C: PROJECT COST ESTIMATE

Adopted by the Bond Reimbursement & Grant Review Committee

April 14, 2020

Construction Management (CM) by a private contractor. Costs may include oversight of any phase of the project by a private contractor. Construction management includes management of the project's scope, schedule, quality, and budget during any phase of the planning, design and construction of the facility. The maximum for construction management by consultant is 4% of the total project cost as defined in statute [AS 14.11.020(c)].

Land is a variable unrelated to construction cost and should include actual purchase price plus title insurance, fees, and closing costs. Land cost is limited to the lesser of the appraised value of the land or the actual purchase price of the land. Land costs are excluded from project percent calculations.

Site Investigation is also a variable unrelated to construction cost and should include land survey, preliminary soil testing, and environmental and cultural survey costs, but not site preparation. Site investigation costs are excluded from project percent calculations.

Design Services should include full standard architectural and engineering services as described in AIA Document B141-1997. Architectural and engineering fees can be budgeted based upon a percentage of construction costs. Because construction costs vary by region and size, so may the percentage fee to accomplish the same effort. Additional design services such as educational specifications, condition surveys, and post occupancy evaluations may increase fees beyond the recommended percentages.

Recommended: 6-10% (Renovation, complexity of scope, and scale might run 2% higher)

Construction includes all contract work as well as force account for facility construction, site preparation, and utilities. This is the base cost upon which others are estimated and equals 100%.

Equipment/Technology includes all moveable furnishing, instructional devices or aids, electronic and mechanical equipment with associated software and peripherals (consultant services necessary to make equipment operational may also be included). It does not include installed equipment, nor consumable supplies, with the exception of the initial purchase of library books. Items purchased should meet the district definition of a fixed asset and be accounted for in an inventory control system. The Equipment/Technology budget has two benchmarks for standard funding: percentage of construction costs and per-student costs as discussed in DEED's *Guidelines for School Equipment Purchases*. If special technology plans call for higher levels of funding, itemized costs should be presented in the project budget separate from standard equipment.

Recommended: 0-4% of construction cost or between \$2,300 - \$3,800 per student depending on school size and type.

District Administrative Overhead includes an allocable share of district overhead costs, such as payroll, accounts payable, procurement services, and preparation of the six-year capital improvement plan and specific project applications. The maximum for non-project specific indirect administrative costs is 3%, as defined in regulation [4 AAC 31.023(c)(7)]. In-house construction management should be included as part of this line item. The total of in-house construction

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APPENDIX C: PROJECT COST ESTIMATE
Adopted by the Bond Reimbursement & Grant Review Committee
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management costs and construction management by consultant should not exceed 5% of the construction budget.

Recommended: 2-9%

Percent for Art includes the statutory allowance for art in public places. This may fund selection, design/fabrication and installation of works of art. One percent of the construction budget is required except for rural projects which require only one-half of one percent. For this category, projects are rural if they are in communities under 3,000 or are not on a year-round, publicly-maintained road system and have a construction cost differential greater than 120% of Anchorage as determined in the Cost Model for Alaskan Schools. The department recommends budgeting for art.

Project Contingency is a safety factor to allow for unforeseen changes. Standard cost estimating by A/E or professional estimators use a built in contingency in the construction cost of $\pm 10\%$. Because that figure is included in the construction cost, this item is a project contingency for project changes and unanticipated costs in other budget areas.

Recommended: 5% Fixed

Total Project Request is the total project cost, as a percent of the construction cost; except in extreme cases, should average out close to the same for all projects, when the variables of land cost and site investigation are omitted. This item is the best overall gauge of the efficiency of the project.

Recommended: Not to exceed 130%

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APPENDIX D: TYPE OF SPACE ADDED OR IMPROVED
Adopted by the Bond Reimbursement & Grant Review Committee
April 17, 2019

Category A - Instructional or Resource

Kindergarten
Elementary
General Use Classrooms
Secondary
Library/Media Center
Special Education
Bi-Cultural/Bilingual
Art
Science
Music/Drama
Journalism
Computer Lab/Technology Resource
Business Education
Consumer Education
Gifted/Talented
Wood Shop
General Shop
Small Machine Repair Shop
Darkroom
Gym

Category B - Support Teaching

Counseling/Testing
Teacher Workroom
Teacher Offices
Educational Resource Storage
Time-Out Room
Parent Resource Room

Category C - General Support

Student Commons/Lunch Room
Auditorium
Pool
Weight Room
Multipurpose Room
Boys' Locker Room
Girls' Locker Room
Administration
Nurse
Conference Rooms
Community Schools/PTA Administration
Kitchen/Food Service
Student Store

Category D - Supplementary

Corridors/Vestibules/Entryways
Stairs/Elevators
Mechanical/Electrical
Passageways/Chaseways
Supply Storage & Receiving Areas
Restrooms/Toilets
Custodial
Other Special Remote Location Factors
Other Building Support

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APPENDIX E: DEFINITIONS OF MAINTENANCE

Adopted by the Bond Reimbursement & Grant Review Committee

April 17, 2019

Component

A part of a system in the school facility.

Component Repair or Replacement

The unscheduled repair or replacement of faulty components, materials, or products caused by factors beyond the control of maintenance personnel.

Custodial Care

The day to day and periodic cleaning, painting, and replacement of disposable supplies to maintain the facility in safe, clean, and orderly condition.

Deferred Maintenance

Custodial care, routine maintenance, or preventive maintenance that is postponed for lack of funds, resources, or other reasons.

Major Maintenance

Facility renewal that requires major repair or rehabilitation to protect the structure and correct building code deficiencies, and shall exceed \$50,000 per project, per site. It must be demonstrated, using evidence acceptable to the department that (1) the district has adhered to its regular preventive, routine, and/or custodial maintenance schedule for the identified project request, and (2) preventive maintenance is no longer cost effective.

Preventive Maintenance

The regularly scheduled activities that carry out the diagnostic and corrective actions necessary to prevent premature failure or maximize or extend the useful life of a facility and/or its components. It involves a planned and implemented program of inspection, servicing, testing, and replacement of systems and components that is cost effective on a life-cycle basis. Programs shall contain the elements defined in AS 14.11.011(b)(4) and 4 AAC 31.013 to be eligible for funding.

Renewal or Replacement

A scheduled and anticipated systematic upgrading or replacement of a facility system or component to establish its ability to function for a new life cycle.

System(s)

An assembly of components created to perform specific functions in a school facility, such as a roof system, mechanical system, or electrical system.

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APPENDIX F: INFORMATION REGARDING PARTICIPATING SHARE & IN-KIND CONTRIBUTIONS OR REQUEST FOR FULL WAIVER

Adopted by the Bond Reimbursement & Grant Review Committee

April 23, 1999

Current law – AS 14.11.008(d) - requires that a district provide a participating share for all school construction and major maintenance projects funded under AS 14.11. The department administers all funds for capital projects appropriated to it under the guidelines of AS 14.11 and 4 AAC 31. The following points should be considered by those districts requesting a waiver of the local participating share.

1. A district has three years before and after the appropriation to fulfill the participating share requirement.

A review of the annual financial audits and school district budgets indicate that no district is in a financial condition which warrants a full waiver. Local dollars are available to fund all or a portion of the match during the six years. Districts continue to generate and budget for, local interest earnings, facility rental fees, and other forms of discretionary revenue adequate to fund some or all of the required local match. If properly documented and not already funded by AS 14.11, prior expenditures for planning, design, and other eligible costs may be sufficient to meet the match requirement.

2. Both the administration and the Legislature have strong feelings that local communities should at least be partially engaged in the funding of projects.

In recognition of the inability of some communities to levy a tax or raise large amounts of cash from other sources, the legislation provides an opportunity for in-kind contributions, in lieu of cash. All districts need to make a directed effort to provide the local match, utilize fund balances and other discretionary revenue, consider sources of in-kind contributions, document that effort, and then request a full or partial waiver, as necessary.

3. All waiver requests require sufficient documentation.

Requests should be accompanied by strong, compelling evidence as to overall financial condition of the school district and in the case of a city/borough school district, the financial condition of the city/borough as well. The attachments should include, at a minimum, cash account reconciliations, balance sheets, cash investment maturity schedules, revenue projection, cash flow analysis and projected use of all fund balances and documentation in support of attempts to meet the local match. Historical expenditures do not provide sufficient evidence of future resource allocations. Consideration should be given to new and replacement equipment purchases, travel, and other expenditures that support classroom activity, but may be delayed until the local match is funded. Each district has an opportunity to help itself and provide a safe, efficient school facility through shared responsibility.

4. Districts may request consideration of in-kind contributions of labor, materials, or equipment.

Under regulation 4 AAC 31.023(d), in-kind contributions are allowed. This also affords an opportunity for community participation through contributions to the art requirements for new buildings or other means. This option should be fully explored, as well as the documentation mentioned above, prior to requesting a waiver of all or part of the participating share.



Guidelines for Raters of the CIP Application

Introduction

The Department of Education & Early Development is charged with the task of compiling a prioritized list of projects to be used in preparing a six-year capital plan for submittal to the governor and the legislature (AS 14.11.013(a)(3)). The criteria for accomplishing the priorities are established in statute (AS 14.11.013(B)) and are awarded points based on a scoring system developed by the Bond Reimbursement and Grant Review Committee under its statutorily imposed mandate (AS 14.11.014(b)(6)).

The guidelines provided here are to assure that raters are using a common set of terms and standards when awarding points for the evaluative scoring criteria.

Basis for Rating Applications

The following positions will define the base philosophy for rating applications.

Since districts are required to submit a request for a capital project no later than September 1 of the year preceding the fiscal year for which they are applying, no rater shall review, rank, or give feedback regarding scoring a project prior to this deadline.

Applications will be ranked based on the information submitted with the application, or applicants may use information submitted to the department in support of a project, provided the submission occurs on or before September 1 and is identified as an attachment to an application. Each rater shall arrive at the initial ranking of each project independently. Raters will be expected to go through each application question by question. They will also review all attachments for content, completeness, and bearing on each scoring element. Consistency in scores from year-to-year shall be considered. It is expected that projects will demonstrate different levels of completeness in descriptions and detail depending on the stage of project development.

Projects are prioritized in two lists, the School Construction List and the Major Maintenance List, and reflect the two statutory funds established for education capital projects. Under the definitions provided in statute and regulation, projects which add space to a facility are classed as School Construction projects and must fall in categories A, B, F, or G. Major maintenance projects (categories C, D, and E) may not include additional space for unhoused students. Only projects in which the primary purpose is Protection of Structure, Code Compliance, or Achieve an Operating Cost Savings, where the work includes renewal, replacement, or consolidation of existing building systems or components, should be considered as maintenance projects.

Each rater should have an eligibility checklist available during rating. Eligibility items A, F, G, I, J, L, and N will be evaluated by each rater. Other eligibility items will be the responsibility of support team members doing data input and capacity/allowable calculations. Discussion regarding project eligibility should be brought to the attention of the rating team as soon as it becomes an issue in one person's mind.

Evaluative Rating Guidelines

For each of the evaluative rating categories, raters will consider the factors listed when evaluating and scoring applications. The list is not exclusive, nor exhaustive. As raters read and evaluate projects, review of the listed elements is to be done for referential purposes. Raters should also refer to the Application Instructions for each question.

Code deficiencies / Protection of structure / Life safety

(Application Question 4a; Points possible: 50)

- Points will be assigned for code deficiency, protection of structure, or life safety conditions when the application documents the deficiency, the need for correction, and how the project corrects the deficiency. A condition may only receive points in one scoring area.
- Simply identifying a condition in the application will not necessarily generate points. A well-described and documented condition that provides for full evaluation and point awards will include specificity, with attached documentation to support the narrative.
- Age of building system is considered based on the calendar year in which the project would receive funding.
- A project can address a single condition or multiple conditions. Evaluate the severity of each condition. Incremental point adjustments from those provided in the below matrix may be provided for the age of the system, severity, the nature of the item, and effect on the school facility.
- Does the project scope combine severe and non-severe or critical and non-critical conditions? Inclusion of unrelated non-severe or non-critical conditions in a project will reduce the overall score of the project based on a percentage of project cost.
- Points for mixed-conditions can total more than the possible points. Combined points are weighted using a ratio of construction cost for correcting scored conditions to the total requested construction cost of the project.
- Per 4 AAC 31.022(c)(8), scoring of mixed-scope projects will be weighted.

Points will be assigned using the following suggested guidelines.

Structural Condition Issue	Pts
Seismic - no restrictions	3
Foundation/Floor - no PE	4
Seismic - minimal restrictions	6
Upper Floor Structure - no PE	9
Vertical Structure - no PE	9
Roof Structure - no PE	10
Foundation/Floor - PE	15
Seismic - moderate restriction	15
Upper Floor Structure - PE	20
Vertical Structure - PE	20
Roof Structure - PE	24
Seismic/Gravity Partial Closure ¹	28
Seismic/Gravity Full Closure ¹	50

Roof/Envelope Condition Issue	Pts
Siding Failure, age <25yr	2
Siding Finish	2
Doors, age >20yr	3
Roof, age >Warranty +5yr ³	3
Roof, age Warranty +10yr ³	6
Roof Leaks - avg WO<3/yr ²	8
ASHRAE 90.1 Windows ⁴	8
ASHRAE 90.1 Insulation ⁴	10
Siding Material, age >25yr	12
Windows, age >30yrs	12
Siding Failure, age <30yr	15
Roof Leaks, avg WO >3/yr ²	15
Doors w/ Egress issues	15
Roof Leaks affect space, w/ WO documentation	25

Arch/Interior/ADA Condition Issue	Pts
ADA - 1 issue	1
ADA - 2 issues	2
DEC Sanitation	2
ADA - 3 issues	3
Ceiling Finishes age >25yr	3
Wall Finishes age >25yr	3
ADA - 4 issues	4
Elevator Code Deficiency	4
Floor Finishes >15yr	4
Building Egress	10
Rated Assemblies	12
Codes + Arch (each system)	+3

Mechanical Condition Issue	Pts
DDC Deficiency	3
Narrative, System age >30yr	4
Ventilation, WO <3/yr ²	5
Plumbing, WO <3/yr ²	6
Heating, WO <3/yr ²	7
Pneumatic Controls	8
Ventilation, WO >3/yr ²	9
Plumbing, WO >3/yr ²	10
Heating, WO >3/yr ²	11
Codes: Ventilation	12
Codes: Plumbing	12
Codes: Heating	13
Codes + PE (each system)	+3
Boilers, 1 of 2 Non-op	13
HVAC age >40yr	15
Boilers, 2 of 3 Non-op	18
Mechanical Systems, WO >5/yr ²	21
Heating Failure	25

Electrical Condition Issue	Pts
Narrative, Lighting age >25yr	2
Narrative, Electrical age >30yr	4
Power, WO <3/yr ²	4
Lighting, WO <3/yr ²	4
Back-up Generator In-operable	5
Egress/EM lights, WO <3/yr ²	5
Power, WO >3/yr ²	7
Lighting, WO >3/yr ²	7
Egress/EM lights, WO >3/yr ²	8
Intercom Issues, WO >3/yr ²	8
Codes, Lighting	10
Codes, Power	10
Codes + PE (each system)	+3
Intercom Failure	10
Electrical, age >40yr	15
Light Levels, <50% of code	16
Electrical Systems, WO >5/yr ²	21
Power Failure	25

Fire Alarm/Sprinkler Condition Issue	Pts
Narrative, Fire Alarm age >15yr	2
Narrative, Sprinkler >30yr	2
Heads Failing, age >30yr	5
Sprinkler Coverage Gaps	5
Non-addressable FA	6
FA/Sprinkler, WO >1/yr ²	8
Heads Failing, age >40yr	10
FA/Sprinkler, WO >3/yr ²	15
Fire Alarm Non-op, <3 floors	17
FA/Sprinkler, WO >5/yr ²	20
Fire Alarm Non-op, >3 floors	25
Sprinkler Non-op	30

Site Condition Issue	Pts
Vehicle Surfaces	3
Walkways and Surfaces	4
Drainage Issues	6
Playground Code	12
Power Issues	15
Wastewater Issues	15
Water Issues	16
Wastewater Failure	24
Water Failure	25

UST/AST/HazMat Condition Issue	Pts
HazMat (all) Low Exposures	3
Narrative, UST age >30yr	2
Narrative, AST age >40yr	5
Sewage Lagoon Failure/ Exposure	5
UST/AST Leak	7
USCG/40 CFR Cite	10
HazMat (all) Mod Exposures	10
HazMat (all) High Exposures	22

Definitions:

Arch = documented by a licensed Architect
 PE = documented by a Professional Engineer
 No PE = not documented by a Professional Engineer
 WO = Work Orders provided w/ application

Notes:

- ¹ If district does not qualify for space, points limited to 15.
- ² Average of prior 3 years, provide work orders. See application instructions.
- ³ Provide copy of roof warranty.
- ⁴ Provide existing R-value or code violation of system.

Regional community facilities

(Application Question 5h; Points possible: 5)

- Is a community “inventory” provided?
- Where reasonable alternative facilities have been identified, is there documentation with the facility owner regarding availability?
- Consider the effort/results in identifying alternative facilities and the rationale behind the viability of the alternative facility.
- Were judgments about the viability of alternate facilities made with “institutional knowledge”, professional assessment, third party objectivity, and/or economic analysis?
- Are facilities listed in a narrative discussion or are they documented with supplemental data such as photos, maps, facility profile, etc.?
- This point category is only applicable to construction projects.

Points will be assigned in increments using the following suggested guidelines:

Scoring Criteria	Point Range
A community inventory is provided and reasonable alternative facilities have been identified. The rationale behind the viability of the alternative facilities has been provided and judgments are made using institutional knowledge, third party objectivity, economic analysis, etc. The narrative discussion is documented with photos, maps, facility profiles, etc.	5 points
A community inventory is provided and reasonable alternative facilities have been identified. The rationale behind the viability of the alternative facilities has been provided and judgments are made using institutional knowledge, third party objectivity, economic analysis, etc.	4 points
A community inventory is provided and reasonable alternative facilities have been identified. The rationale behind the viability of the alternative facilities has been provided.	3 points
A community inventory is provided and reasonable alternative facilities have been identified.	2 points
A community inventory is provided.	1 point
Question has not been answered	0 points

Cost estimate for total project cost

(Application Questions 7a - 7c; Points possible: 0-30)

- Check to assure that the estimate matches the proposed project scope.
- Primary evaluation should test both the “reasonableness” and the “completeness” of the cost estimate (i.e., How well can this estimate be used to advocate for this project?).
- Check for double entries, including factored items, cost after adjustment for geographic factor, and percentages and justification (with backup) when percentages exceed DEED guidelines.
- Review and evaluate backup for cost estimate including lump sum or actual construction costs.
- Rating considers the full range of estimates: from conceptual to detail design to actual construction costs. It should be noted that because this scoring element covers the full

range of estimate possibilities, it is anticipated that conceptual estimates score less than more detailed construction estimates and actual construction cost documentation.

- Completed project costs are supported by competitive selection documentation, and DEED-approval of in-house labor or an alternative procurement method, as needed.

Points reflect the reasonableness and completeness evaluation and will be assigned in increments using the following suggested guidelines:

Scoring Criteria	Point Range
The estimate matches the scope of work, is reasonable and complete with no double entries, adjustments are accurate, justification and backup is provided when estimate exceeds DEED guidelines, and all lump sums amounts are described and supported. The estimate is based on construction document level cost estimate, bid tabulations, or actual invoices.	27-30 points
The estimate matches the scope of work, is reasonable and complete with no double entries, adjustments are accurate, justification and backup is provided when estimate exceeds DEED guidelines, and all lump sums amounts are described and supported. The estimate is based on 65% design development level specifications and drawings.	23-26 points
The estimate matches the scope of work, is reasonable and complete with no double entries, adjustments are accurate, justification and backup is provided when estimate exceeds DEED guidelines, and all lump sums amounts are described and supported. The estimate is based on 35% schematic design level documents.	18-22 points
The estimate matches the scope of work, is reasonable and complete with no double entries, adjustments are accurate, justification and backup is provided when estimate exceeds DEED guidelines, and all lump sums amounts are described and supported. The estimate is based on concept design level documents. The DEED demand cost model is acceptable as a planning/ concept level cost estimate.	12-17 points
The cost estimate is not adequately developed to support concept level costs. Components may not be present to confirm scope of work, reasonableness and completeness or other elements. Project may be at an early preliminary stage.	6-11 points
Construction costs are not supported or many cost elements are missing.	1-5 points

Emergency conditions

(Application Question 8a; Points possible: 50)

- If the district doesn't declare the project an emergency, points will not be awarded.
- Consider the ranking of the project on the district six-year plan.
- Consider the "level of threat" to both people and property in assessing the emergency.
- Consider the "nature" of the emergency.
- Consider the "impact" on the use of the facility due to the emergency condition.
- Consider the "immediacy" of the emergency (how time critical is it?).
- Consider the level of description and documentation provided.
- Consider whether the description provided is congruent with other application elements.

- Does the project scope include non-emergency conditions? Scoring of mixed-scope projects, which address both emergency and non-emergency conditions, should be weighted based on the amount of emergency work that is included in the project.
- Nothing in this scoring element should restrict a system with premature failures from being assigned points when the conditions for assigning points in that category are met.

Points will be assigned in increments according to the level of threat using the following suggested guidelines. High threat emergency projects with high emergency points are infrequent.

Scoring Criteria	Point Range
Building is destroyed or rendered functionally unsafe for occupancy and requires the building to be demolished and rebuilt. The emergency narrative is supported by documentation that addresses the immediacy of the emergency, the circumstances of the loss of the building, and that the students are currently unhoused.	50 points
Building is unsafe and the entire student population is temporarily unhoused. The building requires substantial repairs to be made safe for the student population to occupy the building. The emergency narrative is supported by documentation that addresses the immediacy of the emergency and the narrative explains any mitigation the district has taken to address the emergency.	25-45 points
Building is occupied by the student population. A local or state official has issued an order that the building will need to be repaired by a certain date or the district will have to vacate the building. The emergency narrative is supported by documentation from the local or state official providing the date when the repairs need to be completed. The documentation addresses the immediacy of the emergency and the narrative explains any mitigation the district has taken to address the emergency.	5-25 points
A portion of the building requires significant repair or replacement of damaged portion of building. The damaged portion of the building cannot be used for educational purposes. The emergency narrative is supported by documentation that addresses the immediacy for the emergency, the circumstances surrounding the damaged portion of the building, and the portion of the building that is not available for educational purposes.	5-45 points
A major building component or system has completely failed and is no longer repairable. The failed system or component has rendered the facility unusable to the student population until replaced. The emergency narrative is supported by documentation that addresses the immediacy of the emergency, the circumstances of the failure, and that the students are currently unhoused.	25-45 points
A major building component or system has a high probability of completely failing in the near future. The component or system has failed, but has been repaired and may have limited functionality. If the component fails the district may be required to restrict use of the building until the component or system is repaired or replaced. The emergency narrative is supported by documentation that addresses the high probability of the failure and documents the requirement to restrict use of the building until corrected.	5-25 points

Inadequacies of Existing Space

(Application Question 8b; Points possible: 40)

- Scoring is based on the described and documented inability of existing space to adequately serve the instructional program. Points are not awarded for code violations.
- Consider the adequacy of the space in terms of both form and function, crowding, and upgrades to space that support the instructional program.
- Balance consideration of educational adequacy of physical arrangement versus functional factors.
- Scoring should take into consideration whether the inadequate space is for a mandatory instructional program or a new or existing local program.
- Does the project include improvements to functionally adequate space? Scoring of projects with functionally adequate space and inadequate space should weight the amount of work improving inadequate space that is included in the project.

Points will be assigned in increments using the following suggested guidelines:

Scoring Criteria	Point Range
The existing space as described and documented is significantly inadequate to meet state mandated instructional programs, facility is severely overcrowded, and the project is to add or upgrade state mandated instructional space. Documentation such as a condition survey, design narrative, or space calculations can be used to support the inadequacies of the existing space.	25-40 points
The existing space as described and documented is not adequate to meet state mandated or proposed new or existing local instructional programs, facility is moderately overcrowded, and the project is to add or upgrade state mandated instructional or proposed new or existing local instructional space. Documentation such as a condition survey, design narrative, or space calculations can be used to support the inadequacies of the existing space.	11-24 points
The existing space as described and documented is not adequate to meet state mandated or proposed new or existing local instructional programs, facility has minor or no overcrowding, and the project is to add or upgrade state mandated instructional or proposed new or existing local instructional space.	1-10 points
A major maintenance project that describes and documents the inadequacy of the existing space that is an additional condition being addressed in the project.	0-5 points

Other options

(Application Question 8c; Points possible: 25)

- Consider how completely this topic is addressed. Does the discussion provide alternatives and details that support a strong vetting of the project options?
- Consider the range of options considered and the rigor of the comparison to each other. Does the comparison of options support the project chosen?
- Scoring should increase in accordance with the amount of detailed information; graduated into three levels of: 1) unsupported narrative, 2) well supported narrative, and 3) detailed cost analysis.

- Consider boundary changes where applicable.
- For installed mechanical equipment, was a re-conditioned or re-built option considered in lieu of new?
- For over-crowding, was double shifting or other alternatives considered?

Points will be assigned in increments using the following suggested guidelines:

Scoring Criteria	Point Range
Were the options considered viable alternatives? The options are fully described viable options that are supported by a life-cycle cost analysis and cost benefits analysis that compare the cost of the options; an explanation is provided for the rationale behind the selection of the preferred option. Documentation is submitted that supports the options, analysis, and conclusion. The options contain the proposed project and at least two other viable options.	21-25 points
The options are fully described viable options that include cost comparisons between options. An explanation is provided for the rationale behind the selection of the preferred option; however, no life cycle cost analysis is included. Documentation is submitted that supports the options, analysis, and conclusion. The options contain the proposed project and at least two other viable options.	11-20 points
A description is included for each option; however, the options are not supported with additional documentation or cost analysis. The options contain the proposed project and at least one other viable option.	1-10 points

Annual operating cost savings

(Application question 8d; Points possible: 30)

- This should be rated based on information provided which specifically address this issue.
- Evaluation should be based on district provided data and analysis rather than opinion.
- Top scores should be reserved for those projects that can demonstrate a payback within a relatively brief period of time.
- Should be consistent with life cycle cost analysis and cost benefit analysis (if provided). This may have either a positive or a negative relationship to justification of a project.
- Evaluation may reward efforts to contain or reduce operating costs even if the project doesn't save money or have a payback (i.e. – utilizing LEED or CHPS standards for construction).

Points will be assigned in increments using the following suggested guidelines:

Scoring Criteria	Point Range
A detailed breakdown of projected annual operational cost savings compared to the project cost. The analysis should be consistent with a life cycle cost analysis or cost benefit analysis which is submitted with the project. The projected operational cost savings have a documented, detailed payback of 10 years or less.	21-30 points
A detailed breakdown of projected annual operational cost savings compared to the project cost. The analysis should be consistent with a life cycle cost analysis or cost benefit analysis which is submitted with the project. The projected operational cost savings have a documented, detailed payback of between 10 and 20 years.	11-20 points
A summary analysis that includes a projected annual operational cost savings compared to the project cost. The projected operational cost savings documents efforts to contain or reduce operating costs and has a payback that exceeds 20 years.	6-10 points
Stated opinion regarding estimated cost savings that could be achieved with the project.	1-5 points

District preventive maintenance and facilities management

(Application Questions 9a, 9e-9h; Points possible: 25 evaluative)

Maintenance Management Narrative

(Application Question 9a; Points possible: 5)

- Does the described program address preventive maintenance as well as routine?
- How well does the program work for each individual school?
- Does the program address all building components? Mechanical, electrical, structural, architectural, exterior/civil? (Note: components as used here and below may also be referred to as ‘equipment’.)
- Is there evidence supplied which demonstrates that the program is effective?
- Who participates in the program and how does it function?

<u>Scoring Criteria</u>	<u>Point Range</u>
<p><u>Narrative fully describes the maintenance management (MM) program and all of the following: maintenance structure and staffing, the work order program and process including work order classification, scheduling, tracking, and completion or deferral; how work orders are initiated and by whom; how component work order history and trends are used, how work orders are scheduled, or deferred.</u></p> <p><u>Provides sample work order types showing PM, routine maintenance, and corrective work; includes cost of labor and materials.</u></p> <p><u>Provides sample component-based work orders (with component ID) that include component-specific checklist of preventive and routine maintenance.</u></p> <p><u>Provides sample routine or corrective work orders showing progression of scheduling from initial response to completion to deferral.</u></p> <p><u>Provides sample PM work orders showing progression from PM to routine or corrective work.</u></p> <p><u>Provides a component report for a minimum of 10% of main school facilities showing the date of installation and date of scheduled renewal or replacement; includes components from each building system listed in DEED’s R&R schedule.</u></p>	<u>5 points</u>
<p><u>Narrative describes the MM program and all of the following: maintenance structure and staffing, the work order program and process including work order classification, scheduling, tracking, and completion or deferral; how work orders are initiated and by whom; how work orders are scheduled or deferred. Sample work order types showing PM, routine maintenance, and corrective work; includes cost of labor and materials. Sample component-based work orders (with component ID) that include component-specific checklist of preventive and routine maintenance.</u></p>	<u>4 points</u>
<p><u>Narrative describes the MM program and all of the following: the work order program and process including work order classification, tracking and completion; how work orders are initiated and by whom. Sample work order types showing PM, routine maintenance, and corrective work; includes cost of labor and materials.</u></p>	<u>3 points</u>

<u>Scoring Criteria</u>	<u>Point Range</u>
<u>Minimal narrative that partially describes the MM program but not all of the following: the work order program and process including work order classification; how work orders are initiated and by whom. Sample work order types showing some of PM, routine maintenance and corrective work; includes cost of labor and materials on corrective work samples.</u>	<u>2 points</u>
<u>Minimal narrative that partially describes the MM program but not all of the following: the work order program and process including work order classification; how work orders are initiated and by whom. No sample work orders.</u>	<u>1 point</u>
<u>No narrative or an abbreviated narrative that provides no information of how the maintenance management program works. No sample work orders.</u>	<u>0 points</u>

Energy Management Narrative

(Application Question 9e; Points possible: 5)

- Is the district engaged in reducing energy consumption in its facilities?
- Is a comprehensive set of methods being used?
- Is the program districtwide in scope?
- Is the program achieving results?
- Is there a method for reviewing and monitoring energy usage?
- Is there a method for evaluating existing facilities' need for commissioning?

<u>Scoring Criteria</u>	<u>Point Range</u>
<p><u>Narrative fully describes the Energy Management program including all of the following: energy policy, program structure including roles, and responsibilities, occupant comfort and safety standards, energy consumption monitoring, benchmarking, energy audits and assessments, and implementation/execution of energy efficiency measures (EEMs).</u></p> <p><u>Provides data showing that the program tracks energy usage by facility and calculates an energy use intensity (EUI) for each main school facility over the prior five years—by energy type. Further shows how this is used to prioritize energy efficiency projects.</u></p> <p><u>Provides an energy management guideline or manual issued/updated within the past five years covering the items above which is made available to district staff in electronic or print medium.</u></p> <p><u>Provides a report showing a five-year history of implemented EEMs. The report shows how much energy was saved or usage was avoided and provides records demonstrating the savings.</u></p> <p><u>Provides a complete set of energy consumption records (Application Q.9f).</u></p>	<u>5 points</u>

<u>Scoring Criteria</u>	<u>Point Range</u>
<p><u>Narrative describes the Energy Management program including all of the following: energy policy, program structure including roles, and responsibilities, occupant comfort and safety standards, energy consumption monitoring, energy audits and assessments, and implementation/execution of energy efficiency measures (EEMs).</u></p> <p><u>Provides data showing that the program tracks energy usage by facility and calculates an energy use intensity (EUI) for each main school facility requiring an RCx analysis over the prior five years—by energy type.</u></p> <p><u>Provides an energy management guideline or manual, issued/updated within the past five years, covering the items above which is made available to district staff in electronic or print medium.</u></p> <p><u>Provides a report showing a sample of implemented EEMs. Application includes the complete set of energy records was provided for Q.9x.</u></p>	<p><u>4 points</u></p>
<p><u>Narrative describes the Energy Management program including all of the following: energy policy, program structure including roles, and responsibilities, occupant comfort and safety standards, energy consumption monitoring. Shows that the program tracks energy usage by facility and calculates an energy use intensity (EUI) for each main school facility requiring an RCx analysis over the prior five years—by energy type. Provides an energy management guideline or manual, issued/updated within the past five years, covering the items above.</u></p> <p><u>Provides a complete set of energy consumption records (Application Q.9f).</u></p>	<p><u>3 points</u></p>
<p><u>Narrative has useful description of the Energy Management program including some of the following: energy policy, program structure including roles, and responsibilities, occupant comfort and safety standards, energy consumption monitoring. Shows that the program tracks energy usage by facility and calculates an energy use intensity (EUI) for each facility requiring an RCx analysis over the prior five years—by energy type.</u></p> <p><u>A complete set of energy records is not provided (Application Q.9f).</u></p>	<p><u>2 points</u></p>
<p><u>Narrative has some useful description of the Energy Management program but is not complete; a complete set of energy records is not provided (Q.9f).</u></p> <p><u>OR</u></p> <p><u>No narrative, but complete set of energy records was provided (Q9.f).</u></p>	<p><u>1 point</u></p>
<p><u>No narrative or an abbreviated narrative with no useful description of the Energy Management program. No energy records are provided (Q.9f).</u></p>	<p><u>0 points</u></p>

Custodial Narrative

(Application Question 9f; Points possible: 5)

- Is the district’s custodial program complete?
- Is custodial program based on quantities from building inventories and frequency of care based on industry practice?
- Has the district customized its program to be specific to each facility?
- Is the program districtwide in scope?
- Is the program achieving results?
- Is the written custodial plan(s) attached?

<u>Scoring Criteria</u>	<u>Point Range</u>
<p><u>Narrative fully describes the Custodial program including all of the following: custodial policy and purpose, program structure including staffing, roles, and responsibilities, integration with district maintenance processes, worker and occupant safety, adopted custodial standards, performance verification/quality control, and implementation/execution of program enhancement and efficiency measures.</u></p> <p><u>Provides custodial program guideline or manual issued/updated within the past five years covering the items above, which is made available to responsible district staff in electronic or print medium.</u></p> <p><u>Includes information or supplements that are specific to each main school facility and list types and quantities of surfaces and fixtures to be cleaned, and frequency of care for each based on industry practice. Lists staffing requirements for the facility based on these metrics and industry standards for productivity.</u></p> <p><u>Provides a report which tabulates the preceding information (types and quantities of information, etc.) for all main schools in the district, including staffing requirements.</u></p> <p><u>OR</u></p> <p><u>Provides no less than two facility examples each year of submission with no repeats within a five-year period. If the district operates fewer than 10 schools, provided one-third of all facilities each year.</u></p> <p><u>Provide at least 10 work orders generated by the custodial program in the previous 12 months.</u></p> <p><u>Provides complete sets of quality control and inspection checklists and reports, with photographs, for no less than two facilities for the previous fiscal year period.</u></p> <p><u>Provides a report showing a sample of implemented program enhancements and efficiency measures in the previous five years.</u></p>	<p><u>5 points</u></p>

<u>Scoring Criteria</u>	<u>Point Range</u>
<p><u>Narrative describes the Custodial program including all of the following: custodial policy and purpose, program structure including staffing, roles, and responsibilities, integration with district maintenance processes, worker and occupant safety, adopted custodial standards, performance verification/quality control.</u></p> <p><u>Provides custodial program guideline or manual issued/updated within the past five years covering the items above.</u></p> <p><u>Includes information or supplements that are specific to each main school facility and list types and quantities of surfaces and fixtures to be cleaned, and frequency of care for each based on industry practice.</u></p> <p><u>Provides no less than two facility examples of the facility-specific information.</u></p> <p><u>Provide at least 5 work orders generated by the custodial program in the previous 12 months.</u></p> <p><u>Provides samples of quality control and inspection checklists.</u></p>	<p><u>4 points</u></p>
<p><u>Narrative describes the Custodial program including all of the following: custodial policy and purpose, program structure including staffing, roles, and responsibilities, worker and occupant safety, adopted custodial standards, and performance verification/quality control.</u></p> <p><u>Provides custodial program guideline or manual which includes information or supplements on how the guide is adapted to specific schools.</u></p>	<p><u>3 points</u></p>
<p><u>Narrative has some useful description of the Custodial program but is not complete.</u></p> <p><u>Provides a written custodial program guideline or manual that is general in nature and not site specific.</u></p>	<p><u>2 points</u></p>
<p><u>Narrative has some useful description of the Custodial program but is not complete.</u></p> <p><u>OR</u></p> <p><u>Provided a written custodial program guideline or manual that is general in nature and not site specific.</u></p>	<p><u>1 point</u></p>
<p><u>No narrative or an abbreviated narrative with no useful description of the Custodial program. No written custodial program guideline or manual.</u></p>	<p><u>0 points</u></p>

Maintenance Training Narrative

(Application Question 9g; Points possible: 5)

- Does the program address training and on-going education of the maintenance staff?
- Are maintenance personnel being trained in specific building systems?
- Are training schedules attached?
- How is Training Recorded?
- How is effectiveness measured?

<u>Scoring Criteria</u>	<u>Point Range</u>
<p><u>Narrative fully describes the Training program including all of the following: training policy, program structure including roles and responsibilities, identification of training needs for custodians and maintenance personnel, training methods and types, training scheduling and tracking, and measurement of program effectiveness.</u></p> <p><u>Identifies training needs based on staff positions, job functions, and building systems supported, identifies training methods and types, and assigns training on an individual basis.</u></p> <p><u>Provides two sample position descriptions each from custodial and maintenance fields that identify knowledge, skills and abilities.</u></p> <p><u>Provides a list of job functions (e.g., driving, work order management, etc.) and required building system knowledge (e.g., boiler tuning, lock-out/tag-out, etc.) for each job classification.</u></p> <p><u>Provides a training plan, by individual, for training scheduled in the current school year, by training title and method or type.</u></p> <p><u>Provides a log of completed training (up to 5yrs), by individual.</u></p> <p><u>Provides an assessment of the effectiveness of the training program which, at a minimum includes data on scheduled versus completed training.</u></p>	<u>5 points</u>
<p><u>Narrative fully describes the Training program including all of the following: training policy, program structure including roles and responsibilities, identification of training needs for custodians and maintenance personnel, training methods and types, training scheduling and tracking, and measurement of program effectiveness.</u></p> <p><u>Identifies training needs based on staff positions, job functions, and building systems supported, identifies training methods and types, and assigns training on an individual basis.</u></p> <p><u>Provides a training plan, by individual, for training scheduled in the current school year, by training title and method or type.</u></p> <p><u>Provides a log of completed training (up to 5yrs), by individual.</u></p>	<u>4 points</u>
<p><u>Narrative describes the Training program including all of the following: training policy, identification of training needs for custodians and maintenance personnel, training methods and types, and training scheduling and tracking.</u></p> <p><u>Provides a training plan, by individual, for training scheduled in the current school year, by training title and method or type.</u></p> <p><u>Provides a log of completed training but not by individual.</u></p>	<u>3 points</u>

<u>Scoring Criteria</u>	<u>Point Range</u>
<p><u>Narrative has some useful description of the Training program but is not complete.</u></p> <p><u>Provides training logs that show minimal maintenance or custodial training, primarily HR/OSHA training.</u></p>	<p><u>2 points</u></p>
<p><u>Narrative has some useful description of the Training program but is not complete.</u></p> <p><u>OR</u></p> <p><u>Training logs with no actual maintenance or custodial training. Only HR/OSHA training.</u></p> <p><u>*Training Logs with only HR/OSHA training can never exceed 1 point.</u></p>	<p><u>1 point</u></p>
<p><u>No narrative or an abbreviated narrative with no useful description of the Training program. No training logs</u></p>	<p><u>0 points</u></p>

Capital Planning Narrative

(Application Question 9h; Points possible: 5)

- Does the district have a process for identifying capital renewal needs?
- Are component/subsystem replacement cycles identified and used?
- Does the system involve building occupants and users?
- Are renewal schedules comprehensive and vetted for credibility?
- Are systems up for renewal grouped into logical capital projects?
- Does review of projects on six-year plan show evidence of use of capital planning process, including renewal and replacement scheduled.

<u>Scoring Criteria</u>	<u>Point Range</u>
<p><u>Narrative fully describes the Capital Planning program including all of the following: capital planning policy and procedure including structure, responsibilities and staffing, capital needs forecasting based on system renewal and program/population changes, forecast verification based on condition assessments, user input and maintenance work order history/trends, development of CIP projects and 6-yr plans, identification of capital project resources and funding, and measurement of program effectiveness.</u></p> <p><u>Provides capital planning report issued/updated within the past 12 months and 6-yr CIP plan with at least one project in every year of the plan and includes capital projects programmed from all fund sources, local, state, and federal.</u></p> <p><u>Provides a Facility Condition Index (FCI) for every main school based on a facility condition assessment not older than five years where FCI has the following formula.</u></p> <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: fit-content;"> $FCI = \frac{\text{Cost of Current and Deferred Renewal}}{\text{Current Replacement Value}}$ </div> <p><u>Provides a student population projection for a minimum of five years beyond the current fiscal year for every attendance area in the district.</u></p> <p><u>Provides a condition assessment for every project requesting state-aid in the first year of the 6-yr CIP plan.</u></p> <p><u>Provides an assessment of the effectiveness of the capital planning program which, at a minimum includes a districtwide trend for combined FCI for a minimum of five prior years and tracks districtwide capital expenditures for main schools for a minimum of five prior years.</u></p>	<p><u>5 points</u></p>

<u>Scoring Criteria</u>	<u>Point Range</u>
<p><u>Narrative describes the Capital Planning program including all of the following: capital planning policy and procedure including structure, responsibilities and staffing, capital needs forecasting based on system renewal and program/population changes, forecast verification based on condition assessments, development of CIP projects and 6-yr plans, identification of capital project resources and funding.</u></p> <p><u>Provides capital planning report issued/updated within the past 12 months and 6-yr CIP plan with at least one project in every year of the plan and includes capital projects programmed from all fund sources, local, state, and federal.</u></p> <p><u>Provides a Facility Condition Index (FCI) for every main school based on a current DEED Renewal & Replacement Schedule, where FCI has the following formula.</u></p> <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: fit-content;"> $\text{FCI} = \frac{\text{Cost of Current and Deferred Renewal}}{\text{Current Replacement Value}}$ </div> <p><u>Provides a student population projection for a minimum of five years beyond the current fiscal year for every attendance area in the district.</u></p> <p><u>Provides a condition assessment for every project requesting state-aid in the first year of the 6-yr CIP plan.</u></p>	<p><u>4 points</u></p>
<p><u>Narrative describes the Capital Planning program including all of the following: capital planning policy and procedure including structure, responsibilities and staffing, capital needs forecasting based on system renewal, forecast verification based on condition assessments, development of CIP projects and 6-yr plans, identification of capital project resources and funding.</u></p> <p><u>Provides capital planning report issued/updated within the past 12 months and 6-yr CIP plan with at least one project in every year of the plan.</u></p>	<p><u>3 points</u></p>
<p><u>Narrative has some useful description of the Capital Planning program but is not complete.</u></p> <p><u>Provides R&R documents for all facilities in which state-aid for CIP is listed in the 6-yr plan.</u></p>	<p><u>2 points</u></p>
<p><u>Narrative has some useful description of the Capital Planning program but is not complete; R&R documents not provided for all required facilities.</u></p> <p><u>OR</u></p> <p><u>No narrative, but provides R&R documents for all required facilities.</u></p>	<p><u>1 point</u></p>
<p><u>No narrative or abbreviated narrative with no useful description of the Capital Planning program. Lacks R&R documents for all required facilities.</u></p>	<p><u>0 points</u></p>

Formula-Driven Guidelines

Condition/Component survey

(Application question 6a; Points possible: 0-10 – non-evaluative)

- Condition/component survey age is relative to the earlier of either the application submittal deadline or the project’s substantial completion.

Points will be assigned in increments using the following suggested guidelines:

Scoring Criteria	Points
Condition/component survey is a comprehensive product that informs the project. It includes a full description of existing systems, including code deficiencies, and provides recommendations for upgrades related to all deficiencies described. Costs associated with each deficiency and upgrades are provided as applicable. Supplements may be included such as special inspections, engineering calculations, photographs, drawings, etc. Floor plans, with building area designations and room identifications, are encouraged. Portions of the condition survey, such as that information pertaining to building codes and analysis of structural engineered systems, may have been completed by an architect, engineer, or persons with documented expertise in a building system. It is less than 6 years old.	10 points
Condition/component survey contains many of the required elements as listed above, but not all. It is less than 10 years old.	8 points
Condition/component survey informs the project. Supplements such as special inspections, engineering calculations and drawings that would further document conditions justifying the project are not provided or documentation is not substantial. It is less than 10 years old.	5 points
Condition/component survey is more than 10 years old, but may still contain some relevant building information pertaining to the project.	3 points
Condition/component survey has not been submitted or does not inform the project.	0 points

Use of prior school design

(Application Question 6b; Points possible: 10)

- Are complete documents of the proposed reused school plans provided?
- Is evidence of ownership of proposed reused school plans provided?
- Has an analysis been done of the anticipated deviations and revisions from the proposed reused school plan been accomplished? Is an estimated cost of those deviations (+ or -) been computed?-
- Have design and construction costs for the proposed reused school plans been estimated along with an estimated cost of design and construction for a project alternative for a new school design?
- This point category is only applicable to construction projects.

Points will be assigned in increments using the following general guidelines:

Scoring Criteria	Points
1. The district or municipality owns the reused school plans. 2. The reused school plans are less than 5years old or have been updated within the prior 5 years. 3. A supported estimate of planned deviations from the reused school plans is less than 1% of the estimated cost of construction. 4. A supported estimate of construction cost savings to the project is greater than 10% of construction costs of a new school plan alternative. 5. A supported estimate of design cost savings to the project is greater than 10% of design services costs of a new school plan alternative.	10 points
Any four of the above factors are achieved.	8 points
Any three of the above factors are achieved.	6 points
Any two of the above factors are achieved.	4 points
Any one of the above factors is achieved.	2 points
None of the above factors are achieved.	0 points

Use of prior building system design

(Application Question 6c; Points possible: 10)

- Up to two points are available for capital renewal of a complete system, a subsystem, or a component renewal in each of the following systems: 1) Building Envelope, 2) Plumbing, 3) HVAC, 4) Lighting, and 5) Power.
- Has evidence been provided that the identified building system is part of a written standard that meets ASHRAE 90.1-~~2010~~-2016 prescriptive requirements?
- This point category is not applicable to projects receiving scores for use of a prior school design.

Points will be assigned in increments using the following general guidelines:

Scoring Criteria	Points
The reused building system design is part of a provided written municipal or school district building system standard.	2 points

**Alaska Department of Education & Early Development
Capital Improvement Project Application
Project Eligibility Checklist**

Date:

District:

Project:

Is the project eligible based on below checklist? Yes No

The following items are requirements for projects to be eligible for grants or bond reimbursement as required by statute or regulations. Please check YES or NO if project application is in compliance or not.

Item	Primary Application Question(s)	Eligibility Item Description	Yes	No
A	All	The application is complete and all questions are fully answered – AS 14.11.013(c)(3)(A)		
B	2a	The district’s CIP-6 year plan has been submitted – AS 14.11.011(b)(1)		
C	2b	The district has an auditable fixed asset inventory system – AS 14.11.011(b)(1)		
D	2c	Evidence of replacement cost property insurance – AS 14.11.011(b)(2)		
E	8f	If the district has requested a waiver of participating share, is the request attached? (If not applicable, leave blank) – AS 14.11.008(d)		
F	2d & 3d	Evidence that project should be a capital improvement project and not preventive maintenance or custodial care – AS 14.11.011(b)(3)		
G	3d	Evidence that project meets the criteria of one of the A-F categories – AS 14.11.013 (a)(1)		
H	3d, 4a, & Sec. 7	A detailed scope of work, project budget, and documentation of need – AS 14.11.011 (b)(1)		
I	3d, Sec. 7, & 8c	The scope of work should include all information requested in the application instructions and should include life cycle cost analysis, cost benefit analysis or any other quantifiable analysis, as needed, which demonstrates that the project is in the best interest of the district AND the state – AS 14.11.013(c)(3)(C)		
J	5a, 5b, 5c, 5d, 5e, 5f, & 5g	For projects requesting additional space, evidence of space eligibility based on supported 2-year and 5-year-post-occupancy student population projection data – 4 AAC 31.021(c)(1)&(c)(3)		
K	3d, 4a, 5h, 8b, & 8c	Evidence that the existing facility can not adequately serve or that alternative projects are in the best interest of the state – AS 14.11.013(c)(3)(B)		
L	5h & 8c	Evidence that the situation can not be relieved by adjusting service area boundaries and transportation – 4 AAC 31.021(c)(2) & AS 14.11.013(b)(6)		
M	2e & Sec. 9	DEED certification that the school district has a facility management program that complies with 4 AAC 31.013 and a description of the district’s preventive maintenance program – AS 14.11.011(b)(1)		
N	All	Adequate documentation supporting the project request – AS 14.11.013(c)(3)(A) and 4 AAC 31.022(d)(1)		

Alaska Department of Education & Early Development
Capital Improvement Project Application
Formula-Driven Rating Form

Adopted by the Bond Reimbursement and Grant Review Committee

District: _____ Project Title: _____
Fund: _____
Rater: _____ CIP ID Number: _____ Category: _____
Date: _____ Ineligible: _____

Formula Driven Scoring Criteria	School Construction A, B, F	Major Maintenance C, D, E
1. Preventive maintenance program (Questions 9b - 9d, 9f)		
A. Detailed summary reports of maintenance labor parameters (9b) 15 points	<u>/15</u>	<u>/15</u>
B. Detailed summary reports of PM/corrective maintenance parameters (9c) 10 points	<u>/10</u>	<u>/10</u>
C. The 5-year average expenditure for maintenance divided by the 5-year average insured replacement value, district wide. (9d) 5 points If % < 4, then (% x 1.25) If % > 4, then 5	<u>/5</u>	<u>/5</u>
D. Energy consumption reports (9f) 5 points	<u>/5</u>	<u>/5</u>
2. District ranking (Question 3a) Only eligible project requests are used to calculate ranking points Project #1 request = 30 points, #2 = 27 points, #3 = 24 points, Each additional project 3 points less	<u>/30</u>	<u>/30</u>
3. Weighted average age of facility (Question 3b)	<u>/30</u>	<u>/30</u>
A. 0-10 years = 0 points		
B. > 10 ≤ 20 years = .5 / year in excess of 10 years		
C. > 20 ≤ 30 years = 5 + .75 per year in excess of 20 years		
D. > 30 ≤ 40 years = 12.5 + 1.75 per year in excess of 30 years		
E. > 40 years = 30 points		
4. Condition/Component Survey (Question 6a) Condition survey = 0, 3, 5, 8, or 10 points	<u>/10</u>	<u>/10</u>
5. Use of Prior Design Plans (Question 6b) Prior Design Plan = 0, 2, 4, 6, 8, or 10 points	<u>/10</u>	<u>N/A</u>
6. Use of Prior Building System Design (Question 6c) 10 points A. District standard = Two points each system: Building Envelope, Plumbing, HVAC, Lighting, Power	<u>/10</u>	<u>/10</u>
7. Planning & design phase has been completed (Question 6d-6g and Appendix B)	<u>/25</u>	<u>/25</u>
A. All required elements of planning = 10 points		
B. All elements planning + required elements of schematic design = 20 points		
C. All elements of planning and schematics + required elements of design development = 25 points		
8. Previous AS 14.11 funding for this project (Questions 8e & 7a) Previous funding = 30 points, No previous funding = 0 points	<u>/30</u>	<u>/30</u>
9. Unhoused students today (Questions 5a-5g)	<u>/50</u>	<u>N/A</u>
A. 100 % of capacity = 0 points		
B. > 100% of capacity = One point for each 3% of excess capacity		
C. 250 % of capacity = 50 points		
10. Unhoused students in seven years (5 year Post-occupancy) (Questions 5a-5g)	<u>/30</u>	<u>N/A</u>
A. 100 % of capacity = 0 points		
B. > 100% of capacity = One point for each 5% of excess capacity		
C. 250 % of capacity = 30 points		
11. Type of space added or improved (Question 5j)	<u>/30</u>	<u>N/A</u>
A. Instructional or resource 30 points		
B. Support teaching 25 points		
C. Food service, recreational, and general support 15 points		
D. Supplemental 10 points		
Formula-Driven	Total Points	
	<u>/290</u>	<u>/170</u>

**Alaska Department of Education & Early Development
Capital Improvement Project Application
Evaluative Rating Form
Formula-Driven Rating Form**

Adopted by the Bond Reimbursement and Grant Review Committee

District: _____ Project Title: _____
 Fund: _____
 Rater: _____ CIP ID Number: _____ Category: _____
 Date: _____ Ineligible: _____

Note: Points for elements two through eight will be weighted to apply to each specific category of a mixed-scope project.

Evaluative Scoring Criteria	School Construction A, B, F	Major Maintenance C, D, E
1. Effectiveness of preventive maintenance program (Question 9)		
A. Maintenance Management Narrative (9a)	_____/5	_____/5
B. Energy Management Narrative (9e)	_____/5	_____/5
C. Custodial Narrative (9g)	_____/5	_____/5
D. Maintenance Training Narrative (9h)	_____/5	_____/5
E. Capital Planning Narrative (9i)	_____/5	_____/5
2. Seriousness of life/safety and code conditions (Question 4a)	_____/50	_____/50
3. Reasonableness & completeness of cost or cost estimate (Questions 7a-7c)	_____/30	_____/30
4. Emergency conditions (Question 8a) Did application check "yes"? <input type="checkbox"/> Did discussion support emergency status? <input type="checkbox"/>	_____/50	_____/50
5. Existing space fails to meet or inadequately serves existing or proposed elementary or secondary programs (Question 8b)	_____/40	_____/5+
6. Thoroughness in considering a full range of options for the project (Question 8c)	_____/25	_____/25
7. Relationship of the project cost to the annual operational cost savings (Question 8d)	_____/30	_____/30
8. Thoroughness in considering use of alternative facilities to meet the needs of the project (Question 5g)	_____/5	N/A
Evaluative	Total Points	
	/255	/215

Alaska School Design and Construction Standards

P U B L I C A T I O N C O V E R

April 15, 2021**Issue**

The department seeks committee feedback on the draft additions and revisions to Part 2 Design Principles and Part 3 System Standards of the *Alaska School Design and Construction Standards* handbook.

Background*Last Updated/Current Edition*

This is a new publication; no current edition is available.

Summary of Proposed Changes

The department has prepared revisions/additions to Part 2 Design Principles and two systems in Part 3 System Standards of the publication: 10 Equipment & Furnishings and 11 Special Conditions. These continue to supplement the work completed by BDS Architects.

Part 2 elements continue to be organized under the major headings of *Regionally Based Design, Site and Infrastructure, School Buildings, and High Performance Facilities*. Within the *School Buildings* section, the document uses the categories and types of space listed in the CIP application instructions, Appendix D. This results in a robust differentiation of spaces that may be beyond what is needed for this publication. Two formats, a tabular listing and a narrative listing of requirements, remain under the Category A space headings of General Classroom, Library/Media, and Bi-cultural/Bilingual illustrate these formats. The merits of these formats were discussed at the March 24 Model School Subcommittee meeting with most contributors leaning toward the narrative format. This update also moved/removed duplicated items from the BDS edition related to Interiors in Part 2 and assigned them to their appropriate section in Part 3.

Part 3 System Standards elements received only minimal edits in this update (Interiors noted above). There are approximately 20 subsections that have had no development to date (out of 124).

Public Comment

No public comment period has occurred.

The handbook is scheduled to be presented for public comment once the work on both Part 2 and Part 3 is completed. A public comment period is anticipated to start in September 2021.

Version Summary & BRGR Review

Drafts of the publication were presented to the committee at the following meetings:

- September 8, 2020 – original BDS draft presented that provided an overall structure to the publication and completed Part 1 describing its purpose and use. Part 2 Design Standards, and Part 3 System Standards were left incomplete due to limited funding for the consultant assistance; committee directed DEED to develop incomplete sections.

February 25, 2021 – DEED presented four draft sections for Part 3: 01 Site and Infrastructure; 02 Substructure; 03 Superstructure; and 07 Conveying Systems. Updated Part 3 structure and numbering to index to DEED CostFormat.

March 17, 2021 – DEED presented two additional Part 3 sections: 10 Equipment and Furnishings, and 11 Special Conditions. Part 2 had several sections with further development and included some alternative formats for comparison and consideration.

BRGR Input and Discussion Items

- Use of CIP Application Instructions' Appendix D. Committee has previously discussed updates and revision to the spaces identified in this appendix.
- Is there an appropriate level of detail within each Part 3 section?
- Is there an appropriate level of detail and content within the Part 3 Required, Recommended, and Premium categories?
- Staff review items:
 - Library Space/Equipment: Books vs. electronic media
 - Art Classroom/Equipment: Allowed grades for ceramics space/equipment

Suggested Motion

No motion suggested at this time. Department will continue development and refinement of draft publication based on committee comments and discussion.



ALASKA SCHOOL DESIGN & CONSTRUCTION STANDARDS

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Part I. PURPOSE & APPLICATION

1. Background

These Standards achieve two primary objectives. They fulfill a statutory mandate, and they establish consistency for state aid. In 1993, the Alaska legislature created the Bond Reimbursement and Grant Review Committee under AS14.11.014 and identified the committee's purpose. Among their many tasks, the committee was charged, through the Department of Education & Early Development (DEED), with the development of criteria intended to achieve cost effective school construction in the State of Alaska. These Standards are those criteria and are the result of decades of work by the committee. They also set the stage for continued work toward ensuring cost effective school construction into the future.

Regarding consistency, powers granted to DEED provide broad authority for the state to revise a project's scope and budget if the costs are excessive, and to reject projects not in the state's best interests. These Standards have been developed to make these determinations more transparent; to provide consistent, clear information for school districts and design professionals, and to establish a uniform level of quality and performance for all of Alaska's public-school buildings.

The Standards also provide a framework for research, "best practices," accepted procedures, "lessons learned," statutory and regulatory requirements, and for inclusion of the experience of students and educators across the State of Alaska. The best of what is currently known and available in these areas is included; future knowledge and understanding will be incorporated through a vetted public process.

It should be acknowledged that the Standards are also very DEED-centric in fulfilling the two objectives stated above. They are not a building code. Alaska's adopted statewide building code requirements for schools, are already well developed and are enforced by the appropriate authority having jurisdiction (AHJ). Neither are the Standards district-level facilities manuals. They do not, for example, establish a preference for a side-coiling grill versus an upward acting grill for security or access separation. These standards fit between national code standards and local preferences. Their focus will always be cost effectiveness from a state perspective. The Standards apply to all new school construction and new additions to existing buildings. Renovation to existing facilities will adhere to the Standards, whenever possible, as approved by DEED.

School construction in Alaska encompasses a wide range of climates, differences in school sizes, and the logistics of building in remote areas with limited access to labor and materials. Building system and component types, quantities, and quality vary widely across school projects with state aid. Where applicable the Standards are tailored to address this wide range of conditions.

The Standards recognize the need to consider the long-term operations and maintenance of a school facility rather than focus solely on initial construction cost. Therefore, these Standards will not only consider the initial cost of construction but also operations and maintenance expenses, by looking at design and construction decisions on a life cycle basis.

It is evident that there is an extensive need for new and renovated school facilities. Many of the older schools in Alaska do not meet the program needs of today's complex learning environments. Older

schools tend to be costly to maintain, energy inefficient, and non-code compliant in some cases. There are also many safety issues within and outside of older school buildings. With a deep financial involvement by the State of Alaska, the Department of Education and Early Development has a responsibility to assure that projects meet established criteria for cost effectiveness including durability, economy, and quality.

One of the major objectives of the State is to address as many projects as possible within the limited financial resources at both the State and local levels. To this end the State wants to avoid unnecessarily expensive designs, unapproved assemblies, and products that carry premium costs. The Standards are intended as a baseline for architects, engineers, and other design professionals, along with school districts, to develop cost effective solutions to meet the needs of individual school communities. The information is provided to allow the planning, design, and construction process to proceed most efficiently—without undo restriction on the design of facilities—focusing efforts on the creation of the best possible educational environments for each project.

2. Document Organization

These standards are intended to be used in conjunction with other school planning guidelines developed by DEED including those for alternative project delivery, school condition surveys, and site selection. When available, the Standard may also incorporate Design Ratios whose purpose will be to measure the efficiency of a school design as it relates to cost effectiveness. The Standards do not include all possible building components and materials used in school construction. They reflect the department’s belief that good design is occurring every day based on the compendium of knowledge present in Alaska’s design firms and school districts. Instead, they are to provide both general guidance to the design professional in key areas of concern, and specific guidance on selected design elements and materials that DEED has identified, based on experience from prior projects.

Part 1 – Purpose and Applications is an introduction to the Standards, their background, intended purpose and implementation.

Part 2 – Design Principles deals with overall design, construction, and project management principles. Each design principle includes a list of standards and guidelines. These standards are displayed in three sections as *Required*, *Recommended*, and *Premium*.

Part 3 – System Standards is organized by a DEED-specific elemental cost structure with specific material or system selections, design criteria, and guidance.

Levels of Implementation

In Part 3 the System Standards are grouped into categories with the following definitions:

Required: These are required elements that are accepted practice by DEED. Not all Required elements are intended to be incorporated into any one project and will vary based on design intent, budget, region, climate and school size.

Recommended: These elements are recommended as alternatives and possible improvements or upgrades to the Required elements. These are also accepted practice by DEED.

Premium: These elements are considered substantial upgrades to the Required and Recommended designations. They can be included in projects but in most cases will not qualify for DEED funding. Inclusion of Premium elements requires DEED review.

Cost Factor and Life Cycle Cost Analysis Index

Selected materials described in Part 3 System Standard, have been designated with indicators of CF (Cost Factor) and LCCA (Life Cycle Cost Analysis). The indicators are followed by a numerical scale of 1 through 5.

For CF, a factor of 1 is the least costly option, 5 is the most expensive. For LCCA, 1 has the least life cycle to cost benefit, 5 has the most benefit.

3. Prerequisites

[This placeholder section title is for possible DEED-specific content developed around "prerequisites" on how the state might implement this document.]

4. Flexibility and Innovation

The State recognizes that there will be constant modifications to this document as new technologies and products enter the construction market. Design professionals are encouraged to discuss new approaches, technologies, and materials with DEED officials. Many design decisions should be based on a “life-cycle analysis” that considers energy use, first cost, operational cost, equipment life, and replacement cost. In addition, consideration should be given to materials that can be recycled and are not hazardous to the environment.

The State recognizes that school facilities will differ with each school district’s educational program and internal organization. The design of the building will also be influenced by the school site, region, climate, and other external factors. A one-design-fits-all approach is not advocated; however, these Standards do attempt to address cost-effectiveness, quality considerations, and design efficiency. To allow for appropriate flexibility and innovation, as discussed above, the Standards set out elements as Required, Recommended, or Premium. Recipients of state-aid that wish to incorporate elements that exceed these standards (indicated as Premium) shall do so with non-state funds unless a variance is obtained from DEED.

The State has a commitment to the development of quality educational spaces that will meet the educational needs of students in Alaska schools. Spaces and buildings should be flexible in order that present and future programs can be housed appropriately to meet the needs of an ever-changing public-school curriculum. These standards and guidelines will be used by DEED when reviewing school capital projects approved for state-aid.

DEED encourages an integrated planning and design process that combines the Recipient’s project requirements with these Standards to provide the design team with greater clarity as to the needs of both. The process of qualifying for state-aid for school capital projects as established in AS 14.11 provides all the necessary steps for close collaboration between the recipient district or city/borough

regarding the scope of a project. From the initial application and evaluation process through the design iterations, the importance of maintaining collaboration and DEED oversight throughout is critical. A cooperative approach will ensure a smooth process.

Part 2. DESIGN PRINCIPLES

1. REGIONALLY BASED DESIGN

School construction in Alaska encompasses a wide range of climates and must respond to the challenging logistics of building in remote areas with limited construction seasons. Design principles must be adapted based on climate and geographic region. The climates zones illustrated below will be used as a baseline to identify and evaluate appropriate design strategies in the application of these Standards. It remains the responsibility of design and facility professionals to understand any micro-climate or site-specific conditions which may impact the application of the Standards on a project-by-project basis.

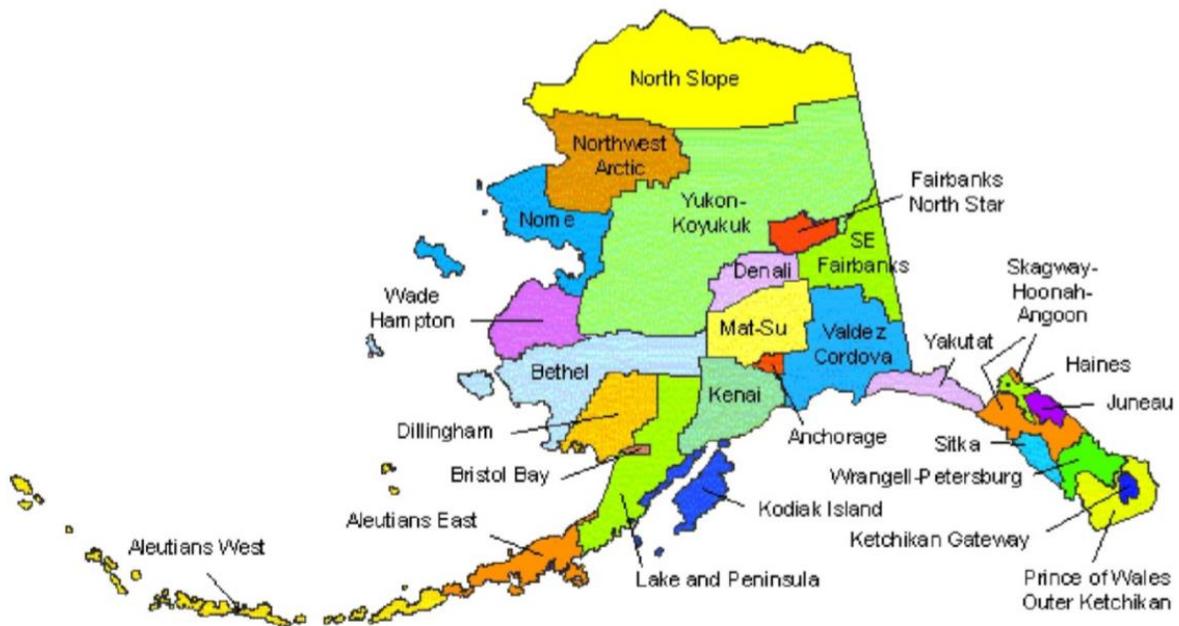


Table A301 Alaska Census Areas

Zone 6	Zone 7	Zone 8	Zone 9
Juneau	Aleutians East	Bethel	North Slope
Ketchikan Gateway	Aleutians West	Denali	
Prince of Wales	Anchorage	Fairbanks North Star	
Sitka	Bristol Bay	Nome	
Skagway-Hoonah-Angoon	Dillingham	Northwest Arctic	
Wrangell-Petersburg	Kenai Peninsula	Southeast Fairbanks	
Yakutat	Kodiak Island	Kusilvak (Wade Hampton)	
Haines	Lake & Peninsula	Yukon-Koyukuk	
	Matanuska-Susitna		
	Valdez-Cordova		

Consideration of geographic regions in the application of the Standards relate primarily to initial construction costs. The department has established an analytical model for the evaluation of

geographic cost variations across Alaska, as it relates to school facilities, and publishes the results of that analysis as part of the Demand Cost Model for Alaskan Schools. The geographic cost factors identified in that DEED publication will be used as a baseline to identify and evaluate appropriate design strategies in the application of these Standards. As with climate zones, it remains the responsibility of design and facility professionals to understand any local variations and site-specific conditions which may impact the application of the Standards on each project.

2. SITE & INFRASTRUCTURE

The State must be involved in reviewing site selection, design, and programming. Selected sites should be affordable, easily developed, and close to commercial-grade utilities wherever possible. Sites requiring extensive earthwork, long driveways, or environmental challenges should be avoided. In urban areas, schools should not be located directly on major roadways with high speeds or heavy traffic.

Recent tragedies at schools around the country have reinforced the need for designs to keep students and staff safe in our public schools. School safety experts and educational facility planners have been working together to develop recommendations that cover the outside and inside of school buildings. DEED encourages school districts to consider student safety as one of the most important criteria when designing or renovating schools.

Safety + Security Site Design

Required:

1. Develop site plans that allow two separate points of access to the site.
2. Make the main entrance easily identifiable from the street, primary parking area or main access route.
3. In settings where the school building is at or near grade, develop main entrances with discrete physical barriers such as concrete-filled steel bollards, boulders, planters or other physical barriers, as applicable, to prevent cars or trucks from being driven into the school.
4. Maintain clear and unobstructed sight lines for security and safety.
5. Obtain preliminary approvals from the Department of Transportation, the Army Corp of Engineers, and other appropriate agencies before site approval.
6. In school settings where emergency services are available, provide emergency vehicle access to all areas of the site, including playgrounds and fields.
7. In school settings where bus service is available, separate bus loop and parent drop-off areas and install fencing or guardrails to limit pedestrian circulation to designated crosswalks and sidewalks.
8. At urban schools, provide safe access for pedestrian and bicycle circulation from site entrances to the main building entrance and consider keeping pedestrian paths away from automobiles.
9. Provide safe, clearly marked pedestrian pathways, sidewalks, and boardwalks through the site.
10. Locate play areas away from vehicle circulation and parking areas. Provide accessible pedestrian pathways to playgrounds and athletic fields that avoid vehicular traffic.

11. Provide chain link fencing at the perimeter of playgrounds as required.
12. Avoid sidewalks that link to high speed roads and highways.
13. Provide clear vehicular circulation patterns and signage. Provide stop signs and speed tables.
14. Provide LED lighting at all travel ways, parking areas, and building perimeter.
15. Oil, propane, and gasoline tanks are preferred to be located below ground. When above ground protect the tank with fencing, berms or bollards. Small propane tanks serving kitchen or science room equipment may be located above ground.
16. Separate service vehicles from bus and parent drop-off areas.
17. Keep perennial bushes and trees a minimum of 20'-0 away from each side of major entrance doors.
18. Keep electric and telephone services secure from vandalism. Use the preferred method of protection, underground service from a street telephone pole to the entering point of a building.
19. Provide adequate lighting for the main entrance sidewalk and parking lot to discourage loitering and vandalism.
20. Provide appropriate site security gates at fire lanes to prevent non-authorized vehicles from driving around the sides or back of the school.
21. Provide exterior public address systems that can be heard in the parking lot, bus loop, and playgrounds.

Recommended:

22. Consider developing emergency off-site staging areas.
23. Consider providing a secondary access to the site for emergency vehicles.
24. Consider how an emergency evacuation will be conducted. Consider bus loading areas and/or staging areas.

Premium:

25. Locally required (i.e., municipality, borough, etc.) off-site improvements.
26. Masonry or stone pavers in locations with a geographic area cost factor above 105.
27. Concrete sidewalks further than 50'-0" from the main entrance.

Building Location and Orientation

Required:

1. Select the building site to minimize environmental impact and encourage a simple, straightforward construction process.
2. Orient the main entrance to face primarily south. Avoid entrances facing north.
3. Consider prevailing wind and wind speeds with regard to doors. Provide measures such as wing walls or rails to prevent wind from catching doors and causing damage.
4. Orient the building design to maximize natural daylighting in classrooms and other occupied spaces.
5. Keep building ventilation intakes away from vehicle exhaust and other sources of air pollution. Consider the site's prevailing winds when locating intake and exhaust equipment.

Recommended:

6. Consider orienting the longer axis of the building East-West for maximum solar impact.

Premium:

7. Building pads/sites with slopes in excess of 10 percent.

High-Performance Site Principles

Required:

1. Site buildings to maximize daylighting (a north-south orientation for classrooms).
2. Orient buildings with a major entrance on the south side whenever possible.
3. Choose native and adaptive plants that do not need permanent irrigation systems.
4. Conduct a Phase I Environmental Assessment (and Phase II if necessary, based on Phase I) to identify hazardous materials. Conduct required mediation on site.
5. Control erosion and sedimentation during construction.

Recommended:

6. Consider opportunities to reduce light trespass onto adjacent sites and improve nighttime visibility by reducing up-lighting, reducing maximum lumens of fixtures above horizontal, and locating luminaires well inside the project site boundary.
7. Consider opportunities to reduce impervious surfaces on site, reduce quantity and improve quality of stormwater runoff. Practice low-impact rainwater management strategies.

Premium:

8. Stormwater management: bioswales, pervious pavers.
9. Green roofs.
10. School vegetable gardens.

Building Entrances

Required:

1. Provide a single point of entry for all visitors that is easily identifiable from the main approach to the school. When called for by school district policy, visitors shall enter through a secure vestibule at the main building entrance. This arrangement may not be practical in a renovation or necessary in a very small school.
2. Design all exits and entrances so the building can be securely locked down after the start of school if desired
3. Safety and Security **at** Main Office
 - a. Locate the main office door adjacent to the security vestibule lobby so office personnel can maintain visual supervision while visitors come in to sign the visitor log.
 - b. Provide a hidden electronic security panic button in the office that can send a signal to police or emergency responders when a crisis is developing at the school.
 - c. Provide a minimum of two locations for interior intercom and exterior public address system. The second location should be designated as a “safe room.”
 - d. Design main offices with a second means of exit, either directly outdoors or into a more remote hallway.
 - e. Provide security cameras at the main entrance and other remote locations around the school. Video systems should be capable of being reviewed for live on-demand broadcasting as well as a minimum thirty-day archival library system.

- f. Design the main office so it has easy supervision of the security vestibule, the main entrance lobby, and one or more main corridors leading into the “heart” of the school.
- 4. In a secure vestibule arrangement, the interior bank of doors of the vestibule should be equipped with an electronic strike that allows the door to be unlocked electronically by main office personnel after visitors have been approved for entrance.
- 5. Provide proximity card readers for staff at the main, kitchen, and at least one other staff entrance.
- 6. Provide video cameras in the ceiling of the security vestibule and directly inside of the vestibule doors so that visitors can be photographed on video loops for later review.
- 7. Design all major entrances and exits with vestibules if they are likely to be used during school hours.
- 8. Design entrance doors to be controllable from a remote location, preferably at the administrative office, with a direct view and oversight of the main entrance security vestibule.
- 9. Install exterior rain canopies at the main entrance and exterior doors that are expected to have high usage.
- 10. In buildings that are at or near grade, protect all front entrances and other major doors used on a regular basis throughout the school day with concrete-filled steel bollards or other appropriate, rugged obstructions.

Premium:

- 11. Pivot hinges, sliders, or revolving doors.
- 12. Electric door openers other than at the ADA main entrance.
- 13. Overly complex ceiling finishes and features.

3. SCHOOL FACILITIES BUILDINGS

Every school plan should be a reflection of the Space Allocation Guidelines found in Alaska Administrative Code (4 AAC 31.020), as well as the school district’s educational specifications and pedagogy. The opportunity to design new or redesign existing school buildings is often a once-in-a-lifetime experience for teachers, school boards, and the local community. Serious consideration should be given to a comprehensive educational visioning process at local expense that reviews current state-of-the-art thinking and considers which educational strategies are most appropriate for the school’s age group and local community values. Learning spaces should support traditional as well as expeditionary, and “virtual” learning experiences. The following general planning principles apply to all school facility design:

A. General Planning Principles

Required:

- 1. Design interior wall layouts to be simple and straightforward.
- 2. Zone the building for public and after-hours use.
- 3. Consider zoning the building for lockdowns that allow different sections of the building to be securely isolated.
- 4. Design the floor plan to carefully separate quiet, academic areas from noisy, high activity functions.

5. Design classrooms to conform to best practices for acoustic isolation and separation as defined by ANSI-S12.60-2010 (Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools Part I).
6. Organize functional layouts to support small-group and large-group activities.
7. Designs should emphasize multi-functioning rooms to maximize daily use and minimize underutilized spaces.
8. Design the floor plan to optimize multi-functioning spaces such as cafeterias, commons, gymnasiums, and exploratory labs.
9. At the Concept Design or Schematic Design phase, school designs must demonstrate the ability to be expanded to accommodate a 15% increase in student population.
10. Provide acoustical and smoke separation by designing classroom walls to extend to the underside of the structural deck whenever possible and when required by codes.

Recommended:

11. Consider single or double intercommunicating doors between classrooms.
12. Schools should be designed to be as flexible as possible to accommodate future learning styles and technology
13. Operable partitions or large sliding doors.

Premium:

14. Complex floor patterns involving curves, cuts, and intricate details.
15. Wood floors, except where allowed for gymnasiums, or natural stone floors.
16. Elaborate, expensive, curved or complex walls, ceilings, windows, and arches.
17. Building plans with more than one elevator.
18. Stairways not required by code for egress.
19. Elaborate, monumental stairs, regardless of location or code compliance.
20. Interior channel glass wall systems or glass block walls.
21. Complex ceilings with multiple levels and decorative soffits.
22. Wood or metal slat ceilings.
23. Plaster or fiberglass shaped ceiling planes.
24. Ceiling tiles larger than 24" x 48".

General Building Safety + Security Planning Principles

Required:

1. Design the building so it can be locked down into separate security zones, preferably at internal firewalls requiring rated steel fire doors.
2. Provide a minimum of two means of exit out of any gymnasium, cafeteria, or library.
3. Provide a secure steel service door at the service entrance with a proximity reader and a means of identifying visitors without opening the door.
4. Provide locked, secure chemical storage areas that are not accessible to students or visitors.
5. Provide laminated security glass at remote exterior doors or sidelights.
6. Reduce the number of exterior doors that need to be supervised or checked for security and safety purposes.

7. Provide exterior doors convenient to playgrounds and playfields that can be quickly unlocked by proximity card readers in cases requiring “reverse evacuation.”

Recommended:

8. Consider providing steel frame doors with no glass vision panels at remote, unsupervised doors.
9. Consider putting fire doors on electric hold opens and having them tied into the emergency security notification system that allows the main office to release fire doors for lockdown.

Premium:

10. TBD

Safety + Security at Classrooms

Required:

1. Provide commercial-grade hardware and locksets on all doors.
2. Provide heavy duty, commercial-grade hardware at classroom doors where the door can be quickly locked by the teacher from the inside.
3. Provide small vision panels with laminated security glass in classroom doors.
4. Provide a phone and two-way intercom system in every classroom.
5. Provide a minimum of one National Fire Protection Assoc. (NFPA)-approved escape window in every classroom, where necessary.

Recommended:

6. TBD

Premium:

7. TBD

Category A – Instructional or Resource

General Classrooms

Required:

1. Design classroom walls to the underside of the deck for smoke and acoustical performance.
2. Design all classroom doors to be easily lockable from the inside by the teacher but to allow egress from the classroom at any time.
3. Specify sinks and countertops with postformed backsplash and front edge.
4. Provide bookcases and teacher storage closets as required.
5. Provide waterproof finishes for winter boot storage.
6. Provide separate row switching to allow artificial light levels to be reduced when natural daylight can be maximized.
7. Design the classrooms for excellent acoustics.
8. Provide a simple, straightforward lighting plan that provides appropriate light levels on white boards and does not interfere with projectors or TV video screens.

9. Provide a technology plan that shows how technology can be incorporated in the classroom and supports the educational pedagogy.

Recommended:

10. Demountable wall systems
11. Operable wall systems or large sliding doors
12. Consider radiant floor heating for grade levels where children are likely to sit on the floors.
13. Consider classroom cubbies for coats, hats, and boots in grades Pre-K–2.
14. Consider toilets in the classrooms for grades Pre-K–1. For classroom toilets, provide seamless or ceramic tile flooring.
15. Consider ceramic tile to a wainscoting height of 48" on the wet wall.
16. Consider sinks in the classroom for grades Pre-K–5. Specify paperless and water-resistant materials, such as sheetrock, for wet walls.

Premium:

17. Decorative or specialty lighting other than standard classroom lights
18. Decorative wall sconces
19. Custom designed sliding doors or operable wall systems
20. Casework or architectural woodwork such as picture rails, wainscoting, crown moldings, or paneling
21. Decorative or expensive non-standard ceiling tiles or ceiling systems such as metal or wood slat ceilings

General Classrooms (Opt.)

Required:

1. Provide space and amenities for instruction and learning associated with grade levels in support of adopted curriculum and a variety of teaching/learning styles in all or some of the following areas: instructor-led learning, individual, team and project-based learning, small group activities, computer-based learning/research, instructional storage, personal storage.
2. Provide from among the following features for this educational space:

<u>System</u>	<u>Features</u>
<u>Spatial Elements</u>	<u>Ceilings - 9ft +/-,</u>
<u>Finishes</u>	<u>Floor: vinyl or rubber sheet at project and entry/exit areas, carpet at teacher and student stations, Ceiling: acoustic tile, Walls: paint</u>
<u>Doors</u>	<u>Interior for code compliance</u>
<u>Specialties</u>	<u>Base cabinets w/laminate counter, Wall cabinets, Teacher wardrobe, 12ft whiteboard (2), PT dispenser, Soap dispenser, Window coverings (full, room darkening)</u>
<u>Plumbing</u>	<u>Stainless steel double sink w/lever mixing valve</u>
<u>Heating/Cooling</u>	<u>As calculated for code compliance</u>
<u>Ventilation/Exhaust</u>	<u>As calculated for code compliance</u>
<u>Lighting</u>	<u>Pendant or drop-in indirect, three-bank controls plus dimming</u>
<u>Power</u>	<u>110v duplex for code compliance, 110v quadplex at each data port</u>

<u>System</u>	<u>Features</u>
<u>Special Systems</u>	<u>Phone/intercom, synchronized clock, interactive whiteboard, projector, duplex data ports (7), instructional voice amplification.</u>
<u>Equipment/Furnishings</u>	<u>None required</u>

Recommended:

1. Consider demountable wall systems.
2. Consider double leaf door openings between classrooms.
3. Consider radiant floor heating for grade levels where children are likely to sit on the floors.
4. Consider classroom cubbies for coats, hats, and boots in grades Pre-K–2.
5. Consider toilets in the classrooms for grades Pre-K–1. For classroom toilets, provide seamless or ceramic tile flooring.
6. Consider ceramic tile to a wainscoting height of 48" on the wet wall.
7. Consider sinks in the classroom for grades Pre-K–5.
8. Specify paperless and water-resistant materials, such as sheetrock, for wet walls.

Premium:

9. Operable wall systems or large sliding doors.
10. Decorative or specialty lighting other than standard classroom lights
11. Decorative wall sconces
12. Custom designed sliding doors or operable wall systems
13. Casework or architectural woodwork such as picture rails, wainscoting, crown moldings, or paneling
14. Decorative or expensive non-standard ceiling tiles or ceiling systems such as metal or wood slat ceilings

Library & Media Spaces

Required:

1. Provide space which supports the following uses: collections (i.e., stacks), computer workstations, individual and group seating, staff workspace, meeting/collaboration space, and presentation space.
- ~~1.2. Provide space in amounts needed to meet defined program needs based on guidelines contained in 4 AAC 31.020(a).~~
3. Provide robust infrastructure including power receptacles above code-minimum, USB charging ports, wireless connectivity, and interactive white board(s).
- ~~2. Refer to the [enter appropriate space standard source(s)] for acceptable room sizes based on student population.~~
- ~~3. Design the library in consultation with school district librarians and design guidelines developed by the [Alaska?] Library Association.~~
4. Design the library for easy adult supervision; avoid creating dead zones.
5. Provide appropriate structural design to accommodate heavy book loading.
- ~~5.6. Provide moveable furniture and equipment for maximum flexibility; use fixed built-in features sparingly.~~

Recommended:

- [7. ~~X~~ Consider distributed versus centralized media for small student populations and adjust classroom sizes accordingly.](#)
- [6-8. Consider planning and design guidance from the American Association of School Librarians \(AASL\).](#)
- [7-9. Consider providing an exterior swing door for connection to supporting exterior spaces.](#)

Premium:

- [8-10. Space required for non-district, municipal/borough-owned library functions.](#)
- [9-11. Excessively high ceilings or volumes.](#)
- [10-12. Expensive architectural woodworking, paneling, and custom millwork.](#)
- [13. Custom ceilings, soffits, skylights, or other monumental architectural features.](#)
- [11-14. More than one exterior door.](#)

Special Education Areas

Required:

1. Integrate special education spaces within the larger school population.
2. Provide appropriate storage for special education equipment.
3. Provide appropriate structural support for special swings or hanging equipment.
4. Provide quiet spaces or timeout rooms that are hygienic, vandal proof, and code compliant.

Recommended:

5. Consider OT and PT space adjacent to or inside of other multi-functioning spaces to maximize efficiency.

Premium:

6. TBD

Bi-Cultural/Bilingual Spaces

Required:

- [7. ~~TBD~~ Provide space and amenities for project-based learning associated with cultural and traditional language heritage when supported with intentional curriculum in all or some of the following areas: food processing and preparation, construction and use of traditional art/artifacts and apparel, oral and visual presentation both live and electronic.](#)
- [8. Provide from among the following features for this educational space:](#)

<u>System</u>	<u>Features</u>
<u>Spatial Elements</u>	<u>Ceilings - 9ft +/-,</u>
<u>Finishes</u>	<u>Floor: vinyl or rubber sheet, Ceiling: acoustic tile, Walls: paint</u>
<u>Doors</u>	<u>Interior for code compliance, Exterior (1)</u>
<u>Specialties</u>	<u>Base cabinets w/laminate counter, Wall cabinets, Teacher wardrobe, 12ft whiteboard (2), PT dispenser, Soap dispenser, Window coverings (full, room darkening)</u>

<u>System</u>	<u>Features</u>
<u>Plumbing</u>	<u>Stainless steel double sink w/lever mixing valve</u>
<u>Heating/Cooling</u>	<u>As calculated for code compliance</u>
<u>Ventilation/Exhaust</u>	<u>Range hood at cooking surfaces</u>
<u>Lighting</u>	<u>Drop-in indirect, two-bank controls</u>
<u>Power</u>	<u>110v duplex for code compliance, 110v quadplex at each data port, as required for appliances.</u>
<u>Special Systems</u>	<u>Phone/intercom, synchronized clock, interactive whiteboard, projector, duplex data ports (7), instructional voice amplification.</u>
<u>Equipment/Furnishings</u>	<u>Range, Refrigerator, Microwave/hood, Dishwasher (all residential)</u>

Recommended:

- 9. ~~TBD~~ Consider dedicated room exhaust for odor control.
- 10. Consider locking hardware on one or more cabinets if valuables will be stored.
- 11. Consider elements for display of 2D and 3D projects.
- ~~1~~.12. Consider an addition interior door if provided for the purpose of after-hours/community use.

Premium:

- 13. ~~TBD~~ Commercial appliances.
- ~~2~~.14. Oversize or non-standard doors.

Art Classrooms

Required:

1. Provide separate storage area and separate kiln room with exhaust (see also, Premium).
2. Specify cleanable and stain resistant room finishes, including countertops, floors, and wall backsplashes.
3. Design for abundant natural lighting with preferred north orientation.
4. Provide appropriate acoustical absorption in rooms with open ceiling structure.
5. Provide adequate storage for student projects.
6. Provide adequate wall display systems for hanging two-dimensional artwork.

Recommended:

7. Consider concrete or seamless floors that can resist paint, markers, and other art materials.
8. Consider floor drains with appropriate traps and trap primers.
9. Consider multiple station student cleanup sinks.

Premium:

10. Ceramics/pottery equipment in schools serving students below grade 9.
11. Stone or epoxy countertops.
12. Wood cabinetry or architectural millwork.
13. Decorative or special light track lighting.
14. Expensive tile floors such as stone, ceramic tile, or quarry tile.

Science Labs

Required:

1. Design and equip science labs to support the educational specifications and to conform to the [enter appropriate space standard source(s)]. Equip science rooms and labs to serve only the science program for which the room is designed.
2. Design science rooms or labs using best practices for safety.
3. Design science labs to allow for adult supervision throughout the room.
4. Provide deluge showers, eye wash stations, and emergency shut-off equipment where required for safety.
5. In science rooms and labs where chemicals will be used, specify appropriate chemical-resistant furniture and countertops, fume hoods, acid neutralization tanks, and plumbing that will prevent wastewater contamination.
6. In science rooms and labs where chemicals will be used, design appropriate safety equipment into the room and design appropriate prep rooms with lockable storage and fireproof, chemical-resistant cabinets.
7. In middle and high school science labs, provide appropriately designed tables and countertops for computer use with experiments.
8. Design to maximize shared amenities such as fume hoods, prep rooms, and storage.

Recommended:

9. TBD

Premium:

10. Compressed air systems
11. Gas at rooms other than chemistry
12. Fume hoods at rooms other than chemistry

Music Classrooms

Required:

1. Design band, chorus, keyboard, and practice rooms to prevent noise from leaking into adjacent spaces and floors. Design walls and floors to prevent noise through ceilings or structural elements.
2. Provide acoustic vestibules at doorways to prevent music from disturbing the rest of the building.
3. Tune band and chorus rooms with sound absorbing materials and acoustic mass to prevent sound transmission.
4. Tune chorus spaces to help amplify the human voice without the use of amplification systems.
5. Specify washable hard surface floors in band rooms.
6. Provide security glass in the doors of keyboarding and practice rooms.
7. Prefer flat floors with portable risers over permanent concrete step floors.
8. Design door configurations to allow for the easy movement of pianos, drums, and other large instruments.
9. Provide lockable storage for music instruments.

10. Design for convenient access to stages and other performance areas.

Recommended:

11. TBD

Premium:

- 12. Natural hardwood paneling or woodwork used as acoustical baffles and reverberation panels
- 13. Specialty flooring
- 14. Television or acoustical recording studios or services
- 15. Prefabricated practice rooms

Computer Lab/Technology Resource

Required:

1. TBD

Recommended:

2. TBD

Premium:

3. TBD

Consumer Education Classroom

Required:

1. TBD

Recommended:

2. TBD

Premium:

3. TBD

Career and Technology Education

Required:

1. TBD

Recommended:

2. TBD

Premium:

3. TBD

Gymnasiums

Required:

- 1. Provide synthetic sports floors in Pre-K-5 schools.
- 2. Specify MFMA-RL second or better grade, plain sawn hard maple floor systems for middle and high schools only.
- 3. Provide minimum underslab 15 mil vapor retarder that meets Class “B” WYB.

4. Refer to the [enter appropriate space standard source(s)]to determine the size of the gymnasium, locker rooms, bleachers and support areas.
5. Provide public toilet areas near the gymnasium.
6. Provide for wireless network computer access in the gymnasium and offices.
7. Locate gymnasiums adjacent to or with easy access to exterior playfields and parking lots for public events.
8. Locate bleachers and gymnasium doors to protect floors from street shoe traffic.
9. Provide energy-efficient lighting that can resist damage from thrown basketballs, softballs and dodge balls.
10. Provide safety and security cages around light switches, thermostats, sensors, etc.
11. Locate door swings, equipment, and other enclosures so they do not become dangerous obstructions to running students playing within the space.
12. Present affordable strategies for maintaining appropriate humidity levels for wood flooring.
13. Design gymnasiums with supporting toilet and shower facilities.
14. Consider sports net dividers to maximize class use of gyms.
15. Limit wall padding to competition court basketball backstops only.
16. Floor painting and striping for intended sports and physical education purposes.
17. Adjustable, retractable basketball backboards/hoops
18. Recessed floor plates for volleyball posts
19. Wall-hung hand sanitizer stations

Recommended:

20. Consider gymnasiums as possible multi-functioning and multipurpose spaces. Provide enough sound absorbing material to allow for good voice recognition, and appropriate sound amplification for group presentations
21. School names, mascots, or logos on floor and walls.

Premium:

22. Separate, specialized dehumidification systems for wood floors
23. Glass backboards or automatic electric winch backboards other than two for the main court
24. Climbing walls
25. Movable bleacher systems designed to be relocated throughout the room
26. Large, tall, electric operable divider systems
27. Specialty equipment other than basketball and volleyball supports or tie-downs
28. Batting cages
29. Television platforms for broadcasting games and events
30. College or professional grade floor systems

Auditoriums + Stage

Required:

1. Consult the [enter appropriate space standard source(s)] for state-supported stage sizes based upon program and grade configuration.
2. Specify a state-supported basic stage curtain, sound system, and theatrical lighting systems

3. Design dressing rooms, storage rooms, and scenery shops only if academic theater programs exist as part of the school curriculum.
4. Design a reasonably sized control booth, 10'-0" x 15'-0".
5. Specify sealed or painted concrete floors with carpeted aisles.
6. Locate the control booth for visual supervision of the stage and for video and audio recording of performances.
7. Design the auditorium stage and all support areas to be ADA accessible.
8. Stage curtains and backdrops in auditorium and performance spaces
9. Fixed seating in auditoriums to have tilting upholstered seat and back and integral arms. Seat number/row letters to be Americans with Disabilities Act (ADA) compliant. Provide wheelchair access as required by code.

Recommended:

10. X

Premium:

11. Square footage that exceeds that required for seating one-third of the student body or for the appropriate stage as recommended by the [enter appropriate space standard source(s)]
12. Additional seating
13. Additional theater curtains
14. Proscenium arches wider than 60'-0"
15. Fly galleries
16. Stage gridirons, pin rails, or catwalks over stages
17. Proscenium openings higher than 25'-0" or stage ceilings higher than 30'-0"
18. Under-stage storage
19. Orchestra pits
20. Professional theater lighting systems
21. Theater balconies or spectator boxes
22. Elevators dedicated to serving just the auditorium
23. Special curved plaster wall or ceiling assemblies designed for acoustic balancing
24. Decorative wood paneling, wallpaper, and murals
25. Spaces and systems for "black-box" theaters

Category B – Support Teaching

Counseling/Testing

Required:

1. TBD

Recommended:

2. TBD

Premium:

3. TBD

Teacher Workrooms/Offices

Required:

1. TBD

Recommended:

2. TBD

Premium:

3. TBD

Teacher Breakroom

Required:

1. TBD

Recommended:

2. TBD

Premium:

3. TBD

Educational Resource Storage

Required:

1. TBD

Recommended:

2. TBD

Premium:

3. TBD

Time-out Rooms

Required:

1. TBD

Recommended:

2. TBD

Premium:

3. TBD

Parent Resource Rooms

Required:

1. TBD

Recommended:

2. TBD

Premium:

3. TBD

Category C – General Support

Administrative Areas

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Health Clinic + Nurse Space

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Conference Rooms

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Commons/Lobby

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Cafeteria

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Kitchen

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Multipurpose Room

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Student Store

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Weight Room

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Locker Rooms

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Pool

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Category D – Supplementary

Corridors

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Stairwells/Elevators

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Mechanical

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Telecom Rooms

Required:

1. Provide dedicated space for telecom rooms. Avoid co-locating racks in electrical or mechanical rooms.
2. Use 2-post racks unless equipment needs call for a 4-post.
3. Provide cable runway over racks for routing cabling.
4. Limit number of telecom rooms to minimum required per standards for size of the building.
5. Locate telecom room in central area of building where possible to average cable lengths.
6. Electrical panel serving the telecom room should have surge protection.

Recommended:

7. Provide rack-mounted UPS for essential systems.
8. Coordinate with Mechanical for cooling needs.
9. Locate utility service entrance in Main Telecom Room where possible.
10. Size room large enough to allow for fire alarm, access control, intrusion detection, DDC, and other similar systems to be located in the room.
11. Provide one circuit per rack, with a larger circuit provided to the main rack with UPS.
12. Use multi-connection KVM units instead of fixed monitors/workstations.
13. Install a paging speaker and telephone in the room.

Premium:

14. Central UPS systems.
15. Air conditioning if temperatures are not excessive in-rack cooling systems.

Maintenance & Receiving

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Building Storage

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Restrooms

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Custodial

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Conditioned Food Storage

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

Recycling Rooms

Required:

1. TBD

Recommended:

2. X

Premium:

3. X

4. HIGH PERFORMANCE FACILITIES

The Alaska DEED encourages high-performance schools for Alaska communities. A high-performance school is designed to conserve natural resources, save money, and improve the overall health and well-being of students, staff, and community. Emphasis is placed on low-impact site design, reduced impact on local infrastructure, energy efficiency, water use reduction, non-toxic materials, waste management, indoor air quality, efficient operations, and community engagement.

High performance school design principles can be broken into three general areas of emphasis:

- Integrative design process
- Human health and comfort
- Demand reduction

These principles are woven throughout this document as both required strategies and suggestions for premium strategies. Resources on high-performance school design are included at the end of this section to provide further guidance to project teams.

A. Integrative Design Process

One of the key ingredients to creating a high-performance school is to conduct an integrative design process. The integrative design process is a collaborative approach that includes the full team in decision-making from project inception through design, construction, and commissioning. The process focuses on a whole-systems design approach: recognition that all the components of the building work interdependently and affect the performance of one another.

A few key steps to implementing an integrative design process include:

- Set sustainability goals with the owner at project inception.
- Conduct a full team meeting at the beginning of each project phase.
- Include high-performance design principles as an agenda item at all project meetings.
- Incorporate life cycle costs and operating costs into the project decision-making process.

Buildings are often budgeted on first costs alone. Life cycle costing takes a more integrated approach, factoring in energy savings over time, durability and reduced maintenance of systems and materials, and enhanced occupant health and productivity. High performance design principles place emphasis on looking at the building as a whole over time to minimize energy use, maximize cost savings, and create comfortable and healthy spaces for the occupants.

B. Human Health and Comfort

Learning environments have a huge impact on student performance, health, and overall well-being. High performance schools can provide high quality indoor air and thermal, visual, and acoustical comfort. Emphasis is placed on daylight in classrooms and views to the outdoors, HVAC and lighting controls, non-toxic materials, enhanced filtration, carbon dioxide sensors, cross-contamination

prevention, natural ventilation, and increased outdoor airflow rates in mechanically ventilated spaces.

Benefits of high-performance schools can include improved student performance, increased student health, reduced student absentee rates, and greater staff satisfaction.

Required:

1. Low water consumption plumbing fixtures.
2. Provide third-party commissioning starting at project concept design.
3. Design heating and cooling systems to meet the requirements of ASHRAE 55 Thermal Comfort in Buildings (latest edition).
4. “Right sizing” of HVAC equipment based on development of building massing and envelope. May require multiple iterations as building layout changes during design.
5. Avoid operating independent heating and cooling systems simultaneously. Utilize HVAC systems that will redistribute heat while also providing cooling, such as variable refrigerant flow (VRF) systems.
6. Design variable output HVAC systems to adapt to varying building heating and cooling demands.
7. Utilize low temperature heating and cooling systems, such as in-floor radiant.
8. Use high-efficiency HVAC equipment.
9. Provide building occupants with individual access to building temperature controls.
10. Minimum MERV-13 filtration on all ventilation systems.
11. Demand control ventilation, with carbon dioxide (CO₂) sensors installed in spaces with high occupant density.

Recommended:

12. Best practices include providing green spaces, open spaces, and shared community spaces in the building; reusing and recycling materials during construction and occupancy; and creating an environment that is a community teaching tool for high performance building and sustainable living.
13. Consider using energy modeling and iterative design to reduce building energy consumption by 5% over ASHRAE-90.1 (current version).
14. Consider providing more than ASHRAE 62.1 minimum outdoor air rates. This may not be appropriate for all locations in Alaska.
15. Consider using the building control system to monitor indoor air quality and adjust ventilation rates to mitigate contaminants such as CO₂ and VOCs.
16. Consider providing a building flushout post construction.

Premium:

17. Provide on-going commissioning of the facility every 5 years.
18. Consider utilizing grey water reclamation systems for use with flushing plumbing fixtures.
19. Consider on-site harvesting of renewable energy such as wind and solar.
20. Provide static and/or dynamic educational displays describing the sustainable features of the facility.

21. Provide a display showing instantaneous and aggregate building water and energy consumption.

Demand Reduction

High-performance schools are designed to reduce demand on energy and natural resources, to optimize the performance of building systems, and to reduce the overall operating costs of the school. Emphasis is placed on energy efficient mechanical systems, high-performance envelope design, low-flow water fixtures, renewable energy systems, lighting and daylight controls, and energy efficient equipment and appliances.

As part of an integrative design process, energy modeling and commissioning will confirm that all systems and components are integrated to achieve optimum results and are installed and operated as designed. One strategy may offset another. For instance, daylight sensors may cost more up front as an individual strategy, but once energy savings and associated reduced mechanical loads are considered, the team may realize that they can save money by selecting a smaller mechanical system.

Practices to optimize systems integration and increase efficiency include energy modeling and building commissioning. Design-phase energy modeling is a tool to use early and throughout the design process to test a variety of energy efficiency measures to determine the best way to align systems and components. Commissioning also offers an opportunity to make adjustments in the field and to train occupants on how to use the systems, improving efficiency even further.

Employing high-performance principles such as demand reduction, energy efficiency, and system optimization results in climate appropriate solutions, buildings that have low-to-no impact on local infrastructure, and an overall reduction in the project’s carbon footprint.

High-Performance Certifications

High-performance building certification systems such as the United States Green Building Council (USGBC) LEED for Schools Rating System can provide detailed guidance on implementing high performance school design strategies.

Although DEED recognizes the value of building certifications by a third-party organization, the State will not participate in costs associated with these certifications that may result in materials and systems that cannot be supported by the State.

Premium:

1. Green Building Certification: Register the project with the USGBC LEED Rating System and obtain LEED for Schools certification.
2. Educational Display: Provide a permanent display, building signage, digital dashboard, or building tour that describe the high-performance features of the school.
3. Carbon Footprint Reporting: Calculate the school’s carbon footprint. Include a greenhouse gas inventory and opportunities to reduce greenhouse gas emissions.
4. Climate Action Plan: Develop and implement a climate action plan to raise awareness of the school community’s carbon footprint and engage students, staff, and the community in reducing that carbon footprint.

5. Performance Benchmarking: Track the school’s energy use over time, using a tool such as the US EPA’s Energy Star Portfolio Manager.

Part 3. SYSTEM STANDARDS

01.SITE AND INFRASTRUCTURE

[The following Site and Infrastructure language was added by department Facilities staff in the 2/12/2021 draft version.]

011 Reserved

011X TBD

012 Reserved

012X TBD

013 Site Improvements

0131 Vehicular Surfaces

Required:

1. Parking areas, access drives, and vehicular circulation will have appropriate structural subbase, 4 inch basecourse, and 2 inch asphalt paving; increase cross-section at truck delivery and bus loops.
2. Provide parking spaces at a ratio of 1/20 K-6 students and 1/15 9-12 students for the projected student population.
3. Provide dedicated bus lanes/bus loops and dedicated parent pick-up/drop-off areas. Design vehicle circulation and parking areas to maximize site safety.
4. Minimize islands and other obstructions in parking areas, except where needed for circulation control, to accommodate snow removal and storage.
5. Provide parking lot lighting to IES standards. (Ref. Section 0163 Lighting & Equipment for additional provisions.)
6. Provide accessible parking spaces in accordance with applicable codes.

Recommended:

7. Consider a top course of uniform gravel, crushed rock, or recycled asphalt in any community without access to a batch or drum-mix plant within an approximate 45min delivery radius.
8. In roadless communities, consider vehicular surfaces of the best available local fill.
9. Consider designing mitigations in vehicular pavement to prevent stormwater and snowmelt from flowing across pedestrian surfaces.
10. Consider speed control measures a long straightaways and high-pedestrian areas.
11. Consider designating parking spaces near the main entrance for carpool and low-emitting vehicles.
12. Consider providing headbolt heaters at staff parking areas in climate zones 8 and 9. (Ref. Section 0161 Electrical Services & Distribution for additional provisions.)

Premium:

13. Paving plants as a project cost.
14. Additional parking and locally mandated parking over the above the standards.
15. Concrete pavement other than at loading dock aprons and dumpster approaches.
16. Asphalt concrete pavement more than 2in thick except at loading docks, bus loops, and dumpster approaches which may be 4in.
17. “Porous” drainage pavement.
18. Access controlled (e.g., magnetic cards, etc.) parking lots.
19. Colored pavement.
20. Radiant parking snow melt systems.
21. Headbolt heaters in climate zones 6 and 7, or those in zones 8 and 9 beyond 50% of the anticipated number of school staff.

0132 Pedestrian Surfaces

Required:

1. X

Recommended:

2. X

Premium:

3. Concrete or asphalt pavers.
4. Concrete walks other than at the main entrance.
5. Radiant sidewalk snow melt systems

0133 Elevated Decks & Ramps

Required:

Recommended:

Premium:

0134 Site Walls

Required:

Recommended:

Premium:

0135 Landscaping & Irrigation

Required:

1. Prioritize the location of plantings at the main entrance and as buffering for paved areas and walks, and along public building facades.
2. Avoid plantings that create a security or visibility issue near entrances.
3. Provide native, water conserving plants.
4. Plant trees of a reasonable size and caliper.
5. Locate trees away from the building to provide a minimum of 12'-0" clearance from the drip line of a fully grown tree.

Recommended:

6. X

Premium:

7. Annual plantings.
8. Buffering plantings required by local authorities.
9. Non-native plantings or trees.
10. Site irrigation systems for athletic fields.

0136 Fencing and Gates

Required:

1. X

Recommended:

2. X

Premium:

3. Chain link fence coatings and screen slats.

0137 Site Furnishings & Equipment

Required:

1. X

Recommended:

2. X

Premium:

3. Decorative benches and elements.
4. Stone benches or plazas.

0138 Playgrounds & Playfields

Required:

1. Design field orientation to conform with National Associations–Court and Field Diagrams.
2. Design play areas to conform to ASTM (American Society of Testing Materials) standards and the publication by the National Principals Association.

3. Specify play area equipment and surfaces to meet Consumer Product Safety Commission standards.
4. Provide drainage for play areas to prevent ponding.
5. Specify surfaces and play equipment for soft play areas that meet ADA and OSHA standards.
6. Provide subsurface drainage systems under soft play areas.
7. Use linear shapes and simple forms at play areas to accommodate snow removal and maintenance.
8. Specify playground equipment constructed of durable, weather-resistant, low maintenance materials.

Recommended:

9. Consider bike racks at the main entrances to the building.
10. Consider installing empty conduit for future power to the athletic fields.

Premium:

11. Athletic and play areas that exceed the DEED’s minimum standards.
12. Bike trails or exercise trails.
13. Bleachers, lighting, concession stands, irrigation systems, press boxes, scoreboards, and drinking fountains.

0139 Other Site Improvements

Required:

Recommended:

Premium:

014 Site Structures

0141 Freestanding Shelters

Required:

Recommended:

Premium:

0142 Attached Shelters

Required:

Recommended:

Premium:

0143 Support Buildings

Required:

Recommended:

Premium:

015 Civil/Mechanical Utilities

0151 Water Systems

Required:

1. Select sites with public water available to the site.
2. Locate water utility connections away from main building entrance.
3. Coordinate water connections with wastewater, and fuel utility connections to enter building at mechanical utility spaces.
4. Where water piping is installed above ground outside of buildings, locate piping away from the main building entrance.
5. Locate water piping to allow access for pipe maintenance and building maintenance; locate piping away from pedestrian walkways and vehicle traffic to the greatest extent practicable.

Recommended:

6. Consider recirculating and/or heat trace on water supply mains as required by site climate conditions.

Premium:

7. Avoid depressed loading docks.

0152 Sanitary Sewer

Required:

1. Select sites with public wastewater available to the site.
2. Locate wastewater utility connections away from main building entrance.

3. Coordinate wastewater connections with water, and fuel utility connections to enter building at mechanical utility spaces.
4. Where wastewater piping is installed above ground outside of buildings, locate piping away from the main building entrance.
5. Locate wastewater piping to allow access for pipe maintenance and building maintenance; locate piping away from pedestrian walkways and vehicle traffic to the greatest extent practicable.
6. Locate kitchen delivery areas, school maintenance, delivery, and dumpsters away from the main building entrance or student activity areas.
7. Locate the dumpster to encourage and maximize recycling of waste materials. Show storage areas for recycled materials in and outside the building on site and building plans.
8. Enclose the dumpster with an 8'-0"-high chain link fence and set it on a bituminous concrete slab with steel bollard bumpers. Provide a 12'-0"-long reinforced concrete pad on the loading side of the dumpster.

Recommended:

9. Consider wastewater pretreatment systems at sites with septic systems.
10. Consider coordinating with the vacuum waste utility to have vacuum collection sumps installed within the school building, for sites served by utility level vacuum waste systems.

Premium:

11. X.

0153 Storm Water

Required:

1. Design an on-site drainage system to keep stormwater run-off away from the building and to keep grounds, paved areas, and playfields free of standing water.
2. Design "open pond" stormwater storage systems. Avoid buried storage systems.
3. Enclose stormwater ponds and holding areas with 4'-0"-high galvanized chain link fencing. Provide gates for maintenance.
4. Provide drip edges at sloped roof areas with positive means of collecting roof runoff and a pipe to convey the flow to the drainage system. Do not use perimeter foundation drains to intercept roof runoff.

Recommended:

5. X

Premium:

6. Chain link fence coatings and screen slats.

0154 Fuel Systems

Required:

1. Locate fuel oil storage away from the building front entrance.

2. Enclose bulk fuel oil storage areas with 8'-0"-high galvanized chain link fencing. Provide gates for maintenance.
3. Install UL-142 above grade double wall intermediate fuel oil storage tank as close as practicable to fuel-fired mechanical equipment. Enclose with 6'-0"-high galvanized chain link fencing. Provide gates for maintenance.
4. Provide containment for fuel oil piping installed below ground including double-wall fuel-rated piping, corrugated carrier pipe, pipe transition and containment sumps.

Recommended:

5. Consider installing a fuel leak detection system with alarms to monitor integrity of fuel storage tank and distribution piping.

Premium:

6. Do not bury ferrous fuel oil piping.
7. Fuel level monitoring system with digital outputs for remote viewing and connection to building energy management system/control system.

0155 Heating/Cooling Piping & Utilidors

Required:

1. X

Recommended:

2. X

Premium:

3. X.

016 Site Electrical

0161 Electrical Service & Distribution

Required:

1. Utilize 3-phase power if available.
2. Coordinate with the local utility for connection point, distribution voltage, and power plant capacity early in the design.

Recommended:

3. If designing the line extension, try to locate transformers as close as practical to service entrance.

Premium:

4. X

0162 Data/Comm Service & Distribution

Required:

1. Utilize public fiber optic services if available.

Recommended:

2. Where practical, use the same routing as power to reach site/building.

Premium:

3. X

0163 Lighting & Equipment

Required:

1. This lighting is for general use. Specific applications such as athletic fields, hockey rinks, and similar would be included in design of those site elements.
2. Building-mounted lighting may be used for site lighting if practical, or as a supplement to pole-mounted lighting.
3. Pole-mounted lighting should be designed for roadway, driveway, and parking areas per IES standards. Additional lighting should be considered for hardscape, playground equipment, sledding hills, and similar areas where use may require artificial lighting.
4. Poles should be located on the perimeter of parking areas to stay out of the way of snow removal paths as much as possible.
5. Lighting parameters including minimum lighting levels, glare, uniformity, and similar should meet IES standards where no local code is in effect.

Recommended:

6. Consider providing conduit to new poles for signal wiring to cameras, wireless access points, etc., as design budget and need allows.

Premium:

7. X

0164 Security Systems

Required:

Recommended:

Premium:

017 Offsite Work

0171 Offsite Improvements

Required:

Recommended:

Premium:

0172 Offsite Utilities

Required:

Recommended:

Premium:

0173 Other Offsite Work

Required:

Recommended:

Premium:

02.SUBSTRUCTURE

[The following Site and Infrastructure language was added by department Facilities staff in the 2/12/2021 draft version.]

021 Standard Foundations & Basements

0211 Continuous & Column Footings

Required:

1. 4000psi concrete is the basis of design. Mixes for other strengths are subject to evaluation by life-cycle cost analysis.
2. Carbon steel reinforcing bar is the basis of design with ratios in the 30-80lbs range per cubic yard of concrete.
3. Design footings sized in accordance with building codes, soils and superimposed loads.
4. Soil bearing pressures below 2000psi require site selection justification and DEED approval.

Recommended:

5. All weather wood (AWW) footings consisting of timbers and strongbacks are acceptable where soils are appropriate (i.e., low moisture, non-permafrost). AWW foundations must be supported by appropriate life-cycle cost analysis.

Premium:

6. Coated reinforcing bar, including galvanized and epoxy, and stainless steel.
7. Reinforcing bar above 80lbs per cubic yard of concrete.

0212 Foundation Walls & Treatments

Required:

1. Extend foundation walls to frost depths per local conditions/codes.
2. 4000psi concrete is the basis of design. Mixes for other strengths are subject to evaluation by life-cycle cost analysis.
3. Carbon steel reinforcing bar is the basis of design with ratios in the 50-100lbs per cubic yard of concrete.
4. Design foundation walls sized in accordance with building codes, soils and superimposed loads.
5. Insulate foundations as required by DEED-adopted energy codes to eliminate or minimize heat loss.
6. Provide dampproofing treatment as required by local conditions/codes.
7. Provide durable (e.g. 10mil poly) vapor barrier on all exposed earth contained within foundation walls.

Recommended:

8. Concrete masonry units (CMU foundation walls, with reinforcing, are acceptable.
9. All weather wood (AWW) foundation walls consisting of framing and sheathing are acceptable where soils are appropriate (i.e., low moisture, non-permafrost). AWW foundations must be supported by appropriate life-cycle cost analysis.
10. Frost protected shallow foundations (FPSF) including perimeter insulation are acceptable when supported by appropriate life-cycle cost analysis.
11. Avoid below grade functional space enclosed by foundation walls whenever possible.
12. Exterior sheet waterproofing on foundation walls that enclose space below the finish grade level; includes below-grade mechanical and service spaces.

Premium:

13. Coated reinforcing bar, including galvanized and epoxy, and stainless steel.
14. Reinforcing bar above 100lbs per cubic yard of concrete.
15. Foundation walls enclosing below grade space classified under adopted codes as occupied space.

0213 Foundation Drainage

Required:

1. Install perimeter foundation drainage only where required by codes adopted by the state or a local jurisdiction with delegated authority.

Recommended:

2. When required by local conditions/code, perforated pipe footing drains bedded in drain rock with filter fabric are acceptable.

3. Run foundation drain systems to daylight where possible and appropriate (see *0153 Storm Water for standards on site drainage collection*).
4. Drainage mats and other water/moisture control measures are acceptable when required by site conditions and supported by appropriate life-cycle cost analysis.

Premium:

5. Sites requiring underslab drainage.

022 Slab on Grade

0221 Structural & Non-structural Slab

Required:

1. 4000psi concrete is the basis of design for interior slabs. 5000psi concrete is the basis of design for exterior, exposed slabs. Mixes for other strengths are subject to evaluation by life-cycle cost analysis.
2. Carbon steel reinforcing bar is the basis of design with ratios in the 20-50lbs range per cubic yard of concrete.
3. Structural slabs are not anticipated except at isolated point loads for installed equipment.
4. Non-structural slabs shall be 4" nominal thickness.
5. Provide standard compacted sub-base, welded wire fabric reinforcement, moisture control, and trowel finish.
6. Insulate slabs as required by DEED-adopted energy codes to eliminate or minimize heat loss.
7. See *0311 Lower and Main Floors* for wood and steel superstructures.

Recommended:

8. Consider reinforcing bar in non-structural slabs where required for slab openings, incidental loads, and perimeter durability.
9. Consider shrinkage and crack control using glass fiber reinforcing in-lieu of or in addition to welded wire fabric.
10. Integrate footings and slabs where part of an approved design assembly such as at FPSF.
11. Consider polished concrete finish where appropriate to be used in-lieu of applied floor coverings.
12. Consider providing full frost-depth wall foundations under entry slabs where necessary to prevent frost heaving.
13. including perimeter insulation are acceptable when supported by appropriate life-cycle cost analysis required by site conditions and supported by appropriate life-cycle cost analysis.

Premium:

14. Coated reinforcing bar, including galvanized and epoxy, and stainless steel.
15. Reinforcing bar above 50lbs per cubic yard of concrete.
16. Colored or decorative concrete slabs exceeding 40 percent of exposed concrete.

0222 Trench, Pit and Pad

Required:

1. 4000psi concrete is the basis of design for pits and pads. Mixes for other strengths are subject to evaluation by life-cycle cost analysis.
2. Carbon steel reinforcing bar is the basis of design with ratios in the 50-100lbs range per cubic yard of concrete.
3. Elevator pits shall be provided in the dimensions and depths required.
4. Pads to provide adequate securing of equipment will be provided where required for anchoring or other safety measures were required by codes adopted by the state or a local jurisdiction with delegated authority.

Recommended:

5. Consider non-seismic housekeeping pads for major HVAC and electrical equipment at nominal heights not to exceed 4in above the surrounding floor level.

Premium:

6. Trenches formed of concrete; slab block-outs and reinforcing for nominal trench drains in support of CTE are acceptable.

0223 Underslab Elements

Required:

1. None.

Recommended:

2. Consider underslab rigid insulation in support of FPSF and where otherwise supported by an energy life-cycle cost analysis of the proposed heating system.

Premium:

3. Sites requiring underslab drainage.

024 Special Foundations

0241 Piling & Pile Cap

Required:

1. Provide a steel H-pile foundation including steel or lumber pile caps and required lateral bracing where soil bearing pressures cannot support a standard foundation or where it is not cost effective to remove poor soils and replace with suitable fill.
2. Install thermistor tubes integral with pile.

Recommended:

3. Consider a treated wood piling foundation including timber or engineered lumber pile caps, and required lateral bracing for smaller education related facilities up to 5000gsf.
4. Consider steel pipe piles where supported over H-piles based on a life-cycle cost analysis.

Premium:

5. Sites where pile stick-up exceeds a total average of 6ft for all piles, or any pile stick-up exceeds 12ft.
6. Pile foundations exceeding 40#/FPA (does not include lateral bracing or pile caps).

0242 Caissons

Required:

1. None; caisson foundations not anticipated.

Recommended:

2. Consider caisson foundations where bedrock (+/- 15,000psi) occurs at shallow depths of up to 8ft below grade. If this foundation is proposed, it must be supported with an appropriate cost analysis of the full substructure.

Premium:

3. Caisson foundations where total estimated O2 Substructure cost exceeds other alternatives.

0243 Grade Beams

Required:

1. None; grade beam foundations not anticipated.

Recommended:

2. Consider grade beam foundations where adequate support for continuous footings is not available, subgrade point loads are available or can be created (i.e., piling, etc.), and concrete is readily available and cost effective. If this foundation is proposed, it must be supported with an appropriate cost analysis of the full substructure.

Premium:

3. Grade beam foundations where total estimated O2 Substructure cost exceeds other alternatives.

0244 Arctic Foundation Systems

Required:

1. Provide an arctic foundation system consisting of thermopile (with or without helical ribs, pile extensions, steel or lumber pile caps and required lateral bracing where soils consist of continuous or discontinuous permafrost.
2. Install thermistor tubes adjacent to each pile.
3. Thermopile and thermosyphons will be included in a project's commissioning plan unless approved otherwise by DEED.

Recommended:

4. Consider passive thermosyphons in-lieu-of thermopile where suitable fill is available to support installation of standard foundations.
5. Consider underslab rigid insulation in support of FPSF and where otherwise supported by an energy life-cycle cost analysis of the proposed heating system.

Premium:

6. Arctic foundations with active refrigeration.
7. Gravel pads in conjunction with thermopile arctic foundations.

0245 Other Special Foundations

Required:

1. None; other special foundations such as sheet pile, raft, multi-point frame, etc. are not anticipated.

Recommended:

2. Consider other special foundations when building loads and soil conditions may exclude other substructure solutions. If a special foundation is proposed, it must be supported with an appropriate cost analysis of the full substructure.

Premium:

3. Other special foundations where total estimated 02 Substructure cost exceeds other alternatives.

A. Design Ratios

Standard Foundations & Basements

1. Total building deadload/GSF
2. Cubic feet of concrete/GSF
3. Pounds of rebar/CY concrete

Slab on Grade

4. Total building deadload/GSF
5. Cubic feet of concrete/GSF
6. Pounds of rebar/CY concrete

Special Foundations

7. Total building deadload/GSF
8. Pile weight (LB)/Footprint area (FPA).
9. Install

B. Design Criteria

Substructure is typically far more expensive in Alaska than in other parts of the country. Usually substructure system options are limited by the soil conditions of a particular site. As it affects the cost of site development, the soil conditions of the selected site also play a large part in the cost of the foundation system and determining the number of substructure system options that are acceptable on a given site. Thus, the quality of soils should be given significant weighting when evaluating site options. Building sites whose soil conditions allow the use of standard concrete foundations are preferable to sites that require piling foundations.

- Multi-story construction shall be considered and presented as a schematic design option for all school structures over 40,000 GSF
- Where appropriate for soil conditions, standard concrete foundations are almost always the preferred substructure system
- If any other substructure system is to be considered, a cost analysis will be performed. Cost analysis shall include cost of energy and maintenance.
- Where soils are of low moisture content, all weather wood foundations should be considered for facilities smaller than 20,000 GSF
- Where appropriate for soil conditions, substructure systems utilizing a heated crawlspace with perimeter closure are preferable to substructure systems that utilize an elevated building with an air space between the underside of the building and grade

03.SUPERSTRUCTURE

[The following Site and Infrastructure language was added by department Facilities staff in the 2/12/2021 draft version.]

A. Building System Summary

The **Superstructure** of a building consists of all gravity and lateral force resisting members above the substructure to and including the roof deck. The department recognizes three sub-categories in this building system: **Floor Structure**, **Roof Structure**, and **Stairs**. Floor, roof, and stair structures normally include vertical members (columns, walls), horizontal members (beams, joists/rafters, trusses), decking (wood sheathing, concrete, etc.), and a variety of bracing elements. In some superstructure systems with bearing walls (e.g., masonry units, light-gauge steel, nominal wood framing, etc.) the superstructure blends with the Exterior Closure and Interiors systems. In **Floor Structure** using slab-on-grade, the system overlaps with **Substructure**.

B. Design Philosophy

Alaskan schools must be provided with an adequate superstructure which responds efficiently, and effectively to building loads as prescribed in adopted building codes and to the conditions of the local environment and building's use. Structural efficiency measures include minimizing the deadload of the building, selecting high strength-to-weight and strength-to-cost materials, building simplicity, and structural member uniformity. A uniformly loaded floor system is typically the most cost-effective elevated floor system; concentrated point loads must be accommodated but should be minimized. It should be noted that concrete slab on grade floor systems is the least expensive floor system in areas where concrete is readily available For additional design parameters see the **Design Ratio** section of this system.

The same can be said for roof assemblies that are typically comprised of roof sheathing, roof rafters or trusses, beams, and columns carrying concentrated vertical loads to the foundation or a lower floor assembly. Structural roof assemblies that utilize load-bearing partitions are typically more cost-effective than assemblies that use post and beam systems to bear vertical loads. With the inclusion of the structural insulated panels in the roof assembly and its use to replace both the roof sheathing and roof rafters or trusses due to its large span and loading limits, roof assemblies have become more

reliant on a post and beam assembly. While the use of structural insulated roof panels may reduce the time required to fully construct the structural roof assembly, its inherent inclusion of heavily loaded beams and columns adds to the overall cost of the superstructure.

The previous paragraphs deal with how the structural systems are designed to accommodate gravity loads. Consideration must also be given to how the structural system performs under lateral, seismic, and wind loading conditions. The best way to design a cost-effective structural system to handle wind loads is to limit them. The building’s form and massing play a significant role in limiting the structure’s exposure to wind loads and should be considered by the architect at the outset of design. Buildings that expose large areas of high bay space to lateral wind loads will not be conducive to cost-effective structural design.

C. Model Alaskan School

The Model Alaskan School includes a main floor structure of reinforced concrete slab on grade and includes a small portion of elevated floor with steel columns, beams, joists, metal decking and concrete. The roof structure uses a combination of wood frame bearing wall, steel columns, beams, joists, and metal decking. Steel angle bracing and light gauge steel shear walls provide lateral support. Acceptable alternatives are detailed in the construction standards that follow.

031 Floor Structure

0311 Lower & Main Floors

Required:

1. Structural frame floor assemblies of wood or metal consisting of posts, beams/frame walls, joists, and decking are required when slab on grade is not cost effective. Support frame floor assemblies with appropriate cost analysis (e.g., in geographic regions where the cost of concrete is high, or soils will not permit this standard).
2. Design frame floor assemblies (materials, size, spacing, etc.) for maximum efficiency in accordance with building codes and superimposed loads.
3. HHS shapes for columns/posts, W-shapes for beams/girders, open web trusses for joists and fluted sheet metal for decking form the basis of design.
4. Wood members functioning in the capacity of metal deck and concrete must be minimum 1-1/8” wood structural panel or wood decking.
5. Insulate frame floors as required by DEED-adopted energy codes to eliminate or minimize heat loss.
6. Provide protective coating on structural members as required by local conditions/codes.

Recommended:

7. Consider light-gauge steel, engineered wood, or lumber for any component listed in the basis of design. Support light gauge steel and wood members and assemblies with appropriate cost analysis and justification (e.g., building dimensions and configurations with small spans).
8. Consider, where pile foundations (0241, 0244) are accepted, a structural insulated panel (SIP), with or without embedded floor joists, as required to meet code-specified loading. If panels will not span between pile caps, consider intermediary engineered wood beams or steel wide

flange beams. Support SIP assemblies with an appropriate cost analysis of the full substructure and 0311 floor structure.

Premium:

9. Framed floor assemblies where total estimated 02 Substructure + 0311 Lower and Main Floors cost exceeds other alternatives.

0312 Upper Floors

Required:

1. Provide structural frame floor assemblies of wood or metal consisting of columns, beams/frame walls, joists, and decking.
2. Design upper floor assemblies (materials, size, spacing, etc.) for maximum efficiency in accordance with building codes and superimposed loads.
3. HHS shapes for columns/posts, W-shapes for beams/girders, open web trusses for joists and fluted sheet metal for decking form the basis of design.
4. Wood members functioning in the capacity of metal deck and concrete must be minimum 1-1/8" wood structural panel or wood decking.
5. Insulate upper floor perimeters as required by DEED-adopted energy codes to eliminate or minimize heat loss.
6. Provide protective coating on structural members as required by local conditions/codes.

Recommended:

7. Consider light-gauge steel, engineered wood, or lumber for any component listed in the basis of design. Support light gauge steel and wood members and assemblies with appropriate cost analysis and justification (e.g., building dimensions and configurations with small spans).
8. Consider framed bearing walls in-lieu-of columns and beams/girders where cost effectiveness can be increased when considering the combination of systems in 0312 and 0411 Exterior Walls or 0312 and 0611 Fixed Partitions.
9. Consider, where pile foundations (0241, 0244) are accepted, a structural insulated panel (SIP), with or without embedded lumber, as required to meet code-specified loading. If panels will not span between pile caps, consider intermediary engineered wood beams or steel wide flange beams. Support SIP assemblies with an appropriate cost analysis of the full substructure and 0311 floor structure analysis.

Premium:

10. Framed floor assemblies where total estimated 02 Substructure + 0311 Lower and Main Floors cost exceeds other alternatives.
11. Exterior balconies and construction.

0313 Ramps

Required:

1. Ramps accepted with framing equal to 0311 Lower and Main Floors and alternative systems as required by building function and with approved cost analysis.

Recommended:

2. Consider light-gauge steel, engineered wood, or lumber for any component listed in the basis of design. Support light gauge steel and wood members and assemblies with appropriate cost analysis and justification (e.g., ramp dimensions and configurations).
3. See Section 0711 *Passenger Elevators* for use of ramps in-lieu-of elevators.

Premium:

4. Framed ramp assemblies where total estimated 02 Substructure + 0311 Lower and Main Floors cost exceeds other alternatives.
5. Ramps wider than 10% of the minimum permitted under applicable codes.

032 Roof Structure

0321 Pitched Roofs

Required:

1. Provide structural frame roof assemblies of wood or metal consisting of columns, beams/frame walls, rafters, and decking.
2. Provide trusses where clear spans are required or possible (gymnasiums, multipurpose, library, etc.).
3. Design roof assemblies (materials, size, spacing, etc.) for maximum efficiency in accordance with building codes and superimposed loads.
4. HHS shapes for columns/posts, W or HSS steel for beams/girders, open web trusses or engineered wood for rafters, and fluted sheet metal for decking form the basis of design.
5. Wood members functioning in the capacity of metal deck may wood structural panel or wood decking with appropriate span ratings as required by applicable building codes.
6. Provide protective coating on structural members as required by local conditions/codes.

Recommended:

7. Consider light-gauge steel, engineered wood (including GLB) or lumber for any component listed in the basis of design. Support light gauge steel and wood members and assemblies with appropriate cost analysis and justification (e.g., building dimensions and configurations with small spans).
8. Consider framed bearing walls in-lieu-of columns and beams/girders where cost effectiveness can be increased when considering the combination of systems in 0321 and 0411 Exterior Walls or 0321 and 0611 Fixed Partitions.
9. Consider a structural insulated panel (SIP), with or without embedded lumber, as required to meet code-specified loading. Support SIP assemblies with an appropriate cost analysis of the full substructure and 0321 roof structure analysis.

Premium:

10. Framed roof assemblies where total estimated 02 Substructure + 0321 Pitched Roofs cost exceeds other alternatives.

0322 Flat Roofs

Required:

1. Provide structural frame roof assemblies of wood or metal consisting of columns, beams/frame walls, rafters, and decking.
2. Provide trusses where clear spans are required or possible (gymnasiums, multipurpose, library, etc.).
3. Design roof assemblies (materials, size, spacing, etc.) for maximum efficiency in accordance with building codes and superimposed loads.
4. HHS shapes for columns/posts, W or HSS steel for beams/girders, open web trusses or engineered wood for rafters, and fluted sheet metal for decking form the basis of design.
5. Wood members functioning in the capacity of metal deck may wood structural panel or wood decking with appropriate span ratings as required by applicable building codes.
6. Provide protective coating on structural members as required by local conditions/codes.

Recommended:

7. Consider light-gauge steel, engineered wood (including GLB) or lumber for any component listed in the basis of design. Support light gauge steel and wood members and assemblies with appropriate cost analysis and justification (e.g., building dimensions and configurations with small spans).
8. Consider framed bearing walls in-lieu-of columns and beams/girders where cost effectiveness can be increased when considering the combination of systems in *0322* and *0411 Exterior Walls* or *0322* and *0611 Fixed Partitions*.

Premium:

9. Exposed structural members where cost analysis demonstrates a cost increase above 2% for the *0321* and *0322* systems.
10. Framed roof assemblies where total estimated *02 Substructure* + *0322 Flat Roofs* cost exceeds other alternatives.

0323 Special Roofs

Required:

1. None; other special roof such as (occupied) roof decks, canopies, etc. are not anticipated.

Recommended:

2. Consider other special roofs when building loads, logistics, materials and construction may exclude other roof solutions. If a special roof is proposed, it must be supported with an appropriate cost analysis of the full superstructure.

Premium:

3. Other special roofs where total estimated *03 Superstructure* cost exceeds other alternatives.

033 Stairs

0331 Stair Structure

Required:

1. Provide stair structure assemblies for stairs and landings, of wood or metal consisting of stringers, treads, risers, connectors, beams/joists. Treads and landings may include concrete decking.
2. Design stair assemblies (materials, size, spacing, etc.) for maximum efficiency in accordance with building codes and superimposed loads (example: plate steel stringers with stiffening provided by treads and risers).
3. Provide stairs in the quantity prescribed by code and with dimensions not greater than 10% of code minimums.
4. Provide protective coating on structural members as required by local conditions/codes.

Recommended:

5. Consider up to one stair associated with a primary common area or public space that has ‘architectural features’ such as: no stair enclosure, concealed structure, concealed connections, open risers, cantilevered treads, integrated enhanced finishes, etc.
6. Consider alternative stair types where permitted by code for limited access such as alternating tread stairs.

Premium:

7. Stairs with any dimension greater than 10% of the minimum permitted under applicable codes.
8. More than one stair with ‘architectural features’.

0332 Stair Railings

Required:

1. Provide stair railing assemblies for stairs and landings, of wood or metal consisting of posts, rails, spindles/panels, shoes, and connectors.
2. Design railing assemblies (materials, size, spacing, etc.) for maximum efficiency in accordance with building codes and superimposed loads.
3. Provide railings in the quantity prescribed by code and with dimensions not greater than 10% of code minimums.
4. Provide protective coating on railing members as required by local conditions/codes.

Recommended:

5. Consider up to one stair railing associated with a primary common area or public space that has ‘architectural features’ such as: decorative posts, tempered glass panels, , concealed structure, concealed connections, open risers, cantilevered treads, integrated enhanced finishes, etc.
6. For stairs railings in high-visibility areas, consider stainless steel for all high-wear elements such as handrails and shoes to reduce long-term maintenance costs.
7. Where functionally and visually appropriate, consider stair railings with top rails at guardrail heights and separate handrails.

Premium:

8. Railings with any dimension greater than 10% of the minimum permitted under applicable codes except as noted.
9. More than one stair railing with ‘architectural features’.

0333 Ladders & Steps

Required:

1. Provide ladder assemblies of wood or metal consisting of rails, rungs, cages, and connectors.
2. Provide structural step assemblies in conformance with applicable provisions of *0331 Stair Structure*.
3. Design ladder assemblies (materials, size, spacing, etc.) for maximum efficiency in accordance with building codes and superimposed loads.
4. Provide ladders in the quantity prescribed by code and with dimensions not greater than 10% of code minimums.
5. Provide protective coating on ladder members as required by local conditions/codes.

Recommended:

6. Consider alternating tread stairs and other alternatives to ladders to improve access.

Premium:

7. Ladder and step materials not commonly accepted as ‘utilitarian’.

D. Design Criteria & Ratios

Criteria

- All single-story structures and smaller (60,000 GSF or less) two story structures should utilize uniform loading structural systems (i.e. load bearing walls) wherever feasible.
- Building massing should limit exterior wall area and exterior exposure of large high bay spaces to wind loads.

Ratios

04.EXTERIOR CLOSURE

[The following Exterior Closure language is from the BDS submittal]

The overall building design affects the performance of the exterior closure. The footprint, configuration, and structural grid should be simple and straightforward, without complex geometries. The State prefers multi-level buildings to reduce the overall footprint and to decrease the exterior surface and roof area. Design Ratios are referenced where applicable. Exterior walls should be straight, with few, if any, curves. Avoid complex configurations with unnecessary corners and changes of materials. DEED-adopted energy codes will have a significant influence on envelope design and

must be complied with in the most cost-effective way possible. Exterior closures should be designed holistically to control transfer of heat, air, moisture, vapor drive, daylight and noise.

041 Exterior Walls and Soffits

Required:

1. Wall and soffit assemblies should be designed to consider life-cycle analysis, energy efficiency, durability, low or no required maintenance and overall costs of assemblies.
2. Materials used for exterior enclosures shall be of commercial grade, durable with an intended 20-year or longer usable life.
3. Consider use of a load-bearing exterior wall assembly where feasible. Wall assemblies constructed from dimensional lumber, structural insulated panels, metal studs, and concrete masonry units are all capable of serving this dual-purpose role as exterior closure and structural system.
 - a. Wood studs – CF-3, LCCA-3, Labor intensive.
 - b. Structural insulated panels CF-3 to 4 (better in remote locations), LCCA-3.
 - c. Metal Studs – CF-4, Thermal Bridging leads to more complex total wall assembly. LCCA=3.
 - d. Concrete masonry units CF-3 (rural location 1). LCCA-1. CMU become very expensive in rural location due to freight. CMU has addition LCCA cost for future renovation as it is difficult to remove/modify.
4. Exterior Cladding and Siding: Exterior material choices are numerous and diverse. When choosing cladding, careful consideration should be given to design guidelines listed above and coordinated with District design preferences. Products that require sealants and repeated paint and stain maintenance are discouraged. Products include:
 - a. Structural Insulated Panels (SIP): Overall thickness, surface thickness, and R-value appropriate to region and structural design intent. CF-3, LCCA-3
 - b. Metal Wall Panels: 24-gauge minimum thickness zinc-coated (galvanized) or aluminum-zinc alloy-coated sheet steel. fluoropolymer exterior finish with minimum 20-year finish warranty. CF-2, LCCA-2, (in rural locations overall wall system maybe more expensive as more layers of material are used in total system.
 - c. Insulated Metal Wall Panels (IMP): 24-gauge minimum thickness zinc-coated (galvanized) or aluminum-zinc alloy-coated sheet steel. fluoropolymer exterior finish with minimum 20-year finish warranty. R-value as appropriate to the climate and region. CF-2, LCCA-2
 - d. Phenolic Resin Panels: install per manufacturer’s instructions on recommended mounting and fastening systems. Specify colors and patterns proven to not fade over time due to ultraviolet radiation exposure. CF-4, LCCA-2
 - e. Fiber Cement Panels: install per manufacturer’s instructions on recommended mounting and fastening systems. CF-4, LCCA-2
 - f. Exterior Insulation Finish System (EIFS). Specify impact resistant mesh that will resist damage from projectiles. Provide flashing to prevent water intrusion into the system. Provide drainage layer behind insulation layer to allow moisture to escape if needed. CF-4, LCCA-2 to 4, (expensive to repair in rural locations).

- g. Exterior Masonry: Can also serve as the structural system. Consider also as an exterior 4' to 8' high protective "wainscot" with different materials above. Avoid use in remote areas due to transportation costs. Schedule installation to avoid the need for temporary heat. Masonry or concrete walls should contain weep holes at the base of walls 8"-12" above finish grade, unobstructed, with insect screen. CF-3, LCCA-1 to 2
5. Wall Insulation: Types and R-values; the following values or those values tested from manufacturers may be used in determining R-values of wall assemblies.
 - a. Expanded Polystyrene (EPS) Board R-Value = 4.17 per inch CF-2, LCCA-2
 - b. Extruded Polystyrene (XPS) Board R-Value = 4.17 per inch CF-3, LCCA-3
 - c. Polyisocyanurate (Polyiso) Board R-Value = 5.6 per inch CF-2, LCCA-2
 - d. Glass-Fiber Batt Insulation R-Value = 3.16 per inch CF-1, LCCA-2
 - e. Glass-Fiber Batt Insulation (High Density) R-Value = 4.28 per inch CF-1, LCCA-2
 - f. Glass-Fiber Blown-In Insulation R Value = 3.7 - 4.28 per inch CF-1, LCCA-2
 - g. Mineral Wool Batt Insulation R-Value = 4.0 per inch CF-4, LCCA-2
 - h. Open Cell Spray Foam Insulation R-Value = 3.6 per inch CF-3, LCCA-3
 - i. Closed Cell Spray Foam Insulation R-Value = 6.0 - 6.5 per inch CF-3, LCCA-3
 6. Soffits such as at overhangs: Provide the following:
 - a. Siding material as described in Siding and Cladding, item 4 above.
 - b. Exterior Air/Weather Barrier System as described in item 12 below.
 7. Soffit areas that separate exterior space from heated space: This construction should be avoided or minimized. Where used in fire sprinklered buildings, and the size of the soffit requires sprinkler coverage, sprinkler piping must be in a heated space or a dry sprinkler system provided.
 8. Continuous Exterior Insulation (CI): provide a continuous layer of insulation at the exterior side of the wall assembly. Protect CI with air/weather barrier and siding material in a rain screen assembly. Minimum R-Value of continuous insulation layer of R-7. Use CI to mitigate thermal conductance through wall structure. CF-1, LCCA-1 low first cost and significant LCCA advantage due to energy savings.
 9. Vapor Retarders at Exterior Walls: Provide vapor retarder at the warm side of wall insulation with permeance rating not to exceed 0.13 perms, polyethylene, 6-10 mils thick. Where vapor retarder is not in direct contact with a cover material such as gypsum wallboard, vapor retarder shall have a flame-spread rating not to exceed 25 and a smoke density not to exceed 450. Ensure vapor retarder is continuous at wall to roof transitions. Minimize penetrations of vapor retarder.
 10. Vapor Retarders at Concrete Floor Slabs: Floor slabs on grade with non-permeable floor finishes should have a vapor retarder of 0.05 perms or less, polyethylene, 10-15 mils thick. Non-permeable floor finishes include (but are not limited to) epoxy, polyurethane, vinyl, linoleum, and rubber. Under slab vapor retarders must be durable enough to withstand construction activity. Penetrations should be detailed according to the manufacturer's instructions. Specifications should require measurement of slab relative humidity in accordance to meet the requirements of the floor finish manufacturer.
 11. Thermal Resistance: Insulation and minimum R-values of wall assemblies shall accommodate regional climate. Minimum wall assembly value in all Climate Regions is R-19.

12. Exterior Air/Weather Barrier Systems: Self-adhering sheets, fluid applied membrane, or mechanically attached building wrap. Detail wall/roof intersection to provide continuous air/weather barrier system. CF-2 to 4, LCCA-2 to 3 (product vary in cost and performance)
13. Impact Resistance at Exteriors: Provide impact resistant material up to a minimum of four feet above ground height. CF-3, LCCA-3
14. Corrosion Resistance: Consider local risks of corrosion from environmental or industrial sources.
15. Graffiti Resistance: Enable the removal of graffiti without damage to the appearance, finish, and durability of the substrate
16. Acoustics: Consider local conditions for requirements.
17. Building massing should limit exterior exposure of large high bay spaces to wind loads
18. Design flashing details as per Sheet Metal and Air Conditioning Contractors’ National Assoc. (SMACNA) flashing recommendations to prevent water infiltration into the wall.
19. Design simple, cost effective steel, concrete, or masonry lintels. Specify galvanized at exterior steel lintels.
20. Do not use paper or organic products that support mold growth when wet in any exterior wall assembly.

Recommended:

21. Avoid materials that require paint or sealers to prevent water intrusion.
22. Impact Resistance: Provide impact resistant material up to a minimum of eight feet above ground height. CF-1, LCCA-1
23. Avoid masonry veneer. CF-3, LCCA-2
24. Consider power and data raceways at exterior walls to reduce the number of penetrations in the vapor retarder.
25. Insulated Metal Wall Panels (IMP) with addition of air/weather barrier directly behind the IMP for additional protection. Air/Weather Barrier CF-1, LCCA-1

Premium:

26. Glazed bricks, cast stone, “architectural” finish cast-in-place concrete. Cost prohibitive in most rural applications CF-4, LCCA-3
27. Precast concrete Cost prohibitive in rural application due to freight and need of large equipment to handle. CF-3 to 4 LCCA-2.
28. Granite, slate, or other stone that is more expensive than common masonry. CF-5, LCCA-2
29. Lead-coated copper, stainless steel, zinc, or other metal shingles and siding products. CF-4, LCCA-1, may have application in saltwater environments
30. Ceramic, porcelain, or other tile products that are more expensive than common brick. CF-3 to 4, LCCA-2
31. Enamel panels or other manufactured curtain wall products. CF-4, LCCA-3
32. Exterior porcelain tile, glass tile, or glass cladding systems. CF-4, LCCA-3
33. Composite stone veneer cladding CF-4, LCCA-3 weight of material is problematic in rural locations.
34. Channel glass facades. CF-5, LCCA-4

Underbuilding Soffits

Required:

1. Buildings located in some regions are recommended to be elevated based on local geotechnical and climatic condition. In such a structure, where the space underneath the building is exposed to the elements, consider enclosure with sheathing or another weather-resistant covering.
2. Consider structural insulated panels (SIPs), which are all capable of serving a dual-purpose role as exterior closure and structural system. CF-3, LCCA-3
3. Exposed underside of SIPs:
4. Plywood bottom surface
5. Provide coverage of any exposed foam insulation with intumescent paint
6. Moisture Resistance: Provide vapor retarder to inside of insulation.
7. Thermal Resistance: Insulation and minimum R-values to accommodate regional climate.
8. Provide barrier system (skirting) to prevent public access to underside of building for fire-safety prevention. CF-1, LCCA-1
 - a. Chain link fence

Recommended:

- 9.

Premium:

10. Building skirting:
 - a. Perforated metal panel or CF-4 LCCA-2
 - b. Welded wire fabric. CF-4 LCCA-2
11. Metal panel siding on underside of SIPs. CF-2 LCCA-1

042 Exterior Glazing

Required:

1. Provide glass thickness and safety glass materials appropriate to safety risk, energy performance requirements and local conditions, including wind loads and internal air pressures, deflections, safety and code compliance.
2. Conduct life cycle analysis and collect detailed warranty information on vinyl, vinyl-clad, and fiberglass windows for DEED review and approval prior to incorporation into the design. CF-3
3. Exterior windows must have insulated glazing system (outer glazing low E coating with an air space and interior glazing that meets latest adopted edition of IBC for wind pressures). Consider building energy efficiency, interior glare, daylighting, acoustic performance, and security when selecting exterior window and glazing systems. Consider high performance glazing units with high visible light transmittance for better daylighting and a low solar heat gain coefficient (SHGC) in accordance the National Fenestration Rating Council.
4. Exterior glazing: area recommended not to exceed 10% of the entire exterior closure area. Consider a balance of natural lighting, view, solar gain and heat loss.
5. Glazing in windows in high-traffic areas and vandal-prone areas should provide an appropriate level of impact resistance.

6. To simplify replacement of broken units, avoid individual glass pieces larger than 4 feet in width or 6' in height.
7. Exterior windows constructed with thermally broken frames to reduce heat loss and prevent thermal conduction.
8. Provide thermally broken aluminum windows, aluminum clad wood windows or storefront systems for larger window installations. CF-4, LCCA-3
9. Provide commercial-grade windows. Provide prefinished exterior surfaces as opposed to field finished or painted options.
10. Provide casement and awning windows with screens at operable vents. Casement and awning windows must not be oversized and must be easily opened by crank mechanisms. Do not locate operable windows at locations where persons can accidentally strike the frame of an open window. Provide adequate number of locking points to provide positive closure
11. Specify windows with sub-frame construction for efficiency and to resist water penetration.

Recommended:

12. Consider single or double hung windows with window screens in appropriate climates (primarily zones 6 and 7) as a character defining feature of an existing building or as an historic treatment. CF-3, LCCA-3
13. Consider specifying high-performance glazing as determined by orientation and energy modeling. CF-4, LCCA-TBD Depending on glazing price of windows can double, LCCA analysis of the systems vary.
14. Consider polycarbonate covers at windows susceptible to vandalism and in remote areas where window replacement is not readily available.

Premium:

15. Stainless steel, mahogany, teak, or exotic hardwood windows, skylights, or doors.
16. Triple-glazed windows in climate zones 6 and 7 without an LCCA.
17. Bullet-proof glass. Consider providing UL 752 Ballistic Rating of Levels 3 through 7. Degree of ballistic protection level should be determined by school district or community policy and design parameters for each school.
18. Any manufacturer's non-standard window sizes.
19. Any windows of special sizes requiring manufacturer's premium costs.
20. Silicone glazing systems, butt glazing systems, or double wall glazing systems.
21. Non-standard colors or finishes on windows that require manufacturer's premium costs.
22. Glazed channel glass wall systems.
23. Arched or complex windows and frames.

043 Exterior Doors

Required:

1. Exterior doors shall be water-tight, weather-tight, and protected from climatic influences, including rain and strong winds.
2. Exterior doors subject to continual heavy use must be constructed both for strength and resilience against wear, and against accidental and deliberate damage. Sufficiently robust to provide appropriate building security and to withstand high traffic conditions without stress or

damage to the door, glazing or hinges. Specify exterior doors with fully welded metal frames. Avoid “knock-down” frames at exterior doors.

3. Door materials include:
 - a. Insulated, fully galvanized steel, primed and painted. CF-2, LCCA-1
 - b. Fiberglass, especially suitable for coastal, salt environments, climate zones 6 and 7.
 - c. Aluminum, factory finish CF-2, LCCA-1
4. Avoid the use of fully glazed door systems
5. Specify Grade 5 exterior door hardware with stainless steel components and no plastic components in hinges, locks, panic hardware, or lever handles. CF-4, LCCA-1
6. Specify exterior doors with fully welded metal frames. Avoid “knock-down” frames at exterior doors. CF-3, LCCA-1
7. Provide electronic locks and controls at exterior doors where required for security.

Recommended:

8. Specify 42" wide doors only at limited locations when functionally necessary such as at service doors. CF-2, LCCA-1
9. When selecting exterior materials for remote communities consider the site-specific local complexities of construction logistics.

Premium:

10. Non-standard doors that are higher than 84" or wider than 36" – other than service doors. CF-4, LCCA-1
11. Any doors of special sizes requiring manufacturer’s premium costs. CF-4, LCCA-1
12. Non-standard colors or finishes on doors that require manufacturer’s premium costs. CF-4, LCCA-2
13. Stainless steel doors or frames. CF-4, LCCA-1
14. Overhead doors except at service/delivery. CF-3, LCCA-3
15. Bullet-proof doors. Consider providing UL 752 Ballistic Rating of Levels 3 through 7. Degree of ballistic protection level should be determined by school district or community policy and design parameters for each school.

044 Exterior Accessories

Required:

1. Louvers: specify internally draining style. In all climate zones, in high wind environments provide protective exterior wall mounted hoods to prevent accumulation of rain, snow and ice within louvers. Hoods shall be galvanized and painted metal or stainless steel with sloped tops.
2. Guardrails and handrails: Provide at locations and construction as required by IBC. Materials include galvanized, galvanized and painted or high performance coated steel; aluminum (bare or coated); treated wood or combinations of the above.

Recommended:

3. Screening enclosures at services areas and dumpsters: cedar fencing, front of the enclosure may have a gate, however, may also be left open for ease of access.

4. Light Shelves: at large window areas to reduce interior glare and solar heat gain, primarily at south and west facing facades. Light shelves may be pre-manufactured as part of the window system or “stick built”.

Premium:

5. Light shelf on the interior side of windows can deflect solar gain and also reflect light upward to augment or reduce artificial light needs.

05. ROOF SYSTEMS

[The following Roof Systems language is from the BDS submittal]

051 Pitched Roofs

Required:

1. Recommended pitch for major portion of roofs is 3 in 12 to 6 in 12. Where the size of the structure in a pitched roof design causes an excessive volume of unused attic space consider changing to a low slope roof design.
2. Snow shedding: On roof materials prone to snow shedding carefully consider the discharge areas to provide occupant safety and to avoid damaging nearby surfaces. Snow shedding shall not occur at any door, including service and maintenance doors.
3. Gutters and downspouts: Where needed to control run off provide commercial grade gutter and downspouts. Ensure downspout discharge is in a controlled drainage system. Do not discharge run-off over sidewalks or other pedestrian circulation.
4. Roof penetrations: minimize the number of roof penetrations. Where possible, sidewall penetrations such as mechanical intake and exhaust are preferred. On metal roof surfaces locate necessary penetrations near to the ridge to minimize risk of sliding snow damage. Provide heavy gage snow diverters above penetrations where shedding may damage penetrations.
5. Installation detailing shall consider and accommodate thermal expansion and contraction.
6. Roof Materials: When choosing roofing systems, careful consideration should be given to design guidelines listed above and coordinated with District design preferences
 - a. Standing Seam Metal Roofs: Sheet material, 24 gauge minimum in portable roll formed or factory formed profiles. Base metal aluminum-zinc alloy coated hot-dipped process and prepainted. Preferred 2-coat fluoropolymer finish system, 20-year warranty on the finish. Avoid large roofs where metal lengths exceed practical lengths due to shipping, handling and machine roll forming considerations. Avoid field splices. CF-3, LCCA-3
 - b. Insulated Metal Roof Panels (IMP). Overall thickness, surface thickness, and R-value appropriate to region and structural design intent. CF-3, LCCA-3
 - c. Asphalt Shingles: asphalt coated glass felt, mineral granule surfaced, Class A fire resistance. Installation must be rated for site wind conditions. 35 year warranty. Do not specify residential grade shingles. CF-1, LCCA-3

- d. Structural Insulated Panels (SIP) covered with an approved roofing option: Overall thickness, surface thickness, and R-value appropriate to region and structural design intent. Provide ventilation space above SIP. C-2, LCCA-2
 - e. Underlayment: self-adhering polymer-modified asphalt sheet, 40 mil total thickness, polyethylene sheet top surface, specify slip resistant top surface when needed for safe installation. CF-2, LCCA-1
7. Roof Insulation: Types and R-values; the following values, or tested values from manufacturers may be used in determining R-values of roof assemblies.
- a. Expanded Polystyrene (EPS) Board R-Value = 4.17 per inch CF-2, LCCA-1
 - b. Extruded Polystyrene (XPS) Board R-Value = 4.17 per inch CF-3, LCCA-1
 - c. Polyisocyanurate (Polyiso) Board R-Value = 5.6 per inch CF-2 to 3, LCCA-1
 - d. Glass-Fiber Batt Insulation R-Value = 3.16 per inch CF-1, LCCA-1
 - e. Glass-Fiber Batt Insulation (High Density) R-Value = 4.28 per inch CF-1, LCCA-1
 - f. Glass-Fiber Blown-In Insulation R Value = 3.7 - 4.28 per inch CF-1, LCCA-1
 - g. Mineral Wool Batt Insulation R-Value = 4.0 per inch CF-3, LCCA-1
 - h. Open Cell Spray Foam Insulation R-Value = 3.6 per inch CF-3, LCCA-1
 - i. Closed Cell Spray Foam Insulation R-Value = 6.0 - 6.5 per inch CF-4, LCCA-1
8. Ventilation: provide ventilation openings equal to or exceeding building code requirements for the roof area to be ventilated. Ensure the structure and associated blocking does not impede air movement. In high wind areas provide design to mitigate infiltration of wind driven rain, snow or ice crystals through use of filters and/or baffle design at ventilation openings. Provide weep holes, or similar, to allow escapement of moisture accumulation such as at ridge vents.

Recommended:

- 9. Attachment: Fasten sheet metal roofing to supports with concealed clips at each standing-seam joint, avoid exposed fastener systems.
- 10. Provide (2) layers of underlayment at slopes of 2 in 12 or less. CF-1, LCCA-1
- 11. At asphalt shingle installations, minimum of one daub of roofing cement at each shingle, one inch in diameter, to prevent wind uplift
- 12. Asphalt Shingles: asphalt coated glass felt, mineral granule surfaced, Class A fire resistance. Installation must be rated for site wind conditions. 50 year warranty.

Premium:

- 13. Polyurethane Foam (PUF) roof assemblies.
- 14. Metal shingles and tiles – required DEED review and approval
- 15. Clay or ceramic roof tiles - require DEED review and approval
- 16. On large roof areas served by gutters: Gutter system large enough to walk in and with safety rail along the side of gutter and tie offs for cleaning.

052 Flat Roofs (Low Slope)

Required:

1. Low slope roofs to be exposed membrane over coverboard, insulation, vapor retarder and thermal barrier board over structural deck. Specify roofs with extended warranties with 20-year minimum life. CF-3, LCCA-3
2. Assemblies should be fully adhered systems. Mechanically attached systems may be used when conditions do not allow for fully adhered. In a mechanically attached system provide self-healing vapor retarder to reduce impact of attachment penetrations through the system.
3. Slope of the surface membrane to drain is 3/8 inch per foot preferred, 1/4 inch per foot minimum. Calculate slope of valleys at tapered crickets to maintain positive drainage.
4. Membranes:
 Note, membranes requiring heated asphaltic products may not be practical in remote locations due to transportation costs and logistics.
 - a. Ethylene propylene diene monomer (EPDM) single ply membrane, 60 mil, internally reinforced. CF-2, LCCA-2
 - b. Ethylene propylene diene monomer (EPDM) single ply membrane, 90 mil, non-reinforced. CF-2, LCCA-2
 - c. Asphaltic built-up, 5-ply (BUR) consisting of base sheet, 3 ply sheets plus cap sheet. CF-4, LCCA-3
 - d. Asphaltic mineral cap built-up, 5-ply (MCBUR) consisting of base sheet, 3 ply sheets plus mineral cap top sheet. CF-4, LCCA-3
 - e. Weldable Thermoplastic Polyolefin (TPO) single ply membrane CF-3, LCCA-2
 - f. Weldable Thermoplastic Polyvinyl Chloride (PVC) single ply membrane CF-3, LCCA-2
 - g. Modified Bitumen, multi-ply membranes CF-4, LCCA-2
5. Insulation: See 5.A.7 above for insulation types and R-values.
6. Roof drains: Provide code required secondary overflow drains. Connect to internal rain leaders leading to storm drain system where available. Provide insulation sump at roof drains. Rain leaders may lead to dry wells or to daylight where storm drains are not available. Avoid the use of scuppers except for secondary overflow drains. Provide rock/debris screening at any discharge pipes where accessible from ground level. Provide measures to prevent freezing around roof drains such as reduced R-value around drains, minimum R-value around drains is R-12. Use heat trace as a last option.
7. Do not discharge water, snow, and ice along the face of the walls. Design systems to prevent water from sheeting down across the face of exterior walls or splashing against exterior walls at grade.
8. Parapets: Top of parapet to be minimum 12" above the roof surface. Roof membrane to lap up and over the parapet and be protected by a cap flashing. Cap flashing to be held by a continuous wind cleat, fastened at an on-center distance capable of resisting site-specific wind conditions.
9. Minimize roof penetrations through the roof membrane. All roof penetrations to be made by certified installers with approved roofing manufacturer's details. Avoid "shelves" on the

exterior faces of parapet that might hold ice to prevent potential of falling and personal injury and to avoid melting and staining down the face of the wall.

10. Mechanical equipment curbs should have diversion crickets to maintain rainwater flow and avoid damming. Elevate mechanical equipment a minimum of 18” above the roof surface. Locate mechanical air intakes a minimum of 24” above the roof surface.

Recommended:

11. EPDM, 90 mil, single ply membrane. CF=3, LCCA-3
12. At BURs – Built-up bituminous roofing: asphalt saturated glass fiber felts, four ply plus base sheet. CF-4, LCCA-4
13. Where possible, achieve roof slope by sloping the building structure to reduce the quantity of tapered insulation.
14. Minimize complex and multiple roof levels in the building design.

Premium:

15. Roof warranties exceeding 30 years
16. Liquid Applied Membranes (LAM) CF-3
17. Any colored roofing system other than manufacturer’s standard colors CF-4, LCCA-1
18. Green/vegetative roofs. CF-5, LCCA-5

053 Roof Accessories

Required:

1. Provide OSHA compliant rooftop safety railings where rooftop equipment requires access within 10 feet of a roof edge.
2. Design roof hatches for maintenance large enough to accommodate individuals equipped with full emergency gear or service personnel with supplies and toolboxes.
3. Design roof access with regular stairways or alternating tread stairs, not by ship’s ladders or exterior roof ladders whenever possible.
4. Provide snow guards to prevent large accumulations of snow and ice from shedding. CF-1, LCCA-1

Recommended:

5. Skylights are discouraged with preference given to vertical glazed clerestories. Locate base of glazing minimum 24” about roof surface
6. Permanently mounted safety harness tie offs CF-1, LCCA-4

Premium:

7. Roof deck plazas with pavers and protective railings, walls and supports.

06.INTERIORS

[The following Interiors language is from the BDS submittal]

Interior partitions, soffits, openings, finishes, and specialties typically account for ~10-12 % of a project’s total construction cost. In a traditional school design, the cost of partitions and doors are

fairly consistent. However, the use and quantity of special partitions such as glazing and movable partitions varies between school designs and can significantly impact the cost of the interiors. The use and quantity of casework also varies between school designs, thus affecting the project cost. The material choice and specification of interior floor, wall, and ceiling also plays a large part in determining the cost of a project’s interiors. Guidelines for these systems and their components are as follows:

061 Partitions/Soffits

Required:

1. Specify interior construction materials of high durability, low maintenance, and an expected life span of 30 years.
2. All walls to be durable and provide the appropriate STC ratings for school spaces (per ANSI/ASA S12.60 on Classroom Acoustics):
3. Standard partition construction will be 20-gauge metal framing sized for needed wall cavity widths, 5/8” gypsum wall board each side, taped, mudded and finished to Level 4. Add the following: CF-3 LCCA-3
 - a. plywood sheathing where required for shear CF-2 LCCA-1
 - b. wood blocking as permitted by code where required for wall-mounted accessories CF-2 LCCA-1
 - c. 18-20 ga metal backing if wood is not permitted CF-3 LCCA-1
 - d. cementitious backer board where installing wall tile CF-3 LCCA-1
 - e. acoustical insulation, resilient channel, and sealant where required for STC ratings CF-3 LCCA-1
 - f. impact resistant GWB or surface applied impact resistance at high-traffic areas
4. Standard soffit construction will be 20-gauge metal framing, cold rolled channel, or fabricated metal suspended-ceiling systems sized for anticipated loads and spans, 5/8” gypsum wall board, taped, mudded and finished to Level 4. Add the following:
 - a. additional gypsum wall board where required for fire resistance CF-3 LCCA-3
 - b. wood blocking as permitted by code where required for wall-mounted accessories CF-2 LCCA-1
 - c. 18-20 ga metal backing if wood is not permitted CF-3 LCCA-1
 - d. acoustical insulation, resilient channel, and sealant where required for STC ratings
5. Partitions and soffits to be easy to maintain and easily cleanable
6. High traffic areas to be impact resistant CF-4 LCCA-1
7. Provide expansion/control joints as required
8. Gymnasium wall finishes to have hard surfaces below 8’ to allow for rebound of balls. Cost and LCCA vary on types of surfaces
9. Non-porous, easily cleanable surfaces for food services areas. Ceramic or porcelain tile wainscot to 4’-0” A.F.F. at a minimum for wet areas. Provide full height ceramic tile at grease-prone areas. CF-3 LCCA-3

Recommended:

10. Concrete masonry walls where cost effective and deemed essential by design team (may need LCCA) CF-3 to 5 in rural locations LCCA-1
11. Wood framed walls where more cost effective. CF-3 LCCA-3
12. At glazed porcelain and/or ceramic tile, consider use of manufactured metal trim pieces at base, corners, and terminations. CF-1 LCCA-1
13. Acoustical panels: fabric wrapped panels or paint-grade wood fiber strand board CF-1 LCCA-2

Premium:

14. Radiused and curved walls.
15. Walls that exceed the minimum STC rating for school spaces
16. Walls that use both impact resistant GWB and an impact resistant applied wall finish

062 Special Partitions

Required:

1. X

Recommended:

2. Consider 2-way mirrors in observation areas; safety glazing.

Premium:

3. Operable partitions or large sliding doors.

063 Interior Openings

Required:

1. Interior doors systems shall be readily available and have a wide variety of offerings including acoustical, fire rated, hollow metal and flush wood veneer. CF-varies LCCA-varies
2. All doors within public use areas to be ADA compliant
3. All swing doors throughout to have ADA compliant, lever-style, commercial grade hardware
4. Overhead doors at food service pass-throughs, shop areas, or for separating zones ; lockable
5. Specify interior doors with welded metal frames in all new construction. “Knock-down” frames are discouraged. CF-3 LCCA-3
6. Standard door assemblies to be solid core, factory-finished wood doors and painted hollow metal frames, with fire resistive ratings as required by code. 1 ¾” 16 gauge insulated hollow metal doors may be used in lieu of wood; metal doors should be used in PE, shops, gym, labs and locker rooms.
 - a. Provide glass vision lite kits and/or louvre openings as indicated by ed specification and/or program.
 - b. In un-rated assemblies, provide ¼” clear tempered glass door inserts and relites
 - c. Vision Lite kits within doors to have 18 gauge cold rolled steel frames with mitered and welded corners and should utilize standard sizes: 6”x27”, 12”x12”, 24” x 24”, 24” x 36”, 24” x 60”.
7. Door hardware in a variety of configurations including, but not limited to:

- a. Office sets: full-perimeter gaskets and door bottom with neoprene element, office lockset, wall or floor stop
 - b. Storage sets: full-perimeter gaskets and door bottom with neoprene element, storage lockset, wall or floor stop, closer, kickplate.
 - c. Classrooms: full-perimeter gaskets and door bottom with neoprene element, closer, wall or floor stop, lockdown locking mechanism
 - d. Gymnasium doors or sets of double doors used to close down portions of the school: panic hardware, closers, kickplates, locking doors (manual or card reader), floor or wall stops where possible, overhead stops where floor/wall stops aren't possible and full-perimeter gaskets and door bottom with neoprene element. Double doors should not have astragals. CF-3 LCCA-3
 - e. ADA/Unisex single-toilet room doors: full-perimeter gaskets and door bottom with neoprene element, lockset with occupied indicator, wall or floor stop.
 - f. Teacher work and support spaces: silencers, proximity card readers, closer, wall or floor stop
8. Limit the size of windowpanes and relites to standard sizes: 18, 24, 36, 48, 60 inches wide by 18, 24, 36, 48 or 60 inches high. Limit overall size of windowpanes; use multiple smaller windows in lieu of one large window. Glazing/relites adjacent to doors can go up to 84 inches high.
9. Relite and frames to be painted hollow metal, with fire resistive ratings as required by code.
10. Window & relite frames and sills to be paint grade. CF-3 LCCA-3

Recommended:

- 11. All classroom doors to have closers, with closing mechanism to be mounted on the classroom side to allow for locking devices to be applied in the event of lockdown situations.
- 12. Door glazing insert kits in a variety of sizes, safety glazing. CF-3 LCCA-3
- 13. Consider single or double intercommunicating doors between classrooms. CF-3 LCCA-2

Premium:

- 14. Bulletproof doors & glazing; UL Listed Level 1- Level 3 is acceptable. CF-5 LCCA varies
- 15. A. UL 752 - Level 1 - protects against 9mm full metal copper jacketed with lead core. No spall, no penetration.
 - a. UL 752 – Level 2 – protects against .357 Magnum jacketed lead soft point. No spall, no penetration.
 - b. UL 752 – Level 3 – protects against .44 Magnum lead semi-wadcutter gas checked. No spall, no penetration
- 16. Motorized overhead doors with glazing used as space dividers walls between classrooms CF-4 LCCA-4
- 17. Non-standard doors that are higher than 84" or wider than 36". CF-4 LCCA-2
- 18. Any doors or windows of special sizes requiring manufacturer's premium costs. CF-4 LCCA-2
- 19. Non-standard colors or finishes on doors that require manufacturer's premium costs. CF-4 LCCA-1
- 20. Silicone glazing systems, butt glazing systems or double wall glazing systems.
- 21. Arched or complex windows and frames

22. *Non-standard relites and vision lite kits*

064 Special Floors

Required:

1. X

Recommended:

2. Provide floors in stage/platform areas appropriate for a variety of performances: dance performances, vocal/music performances, etc. Floors, where required by the program, shall be a cost-effective, self-install sprung floor, resilient finish panel system designed for permanent installation. CF-4 to 5 LCCA-3

Premium:

3. Raised floor raceway systems CF-3 LCCA-3
4. Auditorium spring floor panel system with hardwood surfaces

065 Interior Finishes

Required:

1. Specify applied finishes shall be easy to clean and resistant to moisture and mold/bacterial growth
2. Selected finishes to be sustainable and contribute to a healthy, productive learning environment. Evaluate products for recycled content, recyclability, waste reduction, energy efficient maintenance, low VOC content and post-installation product emissions.
3. Acoustical ceilings and panels to contain recycled content where possible
 - a. Sound absorptive with a minimum NRC of .55 and a CAC rating of 35.
 - b. Ceilings to be installed with a standard 15/16" grid system and seismically braced. Ceiling suspension system to be hot dipped galvanized steel to inhibit rust
 - c. Ceilings within food service and lab areas to be washable & scrubbable
 - d. Acoustic ceilings shall meet ASTM C 1264 for Class A materials
 - e. Acoustical wall treatments to be rigid fiberglass board and fine-grain cork core faced with fabric approved for wall panel use.
4. Provide a walk-off mat system at every main entrance
5. Carpet tiles are preferred for office and classroom spaces throughout (exception: labs and art rooms)
 - a. Carpet tile should have a high wear / TARR rating, stain resistance and cleanability; carpet to have moisture impervious backing
 - b. Carpet tiles should have a minimum of 25% recycled content and a minimum of 17 ounce face weight.
 - c. Carpets to be low-voc, use low-voc adhesives and be compatible with low-voc, water based solvents/cleaning agents.
6. Resilient flooring such as linoleum, sheet vinyl, rubber flooring or vct is preferred for hallways/corridors, art classrooms, storage rooms and other locations where carpet is not ideal.

- a. Resilient floor materials to be low-voc, use low-voc adhesives and be compatible with low-voc, water based solvents/cleaning agents.
 - b. All resilient materials shall be commercially rated for heavy-duty wear
 - c. Resilient sports flooring to have striping for common indoor sports played within the district.
 - d. Science labs to have chemical resistant flooring.
 - e. Provide static dissipative flooring where required by the program.
7. Adhesives and sealants used in the building interior (inside the exterior moisture barrier) must be low VOC
 8. Acoustical wall panels above 8'-0" in gymnasiums, pool areas or other echo-producing locations. Design team to include an acoustical engineer to determine the number/type of acoustical panels needed for each specific environment.
 9. Paint / sealers used throughout should be durable and scrubbable, with low to no-VOC content
 - a. Use acrylic, water based for non-metal surfaces
 - b. Use alkyd enamel paints on metal surfaces
 - c. Use water-based epoxy paints in interior spaces with high humidity or areas subject to surface moisture
 - d. Use concrete sealer and/or concrete paint where required by the program
 - e. Wall paint to have a minimum of three (3) applied coats
 - f. Door/relite frames to have a minimum of two (2) applied coats
 10. Standard resilient wall base should be use throughout office, classroom, and hallway areas with slight modifications based on the rooms
 - a. Tile base where walls are receiving tile applications
 - b. resilient sheet cove base with top trim in toilet rooms or food service areas
 11. Wood sports flooring, where required by the program, to be second and better grade maple strip flooring with striping for common indoor sports played within the district CF-4 to 5 LCCA-3

Recommended:

12. Consider Porcelain tile and mosaic tile floor and wall finishes in toilet/shower rooms where required by the program. All tile and grouts should be installed based on the installation conditions and as recommended by the Tile Council of America. CF-3 LCCA-1
 - a. Use epoxy-modified grout mixture for high moisture areas
 - b. Wall padding in gymnasiums to be limited to competition court basketball backstops
13. Consider ceiling grids to support hanging displays in all classrooms and hallways
14. Consider FRP panels as needed for service and as required CF-2 LCCA-1
15. Gymnasium wall finishes to have hard surfaces below 8' to allow for rebound of balls. Surfaces above 8' to have acoustical wall panels
16. Non-porous, easily cleanable surfaces for food services areas. Ceramic or porcelain tile wainscot to 4'-0" A.F.F. at a minimum for wet areas. Provide full height ceramic tile at grease-prone areas.

Premium:

17. LEED and/or WELL Certified building CF-3 LCCA-1
18. Wall paneling or wallpaper CF-4 LCCA-2
19. Full height wall tile except at grease-prone areas in Kitchens CF-4 LCCA-1
20. Flooring materials other than rubber, vinyl composition tile, linoleum, or floor carpet.
21. Wood sports flooring for elementary schools
22. Cork, bamboo, recycled rubber, or other expensive flooring materials
23. Wood, Plywood wrapped or stainless steel wall base
24. Wax-free resilient floor systems
25. Recessed walk-off grate entry system CF-4 LCCA-1
26. Decorative or expensive non-standard ceiling tiles or ceiling systems such as metal or wood slat ceilings CF-5 LCCA-2
27. ACT ceiling trims other than 15/16" grid profiles
28. Ballistic and blast mitigation coatings or films
29. Architectural resin panels
30. Cove base in areas other than toilet rooms
31. Acoustical felt wall panels

066 Specialties

0661 Interior Specialties

Required:

1. Interior signage to be provided at all areas **required by code** to receive signage.
 - a. All signs to have grade 2 Braille, tactile characters and pictograms as **required by code**.
 - ~~b. All signs to coordinate with interior and exterior finish palettes.~~
2. Student lockers shall be provided as required by the programming documents and should be steel construction with sloped top and closed base; locks requirements to be selected by the school. Lockers within locker rooms and changing areas to be ventilated steel construction.
3. Built-in toilet room items to include, but not limited to commercial-grade, readily available:
 - a. Soap dispensers
 - b. Mirrors
 - c. Toilet paper dispenser
 - d. Seat cover dispensers
 - e. Sanitary napkin receptacles
 - f. Grab bars
 - g. Paper towel dispensers
 - h. Baby changing stations and/or adult-sized changing stations for special needs classrooms as indicated by the program documents.
 - i. Waste receptacles

- j. Toilet partitions; to be durable and graffiti resistant. Partition hardware or door type to be selected to provide maximum privacy and minimum gaps between stall components.
- k. ADA shower with shower seat
- 4. Corner guards to be minimum of 2mm thick, have a 1 ½” wing on either side and be a minimum of 4’-0” A.F.F. Material to be textured rigid material and available in 90 degree and 135-degree corner styles. CF-2 to 4 LCCA-1
- 5. Fire extinguishers to be provided per code. All fire extinguisher cabinets to be recessed. Provide signage and stickers on cabinet for fire extinguisher visibility.
- 6. Window treatments to be roller shades or miniblinds. Provide fascia on coverings to hide mounting brackets and mechanisms.
- 7. Install sliding double whiteboards with an integrated map/poster rail at top and tackboards, typical within all classrooms where markerboards are called out. Music rooms to have whiteboards with and without staff lines
- 8. Cork bulletin boards with aluminum frame in manufacturer standard sizes
- 9. Install retractable, recessed projection screens

0662 Casework & Millwork

Required:

- 10. Specify durable and easily cleaned casework. Base requirement is high pressure laminates over stable substrate with 4mil PVC edge banding. Counters are high pressure laminate with postformed backsplash and front edge profile. Standard casework to be provided throughout with the following special conditions: CF-3 LCCA-1
 - a. Resin counters in science labs space. CF-4 LCCA-1
 - b. High school science labs to have lockable, ventilated acid storage cabinets, lockable and labeled alkali metals & halogens storage cabinet, lockable casework for with minimum 15” inside useable depth, and trays to fit cabinets/shelves under bottles to prevent liquid spills
 - c. Polycarbonate or wired glazing to be used for casework within science lab space. CF-3 LCCA-1
 - d. Coat cubby areas with coat hooks, storage above and benches for changing shoes/outdoor gear. Provide dividers and spacing between hooks to prevent the spread of head lice
 - e. Boot racks with space below to allow for cleaning
 - f. Perimeter counter with sab sinks/stations, and art drying racks in art classrooms
 - g. Library Circulation desk with 6’ minimum counter space including ADA height counter, book drop, supply drawers, files, and technology including computer, printer & storage
- 11. Hallway areas to have lockable display cases for 2-d and 3-D displays, benches near toilet rooms and tackboards CF-3 LCCA-1.

Recommended:

- 12. X

Premium:

13. Signage: signage with changeable inserts, ADA signage on acrylic with standoffs or vinyl graphic signage
14. Toilet room premiums: motion-sensored soap dispensers, automatic hand dryers CF-4 LCCA-3
15. Antimicrobial lockers to help protect against bacteria, mold, yeast and mildew or hardwood or hardwood veneer lockers. CF-4 LCCA-3
16. Wood or metal framed mirrors of custom size, backlit
17. Stainless steel corner guards
18. Hardware pulls greater than 6” in length
19. Solid surface countertops and backsplash
20. Climbing walls
21. Magnetic glass whiteboards, electronic smartboards or other technology-based display boards
22. Dry-erase wallcovering surfaces that double as projection screen
23. Motor operated projection screen in any location other than auditoriums or presentation lecture areas
24. Solid surface counters and backsplashes, solid vinyl, recycled glass, or polycarbonate counters
25. Stainless steel lab storage & cabinetry
26. Solid wood cabinets or wood veneer cabinets
27. Casework or architectural woodwork such as picture rails, wainscoting, crown moldings, or paneling
28. Suspended acoustical felt baffles & wall panels
29. Lit display cases
30. Motorized roller shades
31. Built-in bleachers or built-in, retractable bleachers

Built-in Furnishings, Equipment & Technology

Modern school design requires detailed coordination between the building shell and built-in furnishings and technology. This section outlines the built-in components installed by general contractors and the movable furnishings and technology provided and installed by other vendors prior to occupancy of the building.

The voice/data components of any building are changing rapidly from year to year with new technology resulting in faster, lightweight, affordable, and portable “plug-in” equipment. The State expects schools to take advantage of the latest technology that can simplify building systems and lower installed technology costs.

Required: (list includes basic items; additional items may be required)

1. Building entry vestibules to have perimeter benches in the parent pick-up / drop-off zones and lost & found bin CF-3 LCCA-1
2. IT/Communications room to have the following items:
 - a. Dedicated space. Avoid co-locating within electrical/mechanical spaces.
 - b. Limit number of telecom rooms to minimum required per standards for size of the building.

- c. Locate telecom room in central area of building where possible to average cable lengths.
 - d. Open wall shelving
 - e. 4-post server racks where necessary
 - f. IT desk or workstation for monitoring of equipment
 - g. Servers, routers, monitoring equipment, patch panels, data distribution panels
 - h. Uninterrupted power supply for essential systems.
 - i. Servers for security cameras / CCTV system
 - j. Room for fire alarm control panel if located there
 - k. Security panel
 - l. Intercom head end
 - m. Layout space for building/repairing equipment
 - n. 4-post server racks
 - o. Servers, routers, monitoring equipment, patch panels, data distribution panels
 - p. CCTV system DVR recorder (can be rack mounted within this space)
 - q. Intercom head end
3. Library furniture items to include, but not be limited to:
- a. Library office / workroom within the library space to have a minimum of 20 lineal feet of perimeter cabinetry with sink and intermittent openings for knee space, lockable storage cabinets, ergonomic task chairs, lockable file cabinets, librarian desk/workstation, guest chair, paper towel & soap dispensers at sink, tackboards and markerboards and storage space for book cart storage
 - b. Library storage room to have upper & lower cabinetry, heavy duty shelving, lockable file cabinets, video monitors and other A/V equipment on rolling carts and laptop carts.
4. Administration area should maximize the use of modular, moveable furniture. Furniture includes but is not limited to:
- a. Built-in reception counter with ADA height section and lockable storage pedestals, waiting area with chair rail
5. Staff work area and support space furniture includes but is not limited to:
- a. Copy/print/scan machines in teacher work areas, and administrative office areas
 - b. Built-in cabinetry and open shelving for materials & resources
 - c. Kitchenette with base & upper cabinets, microwave shelf at ADA height, and refrigerator
6. Art & Science Labs
- d. Lockable bins for clay storage and mobile carts for moving greenware into the kiln room
 - e. Markerboard and tackable surfaces
 - a. Tall storage cabinets
 - b. Lockable wall cabinets for instrument storage
 - c. Music office & storage with open wall shelving, work counter with stool for instrument repair, upper and lower cabinetry for storage of materials and resources, lockable

wardrobe storage, teacher desk with ergonomic chair, copy/printer/scanner, tackboard

7. PE office equipment and furniture:
 - a. Casework for instructional materials & recourses
8. Gymnasium equipment to include, but is not limited to:
9. Achievements for rewarding good behavior to include, but not be limited to:
 - a. Comfortable lounge-type furniture
 - b. Gaming equipment with monitors, video access and controls
10. Group rooms to have marker boards, tackable surfaces, a conference table and 8-10 chairs
11. Window coverings on all windows within occupied spaces; roller-shade style
12. Storage rooms to have counters with lockable cabinets for storage of instructional supplies and materials, heavy-duty shelving and lockable file cabinets and mobile technology carts

Recommended:

Premium:

13. Magnetic glass whiteboards, electronic smartboards or other technology-based display boards
CF-3 LCCA-1
14. Dry-erase wallcovering surfaces that double as projection screen CF-2 LCCA-1
15. Motor operated projection screen CF-2 LCCA-1
16. Solid surface counters and backsplashes, solid vinyl, recycled glass, or polycarbonate counters
CF-4 LCCA-1
17. Stainless steel lab storage & cabinetry CF-4 LCCA-1
18. Solid wood cabinets or wood veneer cabinets CF-3 LCCA-1
19. Casework or architectural woodwork such as picture rails, wainscoting, crown moldings, or paneling CF-2 LCCA-1
20. Suspended acoustical felt baffles & wall panels CF-5 LCCA-3
21. Lit display cases CF-2 LCCA-2
22. Motorized roller shades CF-3 LCCA-2

07. CONVEYING SYSTEMS

[The following Conveying Systems language was added by department Facilities staff in the 2/12/2021 draft version.]

071 Passenger Conveyors

0711 Passenger Elevators

Required:

1. Install elevators only where required by codes adopted by the state or a local jurisdiction with delegated authority. (For multi-story schools meeting accessibility requirements with ramps in-lieu-of elevators, see 4 AAC 31.020 for a space variance.)

2. Install electric traction elevators when permitted for maximum energy efficiency.
3. Installations not within 100 road miles of an establish elevator service center at the time of construction are limited to hydraulic elevators excluding roped-hydraulic mechanisms.
4. In-ground hydraulic elevators must be supported by a geotechnical report showing suitable subsurface conditions.
5. Single piston hydraulic systems may not be eccentrically loaded.
6. Elevators will be supplied with backup power for lowering (only?).
7. Elevators will be included in a project’s commissioning plan unless approved otherwise by DEED.

Recommended:

8. Elevators with machine rooms are preferred for maintenance simplicity. (For space variances associated with machine rooms, see 4 AAC 31.020).
9. Where a sump is required for an elevator pit, locate the sump pump outside the elevator shaft.
10. Education related facilities with three or more stories should consider in-ground hydraulic pistons where subsurface geotechnical consideration allow.
11. Cab flooring should match adjacent lobby/corridor flooring; doors and frames should be stainless steel.
12. Robust, durable controls, one per car (including both card access if a building standard and keyed controls), sensors, and connection to building automation.

Premium:

13. Educations related facilities with more than one passenger elevator. [CF-X, LCCA-X??]
14. Elevators with rated speeds above 200fpm and load capacities above 2500lbs.
15. Cab construction, features (lighting, etc.), and finishes above the manufacturer’s standard base or that require manufacturer’s premium costs except as noted above.

0712 Lifts & Other Conveyors

Required:

1. Passenger lifts or wheelchair lifts may be used where permitted by codes adopted by the state or a local jurisdiction with delegated authority. Primarily this will be at floor level changes that are less than a story height.
2. Inclined stair lifts are not permitted.

Recommended:

3. A lift’s audio-visual alarm shall be operational at all times and shall activate when the lift is in operation except that a lift installed at a stage shall be free of a warning light or alarm.
4. Lifts shall have shielding devices to protect users from the machinery or other hazards and obstructions.
5. Cab flooring should match adjacent lobby/corridor flooring.

Premium:

6. Escalators or any type of moving walkway.

072 Material Handling Systems

0721 Elevators & Lifts

Required:

1. Dedicated freight elevators (or lifts where permitted by code) in education related facilities may be installed where the upper level(s) served by the conveyance total in excess of 100,000gsf.
2. If layouts permit, and as allowed by code, a required passenger elevator may be increased in size and capacity to function as a freight conveyance.
3. Vehicle lifts in the following quantities may be installed at any education related facility serving grades 9-12 whose approved educational specification includes an automotive Career Technology Education pathway:

<500 students grades 9-12	1
501 – 2000 students grades 9-12	2
>2000 students grades 9-12	3

Recommended:

4. Lifts shall have shielding devices to protect users from the machinery or other hazards and obstructions.
5. The maximum lifting height for vehicle lifts shall be 68 inches.
6. Two post lifts are limited to slab-on-grade construction; use four post lifts for elevated floors.
7. Where portable automotive lifts can meet curriculum requirements, such lifts shall be purchased and provided under School Equipment.

Premium:

8. Eligible educations related facilities with more than one freight elevator or lift.
9. Freight elevator dimensions exceeding 5ft x 8ft and load capacities above 5500lbs.
10. Vehicle lifts in excess of allowable quantities.
11. Vehicle lifts with load capacities above 3000lbs or with ancillary accessories or features such as alignment calibration.

0722 Hoists & Cranes

Required:

1. None.

Recommended:

2. None.

Premium:

3. Site constructed, permanent, overhead hoist or crane assemblies.

0723 Other Systems

Required:

1. None.

Recommended:

2. Dumbwaiters of any size permitted by code may be used when transfer of materials between floors is needed and freight elevators are not permitted. (Note: dimensions and capacity of dumbwaiters are restricted by code and are very modest.)

Premium:

3. Belt conveyors, pneumatic tube systems, linen/trash/mail chutes, or operable scaffolding.

08.MECHANICAL

[The following Mechanical language is from the BDS submittal]

The building mechanical systems encompass plumbing, heating, ventilation and air-conditioning (HVAC), and fire sprinkler protection systems. Mechanical systems shall be designed to conserve energy and water to reduce operating costs and demand on community resources. The systems shall be integrated with the design of the building plan and envelope to optimize performance and provide occupant comfort. The systems shall be durable, expandable, and easily maintained. Mechanical systems shall comply with DEED-adopted energy codes.

A. General

Required:

1. Design in accordance with the version of ASHRAE 90.1 currently required by DEED, including amendments by DEED.
2. Incorporate redundancy into critical mechanical systems at remote sites.
3. Provide sufficient floor space to provide minimum equipment clearances, and to allow maintenance activities and maintenance equipment.
4. Design piping systems to provide ease of maintenance - valves and equipment that are readily accessible, clearly indicated access locations, and clearly labeled piping, valves and equipment.
5. Do not abandon equipment or systems in building for remodel/addition projects. Demolish piping, ducts and wiring back to active portions of the systems.
6. Install low volatile organic compound (VOC) containing materials in accordance with 40 CFR 59, the **National Volatile Organic Compound Emission Standards For Consumer And Commercial Products**.
7. Design building systems to allow for future expansion.

Recommended:

8. Consider accommodating future removal and replacement of all mechanical equipment, with appropriate coordination between disciplines to provide for this occurrence.

Premium:

9. X

Plumbing

Required:

1. Meet the requirements of NSF-61 for materials in contact with drinking water.
2. Provide water conserving fixtures that meet the Energy Policy Act (EPA) 1992, with Amendments.
3. Design potable water systems to conserve water to the greatest extent practicable, without compromising system performance.
4. For sites that use sewage lift stations, design waste and vent piping systems to use as few lift stations as practicable.
5. Provide furred out walls for plumbing fixtures installed on exterior walls. Do not install plumbing piping in the building thermal envelope.
6. Provide commercial fixtures that are durable and easily maintained.
7. Specify floor mounted wall carriers for urinals, lavatories and drinking fountains.
8. Group spaces with high fixture counts together – i.e. public restrooms, commercial kitchens, custodial.
9. Provide plumbing walls large enough for wall-mounted water closet carriers – 11-inches minimum for single-wall carriers, and 16-inches for back-to-back carriers.
10. Install isolation valves on piping serving rooms with ganged fixtures – such as restrooms, science rooms, kitchens.
11. Provide toilets in Pre-k–1st grade classrooms.
12. Provide sinks in classrooms for elementary grades including grade 5.
13. Provide solids interceptors (plaster traps) at art rooms.
14. Provide grease interceptors in commercial kitchens.
15. Specify floor drains with trap primers.
16. Pitch all slabs to floor drains.
17. Avoid locating floor and roof drains over electrical and data system equipment.
18. Install floor drains next to air handlers.
19. Install floor drains next to all equipment that produces condensate.
20. Install floor drains next to fire sprinkler pumps if practicable.
21. Provide emergency eyewash, shower units, floor drains, and sloped slabs as required by Occupational Safety and Health Administration (OSHA) in science rooms, art rooms, shop and maintenance spaces, and any classroom where chemicals are used.
22. Provide tamper-proof hose bibs adequately spaced around the perimeter of the building, except in locations where water supply is limited.
23. Locate plumbing vents away from roof edges, and snow drift locations, and near the ridge of sloping roofs.
24. Install roof plumbing vents in visually discrete locations to the greatest extent practicable.
25. Install cleanouts in locations readily accessible to maintenance personnel.
26. Use cast iron dome strainers on roof drains. Do not use plastic.
27. Specify insulated roof drain sumps to prevent condensation from forming inside the building.
28. Store domestic hot water at minimum 140°F to prevent Legionella growth.

- 29. Provide recirculation loop for domestic hot water systems out to the furthest hot water fixture. Only operate during occupied hours.
- 30. Provide hot water in accordance with Alaska Food Code_18 AAC 31 for facilities with commercial kitchens.
- 31. Garbage disposals are not an accepted fixture.
- 32. Utilize rainwater and/or snowmelt capture systems for facilities with limited access to potable water.

Recommended:

- 33. Avoid installing plumbing fixtures on exterior walls.
- 34. Consider reducing potable water use by choosing low-flow water fixtures that meet these maximum flow rates:

▪ Lavatories	0.5 gpm metered
▪ Sinks	0.5 gpm
▪ Water closet	1.28 gpf
▪ Urinal	0.125 gpf
▪ Showerhead	1.5 gpm
▪ Kitchen sink (commercial kitchen sink excluded)	1.5 gpm

- 35. Avoid using ultra-low flow or waterless water closets and urinals.
- 36. Consider providing automatic controls at lavatories, water closets and urinals.
- 37. Specify intuitional/penal grade shower heads.
- 38. Consider providing bottle fill stations.
- 39. Consider providing multi-station wash fountains with automatic operation for elementary ganged restrooms.
- 40. Install hose bibbs with backflow protection in mechanical equipment rooms for equipment cleaning.
- 41. Consider installing bubblers on elementary classroom sinks.
- 42. Consider providing above-floor grease traps with automatic grease skimming technology in commercial kitchens.
- 43. Consider providing large sinks – minimum 30” wide x 18” front-to-back – with solids interceptors in Alaska Native cultural studies classrooms.
- 44. Consider install ceiling anchor points above lift stations, for mounting equipment to aid in removing pumps.
- 45. Consider choosing equipment and appliances with an Energy Star label.

Premium:

- 46. Install electric heat trace and insulation on roof plumbing vents.
- 47. Provide flow meter on the domestic water service for monitoring by the building control system. CF-2 LCCA-2
- 48. Design gray water and rainwater capture, treatment and distribution systems for urinal and water closet flushing. CF-varies LCCA-varies

HVAC

Required:

1. Locate mechanical rooms away from educational spaces to avoid the transfer of noise and vibrations.
2. Avoid placement of equipment and building openings on leeward side of building where subject to snow drifting.
3. Locate balancing valves and dampers to allow easy access for testing and balancing.
4. Coordinate with local electric utility for equipment motor sizes requiring variable frequency drives (VFD).
5. Control indoor air quality during construction, meeting SMACNA IAQ Guideline for Occupied Buildings under Construction 2007, Chapter 3.
6. Cover and seal ventilation equipment and ductwork during construction to prevent dust and debris in ductwork and equipment.
7. Provide radon testing for buildings with slab-on-grade construction, below grade crawlspaces, and basements, particularly in locations known to have radon. Design radon mitigation systems as needed.
8. Use energy recovery on ventilation systems according to size, based on DEED requirements.
9. Install preheat coils on outside air ducts in locations with winter design temperatures lower than 40°F to avoid condensation when mixing with return air. Provide preheat coils with summer filters.
10. Locate equipment like make-up air units (MAU) for kitchens on the roof, where practicable due to climate.
11. Implement demand control ventilation.
12. Utilize economizer cooling and natural ventilation to the greatest extent practicable.
13. Use sound attenuation for air handlers and ductwork serving classrooms, media centers, theaters and administrative spaces.
14. Locate building air intakes away from sources of air pollution such as buses, exhaust vents, kitchens, and shop spaces.
15. Exceed minimum distances as needed between outside air intakes and pollution sources if subject to entrainment and carryover from wind.
16. Locate louvers at least 8'-0" above grade and keep plantings away from louvers.
17. Locate intake louvers away from sources of air pollution such as buses, exhaust vents, kitchens, and shop spaces.
18. Avoid using louvers on outside air intakes in locations with frequent wind driven snow and rain, and subject to heavy frosting. Use arctic-tee hoods instead.
19. Maintain outside air intake velocities at or below 500 feet per minute to avoid entraining rain and snow.
20. Use 3/4" birdscreen on outside air intakes to avoid frost build up.
21. Provide deck-to-deck partitions, dedicated exhaust to the outdoors, and negative air pressure for spaces with hazardous materials (janitors' closets, chemical mixing areas, darkrooms, and high-volume copy rooms, etc.).
22. Operate exhaust fans with lighting controls in small restrooms.

23. Operate exhaust fans with dedicated wall switches in janitor closets to allow continuous operation.
24. Provide appropriate air conditioning in computer rooms, computer labs, and data hub rooms. Utilize economizer cooling for server and data rooms and reject heat to return path of building ventilation system, to the greatest extent practicable.
25. Limit air conditioning to spaces used year-round: administrative offices, auditoriums, data and equipment rooms with equipment that generates heat, and spaces needed for summer school programs.
26. Provide exhaust fans sized for 5 air changes per hour in spaces that allow access to below-floor sewage lift stations. Exhaust fans to have dedicated switches to allow continuous operation.
27. Install duct access doors at inlet and outlet side of all duct mounted equipment.
28. Install control systems capable of operation by school district personnel.
29. Maintain monthly and annual records of resource consumption (water, fuel, electric).
30. Provide individual room temperature controls.
31. Use locking enclosures on temperature sensors and thermostats in public spaces

Recommended:

32. Consider hiring a 3rd party agent to perform commissioning in accordance with DEED requirements based on facility size construction scope. Systems to consider for commissioning include: heating ventilation and cooling (HVAC), controls, lighting and power loads, and air barrier systems.
33. Consider requiring extended warranties on boilers, air handlers and other major equipment.
34. Consider locating HVAC equipment in mechanical rooms or penthouses, not on roofs, in most regions of Alaska.
35. Consider installing floor mounted equipment on 4" tall concrete housekeeping pads.
36. Consider providing variable frequency drives (VFD) or electrically commutated motors (ECM) on all equipment for balancing.
37. Consider providing VFDs with integral disconnects.
38. Consider installing BTU metering of hydronic heating.
39. Consider using condensing boilers and low temperature (140 °F and lower heating supply) hydronic heating systems when using natural gas or propane as heating fuel.
40. Use high efficiency 3-pass cast iron boilers for locations heating with fuel oil.
41. Consider providing glycol fill and storage tanks with integral pump, check valve, isolation valves, pressure switch, and alarm panel.
42. Consider installing radiant ceiling panels or radiant floors in restrooms and locker rooms, rather than fintube.
43. Consider using utility waste heat where available. Size plate-and-frame heat exchangers for future expansion.
44. Consider using utility load-shed electric heat where available. Provide sufficient storage/buffer capacity for electrothermal systems.
45. Consider installing bypass filtration on new hydronic heating systems connected to existing piping and equipment.

46. Consider using energy recovery on all ventilation systems.
47. Consider using energy modeling during the design phase for system selection and building configuration.
48. Consider compiling comprehensive life cycle analyses throughout the design phase that addresses the initial cost of the systems, annual operating cost, maintenance costs, and replacement costs.
49. Consider providing passive radon venting that can be converted to active ventilation when site soil test confirm radon mitigation is needed.
50. Consider using factory-fabricated, listed grease duct for Type 1 kitchen hoods.
51. Consider using listed fire-wrap insulation on welded grease duct rather than architectural shafts.
52. Consider providing Minimum Efficiency Reporting Value (MERV) 13 filters, MERV 11 minimum if higher-rated filters are not provided by the unit manufacturer.
53. Consider designing building systems to allow for 15% capacity for future expansion when population rates indicate future growth.
54. Consider direct digital control (DDC) system with remote (web) access, alarms, graphics of all monitored and controlled equipment and systems, and programming tools for maintenance personnel.
55. Consider requiring control contractor to inspect control system performance, confirm occupant comfort, and provide training 1 month prior to 1-year warranty date

Premium:

56. Provide ongoing building commissioning.
57. Consider renewable energy sources such as geothermal, biomass, and thermal electric storage from turbines.
58. Install variable refrigerant flow (VRF) or variable refrigerant volume (VRV) for interior spaces that need cooling, and reject heat in other portions of the building.
59. Dehumidification systems for summer use
60. Electrostatic precipitators for wood chip systems
61. Building flush-out following LEED requirements. CF-varies LCCA-low
62. Connect a permanent metering system to the building management system to track water and energy consumption, manage use, and identify opportunities for additional savings.
63. Establish service contract with control contractor with clearly stipulated and measurable performance requirements.
64. Re-commission systems two years after the school opens to ensure the energy conservation features are operating as intended and to make adjustments to increase efficiency..

Fire Protection

Required:

1. Check with the AHJ for special requirements related to fire panel types/locations and fire department connections (FDC).
2. Provide complete National Fire Protection Assoc (NFPA) 13 systems.
3. Design sprinkler systems in conformance with local sprinkler ordinances.

4. Use cross contamination protection (i.e. backflow prevention) when connecting fire sprinkler system to potable water supply, including fire pumps.
5. Do not combine potable water and fire sprinkler water storage if practicable.
6. Do not recirculate fire sprinkler pump discharge to a potable water supply.
7. Provide a dedicated fire pump room with fire-rated construction, and door directly accessible to the outdoors or through a fire-resistant-rated corridor, per NFPA 20, for facilities with fire pumps.
8. Provide direct access from the fire sprinkler pump room
9. Use Schedule 40 black steel pipe for threaded fittings.
10. Use galvanized Schedule 40 black steel pipe for dry pipe systems.
11. Avoid dry sprinkler systems as much as practicable.
12. Use dry heads at entry/exit vestibules on wet fire sprinkler systems.
13. Conceal fire sprinkler piping to the greatest extent practicable in occupied spaces.
14. Do not install exposed sprinkler piping below 10 feet above finished floor to the greatest extent practicable.
15. Standardize on sprinkler heads throughout building.

Recommended:

16. Consider using electric fire pumps if electric utility has sufficient capacity.
17. Consider installing diesel fire sprinkler pumps near other fuel-fired equipment for efficient fuel storage and distribution.
18. Consider fabricating all exterior building overhangs, walkways, balconies, porches, etc., of dimensions and/or materials to avoid fire sprinkler protection.
19. Consider nitrogen-generator for dry sprinkler systems, rather than air compressor only.

Premium:

20. X

Special Mechanical Systems

Required:

1. Provide dust collection systems designed to NFPA 68, 69 and 654, as applicable, in facilities with equipment producing combustible dust – vocational education, maintenance shops, etc.
2. Compressed air and vacuum systems to have dedicated equipment rooms with limited access, constructed per the building code based on the type of gases stored.
3. Provide lab exhaust hoods for labs and science rooms, with lighting, fan switch, retractable sash. Install other accessories as required by school district.
4. Install HVAC systems for swimming pools to maintain space temperature and humidity levels between 82°F to 86°F, and 50% to 60% relative humidity.
5. Provide water mist fire sprinkler protection system designed to NFPA 750, where water mist is used in lieu of an NFPA 13 sprinkler system.

Recommended:

6. Use outside air only for pool room dehumidification, if possible, based on site climate conditions.

Premium:

7. X

09.ELECTRICAL

[The following Electrical language is from the BDS submittal]

Building systems shall be energy efficient to reduce initial construction costs as well as long-term energy consumption and operating costs. Electrical systems shall comply with DEED-adopted energy codes.

1. The building electrical systems encompass lighting, power, telecommunications, and electronic safety and security systems. These systems are for the purposes of life safety, user convenience, building and user security, occupant comfort, and educational delivery.
2. Electrical systems shall be designed in accordance with applicable codes and standards and shall conserve energy while also meeting the needs of the building and users.
3. The systems shall be integrated with the building programming, floor plan, and local District requirements to enhance and support the building’s usefulness and longevity.
4. The systems shall be robust, expandable where feasible, and easily maintained.
5. Design shall meet present needs, with consideration given to future. Spare capacity or the ability to expand in the future should be evaluated within budgetary constraints.
6. Electrical systems should be considered for replacement based on age, condition, availability of parts, availability of support, and obsolescence.

A. Service and Distribution

1) MDPs & Switchgear

Required:

1. Size equipment for all building and site systems.
2. Locate equipment as close to the service entrance as practical to minimize the length of large feeders.
3. Use secondary distribution panels to consolidate panels and reduce the number of feeders running throughout the building.

Recommended:

4. Limit spare capacity to around 25% of physical breaker capacity or overall electrical capacity.
5. Provide surge protection at the main distribution panel, particularly on grids with lower reliability.
6. Provide metering with a network connection at the main distribution panel and any large distribution panels for accurate energy monitoring.
7. Allow listed series-rated systems to lower rating and cost of downstream panels and breakers.

8. Allow aluminum conductors on large feeders to lower project costs, if local District maintenance personnel are in agreement.

Panels & Motor Control Centers

Required:

1. Locate panels away from student-occupied areas unless unavoidable. Try to consolidate in electrical rooms, storage rooms, or similar spaces. Coordinate locations during design and monitor during construction to maintain working clearance. Provide an equipment grounding conductor in all conduits containing line voltage conductors.
2. Provide a dedicated neutral conductor for all circuits requiring a neutral.

Recommended:

3. Feed lighting circuits from a single panel that can be monitored.
4. Limit spare capacity to around 25% of physical breaker capacity or overall electrical capacity.
5. Provide surge protection for panels primarily serving classroom and office receptacles, or telecom equipment.
6. Locate a panel in areas with high numbers of circuits required, such as the kitchen and mechanical rooms, to minimize the length of branch circuits and number of disconnects.

Premium:

7. Building-wide monitoring of all panels.

Transformers

Required:

1. Size transformers for required load.
2. Avoid excessive transformer capacity and losses.
3. Coordinate with the electrical utility early in the project to identify delineation of work, particularly with respect to utility/medium-voltage transformers and circuit.
4. Vibration isolators are required where transformers may affect nearby spaces.

Recommended:

5. Consider using 120/208V where practical to avoid step-down transformers.
6. Utilize wall-mount or suspended configurations to maximize floor space.

Premium:

26. X

Power Distribution

Required:

1. Provide adequate electrical capacity for future building expansion.
2. Specify variable speed/frequency drives on electrical motors. Coordinate requirements with Mechanical.
3. Specify a minimum of two (2) double duplex outlets (2 outlets per circuit) per classroom wall unless covered with cubbies/casework that makes them inaccessible.

4. Provide receptacle load control in private offices, computer labs, and open office areas per energy code requirements. Switch receptacles with lighting occupancy sensor.
5. Provide tamper-resistant and GFCI receptacles where required by code.
6. Provide dedicated circuits for 120V equipment and appliances equal to or greater than 10 amps of draw.
7. Provide power and data for electronic whiteboards or digital TVs in classrooms.

Recommended:

8. Consider using GFCI circuit breakers where maintaining ready access to GFCI receptacles may be difficult.
9. Limit general purpose circuits to 6 duplex outlets.
10. Limit high-draw areas (kitchen, break room/lounge, workroom, etc.) to 2 duplex outlets per circuit in areas with high concentrations of equipment.
11. Use floor boxes and power poles in areas where they serve a specific purpose, instead of general power distribution.
12. Avoid headbolt heater outlets over 50% of staff positions. Consider time or occupancy based control of these circuits.
13. Provide locations with dedicated circuits for laptop charging stations if programmed.

Premium:

14. Excessive receptacle counts, including surface raceway with high quantities outside of labs or workbenches where required.

Lighting

Required:

1. Fixture types should be commodity level, commonly available, and cost effective to the extent possible. The use of custom/architectural fixtures, whether for general or decorative/accent lighting, should be limited to small areas of architectural interest and fit within budgetary constraints of the project.
2. Fixture source should be LED for efficiency and life expectancy unless design criteria justifies use of alternate sources.
3. Maintenance should be considered in fixture placement and selection. Fixtures should have field replaceable components, readily available replacement parts, and be installed in a manner that allows for access by local maintenance staff to clean, test, or repair.
4. Minimize the types of lamps to reduce inventory and replacement costs.
5. Provide fixtures that are easily relamped and cleaned.
6. Lighting levels shall be in accordance with Illuminating Engineering Society standards and Alaska Administrative Code (AAC). Lighting levels shall meet or exceed minimum recommended levels of the latest published version of the IES Handbook (25-65 age group) unless AAC requires higher light levels.
7. Emergency lighting/exit signs shall be provided in all code-required areas. Additional emergency lighting should be provided in areas with either increased risk of injury during an outage, or likelihood of persons unfamiliar with the space. These would include support

spaces (electrical/mechanical/telecom rooms), large restrooms, conference/meeting rooms, kitchen, and similar.

8. Coordinate ceiling plan and lights with projectors and IT equipment.
9. Provide light emitting diode (LED) site lighting with zero cut-off fixtures where light trespass is unwelcome.
10. Provide lighting controls for dimming or multi-level light switching in educational spaces.
11. Install task lighting at instructional area wall surfaces where necessary.
12. Install LED fixtures or extended life lamps in areas with high ceilings where relamping is difficult.
13. Lighting control shall meet current codes at a minimum. Additional energy savings may be achievable with a more complex system but should be balanced with local maintenance capabilities and project budget constraints.
14. Minimum lighting control elements should include exterior photocell control, interior occupancy sensor control of applicable spaces, dimming of fixtures either through manual interface, daylight sensor input, or occupancy sensors, and multi-zone layouts for more functional use of spaces. Examples would be a separate teaching wall zone in classrooms, or multiple zones in a gym or multi-purpose room to allow for most lighting to be off while maintaining some visibility.

Recommended:

15. Consider control for site and corridor lighting systems with the direct digital control system or a lighting control system.
16. Consider direct/indirect fixtures in classrooms with 10'-0" ceilings or greater.
17. Track energy use through a building automation system (BAS) or local metering of the lighting panel.
18. Use dimmable site lighting with integral photocell/occupancy sensors to reduce energy use.
19. Use fixtures with integral controls where practical to reduce device count and cabling.

Premium:

20. Building-wide lighting controls with extensive individual control of fixtures or connection with other systems. CF-3 LCCA-2
21. Architectural fixtures outside of limited use noted above. CF-4 to 5 LCCA-3

Special Systems

1) General Design Principles

1. Design principles apply as noted in Electrical.
2. In the absence of code requirements, design should follow BICSI or similar standards to the extent possible.

Data and Communications

Required:

1. Provide classroom ceilings with an outlet with voice/data capability and power for technology (if required, verify if PoE first)

2. Provide for wireless connectivity. Coordinate with IT for number and location of needed devices.
3. Provide minimum CAT 6 cabling—all horizontal cabling to be less than 295' in length.
4. Provide one (1) voice/data jack at each classroom wall unless inaccessible due to cubbies/casework.
5. During design development, provide layouts and cut sheets for all equipment requiring active electrical equipment to be built-in or purchased as part of movable equipment budget.
6. Provide cable pathways between all points.
7. Use plenum-rated cabling where distributed in open-air environments.

Recommended:

8. Provide fiber optic backbone between telecom rooms.
9. Provide Category 6A cabling to wireless access points.
10. Use J-hooks for smaller cable counts, consolidate into cable tray for larger counts.
11. Coordinate with Architect to minimize number of inaccessible conduit sleeves in cable pathway to telecom rooms.

Premium:

12. Raised floor raceway systems
13. Oversize cable tray systems.
14. PON or similar fiber distribution systems.

Clock/Intercom

Required:

1. Provide general paging throughout the building, with ability to page via phone system.

Recommended:

2. Provide multiple paging zones, including classrooms, corridors, exterior, support spaces. Consider a network-based solution with individual zones for each classroom.
3. Provide synchronized central clock system.

Premium:

4. Augmented/Virtual Reality Systems

Audio/Video

Required:

1. Provide power and data for electronic whiteboards or digital TVs in classrooms.
2. Provide HDMI connection at teacher's desk for electronic media.
3. Provide sound system in Gym/MPR/Commons with speakers, microphones, media input (CD optional/Aux input), amplifier and digital signal processor/mixer.
4. Provide small sound system in Band/Orchestra/Choir for support of program.
5. Coordinate location of motorized screen controls with sound input, basketball hoops, stage controls, lighting, etc.

Recommended:

6. X

Premium:

7. Augmented/Virtual Reality Systems
8. Multiple fixed projectors in large spaces.
9. TV Walls instead of projector screens.
10. Digital Signage, Graphic Walls for decorative/accent purposes.

Safety and Security

1) Electronic Safety and Security- General Design Principles

1. Except for code-required fire alarm systems, all other systems in this section are optional and should be considered based on budget, local District wants and needs, and area considerations such as likelihood of vandalism or intrusion.

Fire Alarm System

Required:

1. Code-minimum coverage for initiating and notification devices.
2. Code-required monitoring of mechanical equipment, generator, suppression systems, fire pump.
3. 24-hour monitoring service in areas served with a fire department.
4. Automatic dialer with local contacts in areas without a fire department.

Recommended:

5. Additional detection in areas with elevated risk of fire, such as storage rooms, kitchen, mechanical/electrical spaces, public restrooms.
6. Exterior notification on at least two sides of the building.
7. Low-frequency sounder/horn and high-candela strobe in areas that may be used for sleeping, even if occupancy is not called out for itinerant housing.

Premium:

8. Pre-action systems.
9. Full coverage detection.

Access Control System

Required:

1. If a system is used, limit number of doors to main entry points, including front, playground, staff entry, and loading dock/kitchen. Office area may be controlled.

Recommended:

2. Verify requirements with School District.
3. Use card readers or combination card reader/key pad.
4. Minimize use of key pad only, and if so assign unique codes to individuals. Do not assign a common code to a given door.

5. Use of a reader or button to initiate lockdown in the office should be provided. Lockdown should re-lock all doors, and release any magnetic door holders to seal off corridors/MPR/Gym, etc.
6. System should function independently if network connection is lost.
7. System should use standard readers, locks, and hardware to the extent possible to allow for migration to a different software.

Premium:

8. Card readers on interior doors except for the office area, particularly when used widely to eliminate keys.
9. Cabinet locks and similar where keys would normally be used.
10. Proprietary hardware (such as wireless locksets, hubs, etc.) that cannot migrate in case of software replacement.
11. Badging printers at every school in a District instead of centralized credentials.

Intrusion Detection System

Required:

1. Verify need/want with School District.

Recommended:

2. Utilize a combination of door contacts, glassbreak sensors, motion sensors for intrusion detection.
3. Locate a keypad at main entry and staff or kitchen entry.
4. Provide either a 24-hour monitoring service or automatic dialer with local contacts (particularly if no local law enforcement agency exists).
5. Connect to lighting controls if used to switch on corridor/site lighting upon alarm.
6. System can monitor industrial alarms, but avoid redundancy with building control system.

Video Surveillance System

Required:

1. Verify need/want with School District.

Recommended:

2. Provide surveillance cameras at least at all major entry points and corridor intersections, with traffic in and out of the office covered.
3. Provide a workstation in the Principal's office for review/download of video, and a monitor in the main office.
4. In schools with a security officer, Assistant Principal, or other similar party, additional workstations should be provided for effective monitoring.
5. IK08 impact resistance is the minimum allowed for cameras that can be touched, or objects thrown at them from less than 10' away.
6. Playgrounds should be monitored.
7. Use multi-sensor or wide-angle cameras wherever possible to replace multiple cameras with a single camera.

8. IK10 impact resistance is recommended.
9. Video system can integrate with access control/intrusion detection to assist those systems.

Premium:

10. Surveillance cameras at locations other than exterior doors, office, playgrounds, or corridors.
11. Interior cameras that exceed the ratio of 1 camera per 5,000 sf
12. Security camera systems that exceed 20 cameras for schools under 50,000 sf. For schools over 50,000 sf, add 2 cameras (one inside, one outside) per 5,000 sf.
13. Pan-tilt-zoom cameras, particularly without an active security officer.
14. Video walls, analytics packages if not justified, thermal or other specialty cameras.

Secure Entry and Lockdown

Required:

1. Verify need/want with School District.

Recommended:

2. Provide a lockdown button at the main office and security office. Lockdown should re-lock all doors, and release any magnetic door holders to seal off corridors/MPR/Gym, etc.
3. If lockdown is only used for duress (as opposed to abundance of caution such as non-custodial parent), button should call local law enforcement and/or alert District.
4. If lockdown and duress functions differ, provide two buttons.
5. Broadcast a coded message to classroom paging zone upon activation of button to alert teachers to lock doors.
6. Provide a controlled point at main entry to screen visitors, including intercom/camera.

Other Electrical Systems

1) Power Generation and Distribution

Required:

1. None

Recommended:

2. Use battery backup instead of an emergency generator. If a generator is included, design it for standby functions.
3. Consider a standby generator to support safety, security, and core building systems..
4. Locate the generator inside of the building, or in an equipment enclosure instead of a walk-in module to preserve square footage.

Premium:

5. Photovoltaic arrays or systems
6. Electrical wind generators
7. Standby generator beyond critical systems.
8. Walk-in generator modules or buildings.
9. Excessive capacity, either electrically or physical.

10. Redundant generators or bypass isolation automatic transfer switches.

010. EQUIPMENT & FURNISHINGS

[The following Site and Infrastructure language was added by department Facilities staff in the 3/8/2021 draft version. BDS language from 06 Interiors “Built-in Furnishings, Equipment & Technology” was incorporated into these sections.]

A. Building System Summary

The **Equipment & Furnishings** of school buildings consist of the educational program and support equipment physically connected to the facility or its support systems. It also includes furnishings that are fixed or integral to the building. The department recognizes two sub-categories in this building system: **Equipment** and **Furnishings**. Equipment in this category is normally incorporated into load calculations by engineering disciplines and installed by a contractor using one or more trades. Furnishings in this category are of traditional types (chairs, bookcases, tables, etc.) but that are built-in or affixed to the facility. The **Furnishings** category fits in a niche between **Specialties in 06. Interiors** and moveable fixtures, furnishings and equipment (FF&E). Lockers, casework, display cases, bleachers and window coverings are all examples or items covered in **Specialties**. For additional information and standards on FF&E, see the department’s publication *Guidelines for School Equipment Purchases*.

B. Design Philosophy

Cost effective school construction requires detailed design coordination between the school’s building systems and the **Equipment** and **Furnishings** needed to deliver and support education. Items in this section include those that have proven to need a moderate to high level of integration to meet their intended function, and to avoid changes during construction. The building technology and educational technology elements deserve a special note as components related to these areas are changing rapidly from year to year with new technology resulting in faster, lightweight, affordable, and portable “plug-in” equipment. The State expects schools to take advantage of the latest technology that can simplify building systems and lower installed technology costs. For additional design parameters see the **Design Ratio** section of this system.

C. Model Alaskan School

The Model Alaskan School includes a selection of athletic equipment (main and secondary basketball goals, volleyball floor inserts, chinning bar, pegboard), food preparation (refrigerator, freezer, convection oven, range and hood, under-counter fridge), laundry equipment (stacked washer and dryer), classroom equipment (projection screens, window blinds), and entry mats. Associated with special electrical systems, the model also provides for classroom and gym/stage audio visual systems. Associated with plumbing systems, the model provides for three-compartment sink, handwash sink, and grease interceptor. Acceptable additional items and alternatives are detailed in the construction standards that follow.

101 Equipment

1011 Food Service & Kitchen Equipment

Required:

1. Provide equipment for basic food preparation and cleanup for student lunch preparation of up to 40 meals/day in all school facilities to include appropriately sized items from the following categories:
 - Reach-in refrigerator
 - Reach-in freezer
 - Combi steam/convection oven
 - Commercial range
 - Wall-mounted shelving
 - Dishmachine
 - Mop sink cabinet
 - Type 1 vent hood

(Ref. Section 0811 Plumbing Fixtures for code required prep and cleanup sinks.)
2. Provide equipment for full-service food preparation and cleanup for student lunch preparation of over 40 meals/day. Size and select equipment based on DEED-reviewed kitchen design from the basic equipment list and the following categories:
 - Walk-in refrigerator
 - Walk-in freezer
 - Steam kettle
 - Braising pan
 - Production steamer
 - Fryer
 - Ice maker
 - Type 2 vent hood(s)

(Ref. Section 0811 Plumbing Fixtures for code required prep and cleanup sinks.)
3. Provide other support equipment that is mobile/moveable and plugs into standard receptacles as FF&E. Items below are considered FF&E; see Building System Summary preceding:
 - Prep appliances (mixer, slicer, etc.)
 - Cooking appliances (microwave, toaster)
 - Mobile hot/cold serving tables
 - Mobile heating cabinets
 - Multi-tier shelving units
 - Mobile prep/work tables
 - Mobile transport carts
 - Pots/pans/utensils

Recommended:

4. Consider providing equipment for a warming/cooking kitchen only when the district provides a central kitchen to include:
 - Reach-in refrigerator
 - Reach-in freezer
 - Convection oven
 - Wall-mounted shelving
 - Mop sink cabinet
 - Type 1 vent hood

(Ref. Section 0811 Plumbing Fixtures for code required prep and cleanup sinks.)

Premium:

5. Equipment for full-service food preparation in districts which operate a central kitchen.

1012 Athletic Equipment

Required:

1. Provide ceiling or wall-mounted basketball backboard/hoops at competition court; motor-operated raise/lower.
2. Provide floor inserts for volleyball standards/nets.
3. Provide a multi-sport wall-mounted score board opposite each set of bleachers.

Recommended:

4. Consider secondary, wall-mounted basketball backboards/hoops at recreational courts; motor operated raise/lower.
5. Consider mat hoists where wrestling programs are established.
6. Consider ceiling mounted gym curtains to support multiple concurrent programs; motor-operated raise/lower.
7. Consider ceiling-mounted climbing ropes.
8. Consider chinning bar(s), peg climbing board, and other wall-mounted fitness equipment requiring structural support.
9. Consider a motor-operated projection screen.
10. Consider a high-capacity washer and dryer.

Premium:

11. Whirlpools or ice-bath equipment.
12. Saunas

1013 Career & Technology Equipment

Required:

1. Provide the following woodworking equipment in floor-standing models: 10in table saw with 'saw stop' technology, 12in band saw, 1hp drill press. (Other benchtop and plug-in equipment will be provided as FF&E)
2. Provide the following metal working equipment: welding station/booth, 1hp milling machine/lathe.

Recommended:

3. Consider additional woodworking equipment to include: lathes, router/joiner, and belt/disc sanders.
4. Consider additional metal working equipment to include: sheet metal brake, and grinders.
5. Consider moving all equipment to portable, tabletop, 110v for small programs and additional flexibility. All such equipment would be provided as FF&E.
6. Consider medium format 4ftx8ft CNC machine.
7. See Section [0721 Elevators and Lifts](#) for provisions associated with vehicle lifts.

Premium:

8. See Section [0733 Hoists and Cranes](#) for premium limitations.

1014 Science Equipment

Required:

1. [See Section [0652 Casework/Millwork](#) for fixed lab tables.]
2. Provide one 36in fume hood.

Recommended:

3. Consider a 48in fume hood for larger programs; demonstration type or double sided.
4. Consider a commercial undercounter dishwasher at Science Storage/Prep.

Premium:

5. Fume hoods larger than 48in.

1015 Library Equipment

Required:

1. Provide a book drop with catch bin; free standing or built-in to casework.
2. Provide book stacks in a combination of wall perimeter (5-6 shelf) and freestanding (2-3 shelf) for approximately 50 volumes/student capacity. Laminate finish. [Note: Other book display shelving to be FF&E; all seating, tables and other loose furnishings to be FF&E.]
3. Provide a motor-operated projection screen.

Recommended:

4. Consider wood veneer on book stacks in libraries serving any secondary grades.

Premium:

5. TBD

1016 Theater Equipment

Required:

1. Provide motor-operated projection screen.
2. Provide motor-operated stage curtain.

Recommended:

3. Consider fixed overhead rigging for stage curtains, sets, and lighting.
4. Consider stage lighting system including fixtures and control board.
5. Consider 48 channel sound mixing board.

Premium:

6. Orchestra pit equipment

1017 Art Equipment

Required:

1. [None required.]

Recommended:

2. Consider up to two gas-fired kilns.

3. Consider heavy-duty clay mixer.
4. Consider electric pottery wheels; quantity for anticipated class size.

Premium:

5. Darkrooms for chemical film/print processing.

1018 Loading Dock Equipment

Required:

1. [None required.]

Recommended:

2. Consider bin-size recyclable baler and multi-waste compactor.
3. Consider providing fixed commercial compactor chute (to align with vendor provided compactor and waste service).
4. Consider dock bumpers where elevated truck loading/unloading occurs.

Premium:

5. Dock leveler systems.

1019 Other Equipment

Required:

1. [None required.]

Recommended:

2. Consider kitchenette at Special Needs Life Skills areas with residential type refrigerator, range, over range microwave, and dishwasher.
3. Consider high-capacity washer and dryer at Intensive Needs program area.
4. Consider ceiling mounted plates/eye bolts at OT/PT program area.

Premium:

5. Plumbed and hardwired commercial equipment at 'student store' unless specifically supported by curriculum in an approved educational specification.

102 Furnishings

1021 Fixed Furnishings

Required:

1. Provide benches at building entry vestibules/lobby in the parent pick-up/drop-off zones; secure to floor.

Recommended:

2. Consider built-in benches/seating at Library and Elementary Classroom.

Premium:

3. TBD

1022 Mats

Required:

1. Provide walk-off grates/mats at entry vestibules.

Recommended:

2. TBD

Premium:

3. TBD

1023 Other Furnishings

Required: Required:

1. TBD

Recommended:

2. TBD

Premium:

3. TBD

011. SPECIAL CONDITIONS

[The following Site and Infrastructure language was added by department Facilities staff in the 3/8/21 draft version.]

A. Building System Summary

The **Special Conditions** related to school buildings consist of both special purpose facilities and project conditions that bridge across, rather than fitting within, several of the core building systems. The ‘system’ deals with the installation, removal, or relocation of integrated or self-contained support buildings, and with site conditions that, while altering the site, do not install utility or improvement features. Generally, all elements related to hazardous materials and conditions are included within this system. The department recognizes three sub-categories in this building system: **Special Construction, Special Demolition, and Special Site Conditions**. Special Construction includes three specific use-types. Special Demolition includes all demolition work from entire buildings to selective building elements and utilities. It also captures hazmat associated with that demolition. Special Site Conditions deals with management of site conditions for both effective construction execution and long-term building operations. Remediation work for sites is also captured. **Special Construction** will overlap nearly all building system sections **02** through **09** depending on complexity, as will **Special Demolition**. The **Special Site Conditions** category abuts **01. Site & Infrastructure** categories but should not have much, if any, overlap.

B. Design Philosophy

Cost effective school construction can sometimes be enhanced by isolating special facility uses such as greenhouses or various types and combinations of utility modules and providing them as separate facilities. These solutions, while more common in remote school locations, are not automatic for any project and should be based on solid value analysis. Similarly, selective, and whole building

demolition work occurs across a range of scope and possibility. Final project solutions should be driven by options analysis supported by accurate life-cycle costing. Site conditions can have a significant impact on cost effective school construction. Factors such as topography, erosion, proximity to natural hazards, wetlands, site drainage, and flooding must be properly evaluated in the project planning phase. The department’s publication ***Site Selection Criteria and Evaluation Handbook***, provides guidance and tools in these areas. The State expects school districts to thoroughly evaluate **Special Conditions** that can simplify building systems and lower construction costs. **For additional design parameters see the Design Ratio section of this system.**

C. Model Alaskan School

The Model Alaskan School includes site preparation work that aligns with Special Site Conditions of this section to include clearing and grubbing, survey and layout, SWPPP, excavation, geotextiles, fill, and compaction work. While the full ***Program Demand Cost Model for Alaskan Schools*** does include estimating elements for demolition and hazardous materials conditions, its Model School Escalation file does not. Primarily this is due to these elements being dependent on specific project environments and conditions. Acceptable additional items and alternatives are detailed in the construction standards that follow.

111 Special Construction

1111 Packaged Utility Modules

Required:

1. Provide packaged utility module supporting any of the following functions in locations where site-constructed solutions are less cost effective: fire suppression, heating plants (i.e., oil and wood-fired boilers, etc.), power generation, walk-in refrigerator/freezers (**CF-3 LCCA-1**).

Recommended:

2. Consider including electrical services in conjunction with utility modules providing heating plants (**CF-3 LCCA-1**).

Premium:

3. Packaged utility modules with utility runs to the supported facility that exceed 40ft.

1112 Swimming Pool

Required:

1. Swimming pools are supported as school space under AS 14.11 under certain conditions. Refer to the most current department publication *Swimming Pool Guidelines for Educational Programs*.

Recommended:

2. Consider construction of swimming pools in support of the educational program where the capacity exists to meet the above average operations and maintenance costs of such facilities over time.

3. Consider partnering with related municipal and borough entities in sharing the cost of initial capital, O&M, and capital renewal costs through a joint use agreement (ref. **4 AAC 31.020(g)**).

Premium:

4. Swimming pool tank sizes, amenities, and resulting facilities not supported under statute and regulation.

1113 Greenhouse

Required:

1. None required. [Note: Greenhouses are considered school space under 4 AAC 31.020.]

Recommended:

2. Consider building-attached greenhouse spaces when such spaces can meet the educational program being provided (ref. **0142 Attached Shelters**).
3. Consider freestanding greenhouses in support of the educational program where the capacity exists to meet the above average operations and maintenance costs of such facilities.

Premium:

4. Greenhouse space which is beyond the allowable gross square footage in the attendance area (ref. 4 AAC 31.016 and 4 AAC 31.020).

112 Special Demolition

1121 Structure Demolition

Required:

1. Provide demolition of existing schools which are no longer cost effective to repair and or transfer to another entity when approved for replacement as part of an application for state-aid under AS 14.11 (**CF-3 LCCA-1**).
2. Provide demolition of state-owned abandoned school sites as part of the development of new schools, replacement schools, or additions/renovations to existing schools.
3. Secure permits for local disposal (i.e., one-time monofill on state-owned or district-owned property), on property owned by others by agreement, or in approved local landfills.

Recommended:

4. Consider the demolition of education support facilities that have exceeded their useful life and cannot be renovated for additional use(s).
5. Consider removal of demolition waste to a landfill in Alaska or outside of Alaska when local disposal options have been exhausted (**CF-3 LCCA-1**).

Premium:

6. Demolition of any structure not accepted as an *education related facility* and approved by the department.

1122 Building Selective Demolition

Required:

1. Provide selective demolition in support of approved new work or renovation.
2. Secure permits for local disposal in approved local landfills.

Recommended:

3. Consider removal of demolition waste to a landfill in Alaska or outside of Alaska when local disposal options have been exhausted (CF-3 LCCA-1).

Premium:

4. Any selective demolition not accepted as part of an *education related facility* and approved by the department.

1123 Site & Utility Demolition

Required:

1. X

Recommended:

2. X

Premium:

3. X

1124 Hazardous Material Removal

Required:

1. X

Recommended:

2. X

Premium:

3. X

1125 Building Relocation

Required:

1. X

Recommended:

2. X

Premium:

3. X

113 Special Site Conditions

1131 Site Shoring & Dewatering

Required:

1. X

Recommended:

2. X

Premium:

3. X

1132 Site Earthwork

Required:

1. X

Recommended:

2. X

Premium:

3. X

1133 Site Remediation

Required:

1. X

Recommended:

2. X

Premium:

3. X

Site Selection Criteria and Evaluation Handbook

P U B L I C A T I O N C O V E R

April 1, 2021**Issue**

The department is alerting the committee that it has initiated an update of the *Site Selection Criteria and Evaluation Handbook*.

Background*Last Updated/Current Edition*

Publication last updated in 2011. Current edition available on the [department's website](http://education.alaska.gov/facilities/publications/SiteSelection.pdf) (education.alaska.gov/facilities/publications/SiteSelection.pdf). The publication includes a companion scoring matrix tool using the Microsoft Excel platform.

Summary of Proposed Changes

The department started the update of this publication with a validation assessment. On March 19, 2021, the department produced a nine-question survey and solicited feedback using the Facilities listserv and direct e-mail. 17 entities responded to the survey.

Based on the survey results (see Validation Survey following), the publication remains valid for DEED school capital processes and is expected to continue to be useful for an additional five years. Comments were general in nature and supported a straightforward update of the prior publication (see Input and Discussion below for additional detail).

Version Summary & BRGR Review

The initial draft update is due to be presented for committee review in July 2021 following which will be a period of public comment. A final publication is anticipated in September.

BRGR Input and Discussion Items

Below are questions and comments developed by DEED during the revisions of this draft. Outlined below for consideration by the BRGR Committee:

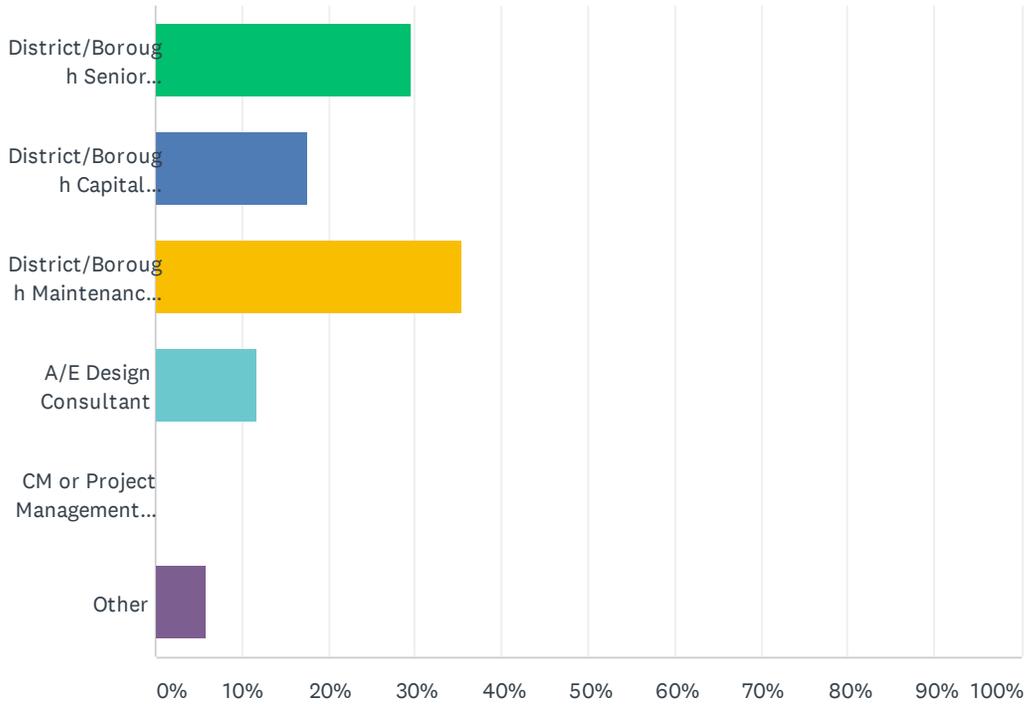
- Increase applicability where possible for use on remote communities with limited site alternatives;
- Provide additional details regarding parking allocations/needs based on school facility size;
- Update to conform to current regulations regarding site approval and acquisition;
- Update sample documents and illustrations;
- Ensure the document and supporting tools meet accessibility standards.

Suggested Motion

None at this time, no committee action requested.

Q1 Which of the following best describes your role in relation to school facilities.

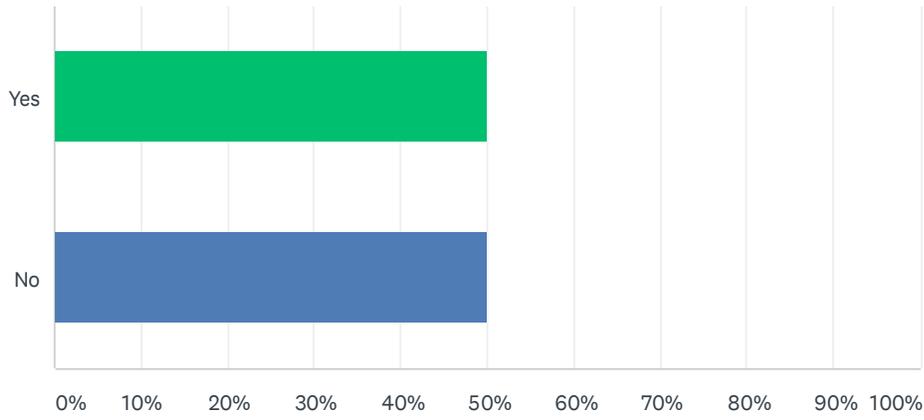
Answered: 17 Skipped: 0



ANSWER CHOICES	RESPONSES	
District/Borough Senior Management	29.41%	5
District/Borough Capital Projects Staff	17.65%	3
District/Borough Maintenance & Operations Staff	35.29%	6
A/E Design Consultant	11.76%	2
CM or Project Management Consultant	0.00%	0
Other	5.88%	1
TOTAL		17

Q2 In the past five years, have you had an opportunity to use the publication in any aspect of school capital project planning, design, construction, or operations?

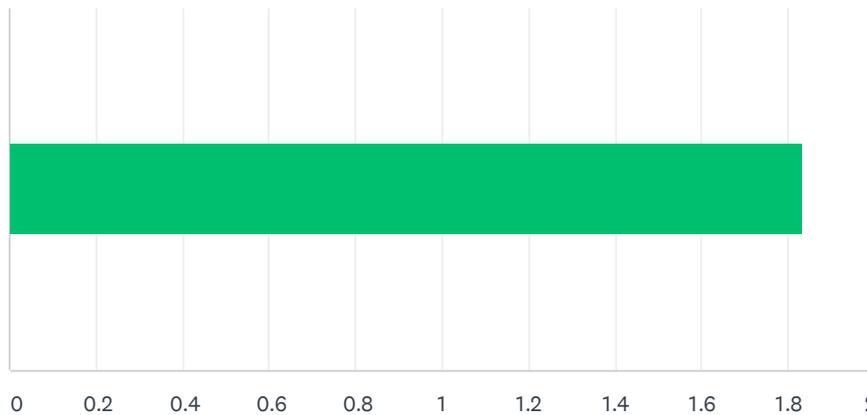
Answered: 8 Skipped: 9



Yes	50.00%	4
No	50.00%	4

Q3 If Yes above, approximately how many projects?

Answered: 6 Skipped: 11

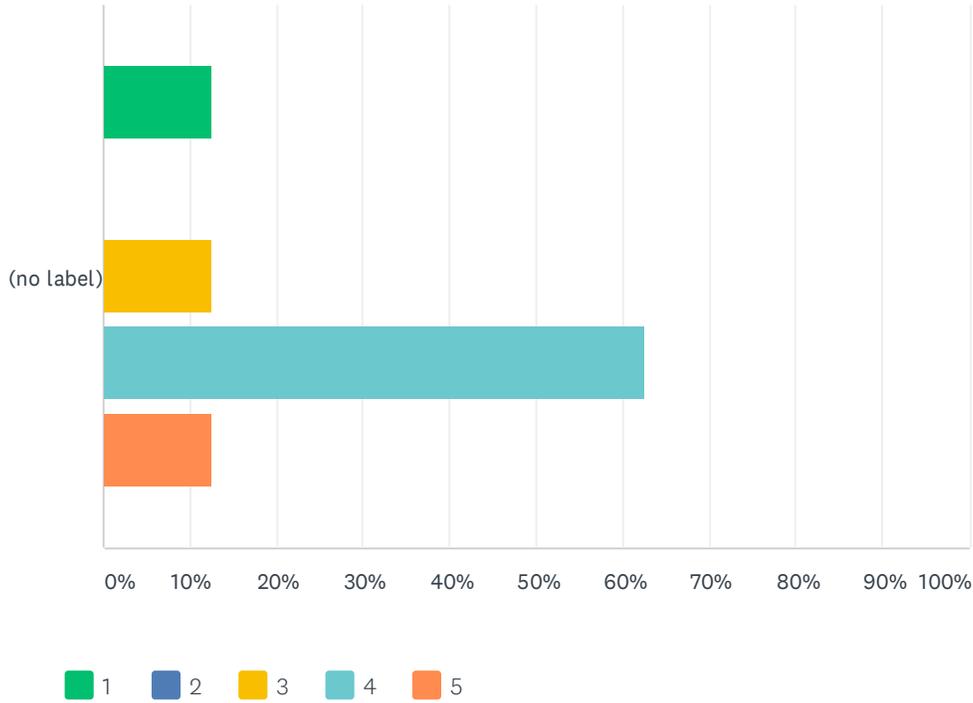


ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
	2	11	6
Total Respondents: 6			

#		DATE
1	0	3/30/2021 8:56 AM
2	1	3/30/2021 8:22 AM
3	5	3/24/2021 9:28 AM
4	2	3/22/2021 2:38 PM
5	0	3/19/2021 1:44 PM
6	3	3/19/2021 11:16 AM

Q4 In your opinion, how useful is this publication? 1-low, 5-high

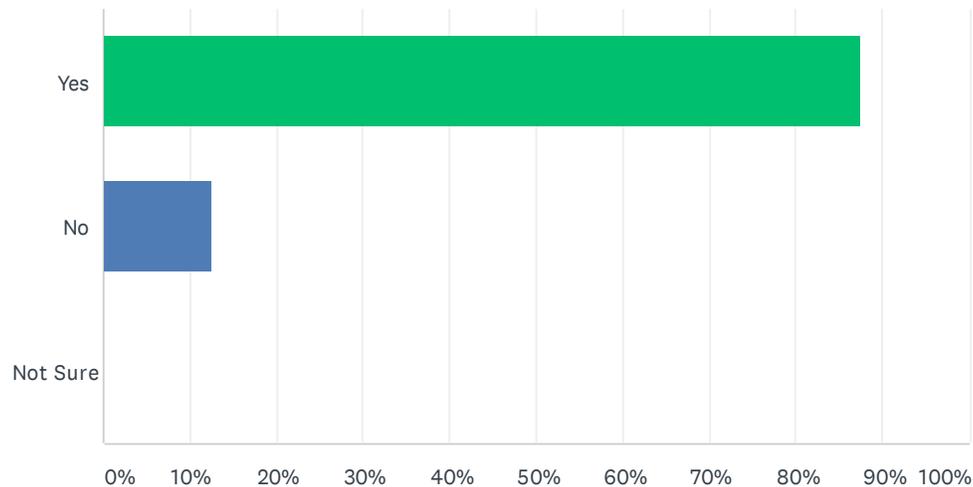
Answered: 8 Skipped: 9



	1	2	3	4	5	TOTAL	WEIGHTED AVERAGE
(no label)	12.50%	0.00%	12.50%	62.50%	12.50%	8	3.63
	1	0	1	5	1		

Q5 Do you believe this publication will continue to fill a need over the next five years?

Answered: 8 Skipped: 9



ANSWER CHOICES	RESPONSES	
Yes	87.50%	7
No	12.50%	1
Not Sure	0.00%	0
TOTAL		8

#	NOT SURE	DATE
	There are no responses.	

Q6 What, if any, are areas of the publication that could be developed, made more clear, or made more accurate?

Answered: 4 Skipped: 13

#	RESPONSES	DATE
1	The publication was clear, it was a little challenging on remote sites with limited options.	3/30/2021 8:22 AM
2	Pretty clear cut, score based document.	3/22/2021 2:38 PM
3	explain any parking spaces/sqft of facility	3/22/2021 9:45 AM
4	1. I think there have been some minor areas of regulation change related to sites and DEED approval. 2. The graphics in the appendices seem a little dated and don't have great quality. 3. The listed site uses may need to be aligned with the upcoming Construction Standards. 4. Can probably remove the 'announcement banners' for the traffic section. 5. The MExcel tool may need work for accessibility issues.	3/19/2021 11:16 AM

Q7 Are there other related topics you would like to see addressed in the publication?

Answered: 2 Skipped: 15

#	RESPONSES	DATE
1	No	3/30/2021 8:22 AM
2	No	3/19/2021 11:16 AM

Q8 If supplementary tools are provided, do they work well; are they presented in a useful format?

Answered: 2 Skipped: 15

#	RESPONSES	DATE
1	Yes the samples where helpful	3/22/2021 2:38 PM
2	Yes; see comment on 'accessibility'.	3/19/2021 11:16 AM

Q9 Are there additional tools the department could develop that would improve the aspects of capital project work addressed in this publication?

Answered: 2 Skipped: 15

#	RESPONSES	DATE
1	Considering the major revisions in 2011 this is about 10 years old and not seeing in my opinion issues that need to be made current.	3/22/2021 2:38 PM
2	Maybe an example of a well done report?	3/19/2021 11:16 AM

Work Topics for the BR & GR Committee

Proposed As Of: ~~March 17, 2021~~ April 15, 2021

BR&GR 2021 Work Items	Responsibility	Due Date
1. CIP Grant Priority Review – [(b)(1)]		
1.1. FY22 MM & SC Grant Fund Final Lists (4 AAC 31.022(a)(2)(B))	Committee	Apr 2021
1.2. FY23 MM & SC Grant Fund Initial List	Committee	Dec 2021
2. Grant & Debt Reimbursement Project Recommendations – [(b)(2)]		
2.1. Six-year Capital Plan (14.11.013(a)(1); 4 AAC 31.022(2))	Dept	Annually, Nov
3. Construction Standards for Cost-effective Construction – [(b)(3)]		
3.1. Model School Costs (DEED Cost Model)		
3.1.1. Model School Analysis & Updates (Allowable Elements)		Annually, Jan-May
3.1.1.1. Solicit, Award, And Manage Model School Update	Dept	Annually, Jan
3.2. Model School Building Systems Standards		
3.2.1. State Building Systems Standards		Mar 19- Feb 22
3.2.1.1. Review Final Draft for Approval to Seek Public Comment	Committee	Sep 2021
3.2.1.2. Complete and publish standards [See 6.2 New Publications]	Dept	Dec 2021
3.2.1.3. Implement New Standards [See 6.3 Regulations]	Dept	TBD
3.2.1.4. Review/Approve Plan for Biennial Updates	Committee	Feb 2022
3.3. Design Ratios		
3.3.1. Development of Design Ratio O:EW		
3.3.1.1. Amended/Corrected Final O:EW Ratios	Dept	Feb 2021
3.3.1.2. Final All Ratios	Committee	Apr 2021
3.3.1.3. Validate, Release for Comment	Dept	TBD
3.3.1.4. Evaluate Public Comment, Make Recommendations	Committee	TBD
3.3.1.5. Manage Regulation Development & Implementation	Dept	TBD
3.3.2. Development of Design Ratio V:GSF		
3.3.2.1. Final All Ratios	Committee	April 2021
3.3.2.2. Validate, Release for Comment	Dept	TBD
3.3.2.3. Evaluate Public Comment, Make Recommendations	Committee	TBD
3.3.2.4. Manage Regulation Development & Implementation	Dept	TBD
3.3.3. Development of Design Ratio V:ES		
3.3.3.1. Compare Model & Existing School Ratios And Energy Use	Subcommittee	Oct 2020
3.3.3.2. Recommendation of V:ES Ratio	Subcommittee	Jan 2020
3.3.3.3. Evaluate Recommendations, Provide Guidance	Committee	Feb 2020
3.3.3.4. Final All Ratios	Committee	April 2021
3.3.3.5. Validate, Release for Comment	Dept	TBD
3.3.3.6. Evaluate Public Comment, Make Recommendations	Committee	TBD
3.3.3.7. Manage Regulation Development & Implementation	Dept	TBD
3.3.4. Develop Test Method for Ratios	Subcommittee	Jul 2021
4. Prototypical Design Analysis – [(b)(4)]		
4.1. Seek Peer Consensus on Reuse of School Plans and Systems		
4.1.1. Develop and Schedule AEC Peer Workshop on Reuse	Committee	Jul 2021
4.1.2. Update Aug 4, 2004 Committee Position Paper	Committee	TBD
4.2. Codify Regulations As Needed for Reuse of Plans/Systems Policy		
4.2.1. Make Recommendations to Committee on Prototypes	Dept	Sep 2021
4.2.2. Make Recommendations to State Board on Prototypes	Committee	TBD
4.2.3. Manage Regulation Development and Implementation	Dept	TBD
5. CIP Grant Application & Ranking – [(b)(5) & (6)]		
5.1. FYXX CIP Briefing – Issues and Clarifications	Dept	Annually, Dec
5.2. FY23 CIP Draft Application & Instructions	Dept	Apr 2021
5.2.1. Life Safety/Code/POS Matrix Weighting Review	Cmte	Apr 2021

BR&GR 2021 Work Items

Responsibility Due Date

5.3.	FY23 CIP Final Application & Instructions	Committee	Apr 2021
5.4.	Future CIP Application Issues		TBD
5.4.1.	Space Allocation Issues	Dept	TBD
5.4.1.1.	Analyze and Make Recommendation to Committee	Dept	TBD
5.4.1.2.	Manage Regulation Development and Implementation	Dept	TBD
5.4.2.	Projected Unhoused (erosion/environmental factors)	Dept	TBD
5.4.3.	Total Point Balance Review	Dept	TBD

6. CIP Approval Process Recommendations – [(b)(7)]

6.1.	Publication Updates		
6.1.1.	Program Demand Cost Model for Alaskan Schools	Dept	Annually, May
6.1.2.	Alaska School Facilities PM Handbook		Dec 17– Dec 21
6.1.2.1.	Preventive Maintenance Handbook – Progress	Dept	July 2021
6.1.2.2.	Preventive Maintenance Handbook – Public Comment	Committee	Sept 2021
6.1.2.3.	Preventive Maintenance Handbook – Final	Committee	Dec 2021
6.1.3.	Site Selection Criteria and Evaluation Handbook		
6.1.3.1.	Site Selection Handbook – Validation	Dept	Apr 2021
6.1.3.2.	Site Selection Handbook – Initial	Dept	Jul 2021
6.1.3.3.	Site Selection Handbook – Final	Committee	Sep 2021
6.1.4.	Guidelines for School Equipment Purchases		
6.1.4.1.	Guidelines for School Equipment Purchases – Validation	Dept	Apr 2021
6.1.4.2.	Guidelines for School Equipment Purchases – Initial	Dept	May 2021
6.1.4.3.	Guidelines for School Equipment Purchases – Public Cmt	Committee	Sep 2021
6.1.4.4.	Guidelines for School Equipment Purchases - Final	Committee	Dec 2021
6.2.	New Publications		
6.2.1.	School Construction Standards Handbook (see 3.3)		May 17-Apr 21
6.2.1.1.	Construction Standards Handbook – Progress	Committee	Apr 2021
6.2.1.2.	Construction Standards Handbook – Progress	Dept/Subcmte	Jul 2021
6.2.1.3.	Construction Standards Handbook – Final Draft	Committee	Sep 2021
6.2.1.4.	Construction Standards Handbook – Final	Dept	Nov 2021
6.2.1.5.	Construction Standards Handbook – Final	Committee	Dec 2021
6.3.	Regulations		
6.3.1.	Baseline Design Ratios (see item 3.5.2)	Dept (w/Cmte)	
6.3.1.1.	Draft Regulation	Dept (w/Cmte)	TBD
6.3.1.2.	SBOE Public Comment on Regulation	Dept	TBD
6.3.1.3.	Review Public Comments from SBOE Comment Period	Committee	TBD
6.3.2.	Reuse of School Plans and Systems (see item 4.2)	Dept (w/Cmte)	
6.3.2.1.	Draft Regulation	Dept (w/Cmte)	TBD
6.3.2.2.	SBOE Public Comment on Regulation	Dept	TBD
6.3.2.3.	Review Public Comments from SBOE Comment Period	Committee	TBD

7. Energy Efficiency Standards – [(b)(8)]

No current items.

Projected Meeting Dates

April 14-15, 2021 - Teleconference

- Final CIP Lists
- Consultant Review of Escalation Model School Elements
- FY23 Draft CIP Application and Instructions
- Final All Ratios (O:EW, V:GSF, V:ES)
- Construction Standards Handbook (progress)
- Site Selection Handbook – [Validation](#)

BR&GR 2021 Work Items**Responsibility Due Date**

July 2021 TBD - Teleconference

- Construction Standards Handbook (progress)
- [Site Selection Handbook – Final Draft \(to Public Comment\)](#)
- School Equipment Purchases– Initial [Draft](#)
- Preventive Maintenance Handbook (progress)

September 2021 TBD - Teleconference

- Briefing Paper on Codifying Reuse of Plans/Systems Policy in Regulation
- Construction Standards Handbook – Final Draft (to Public Comment)
- School Equipment Purchases– Final [Draft \(to Public Comment\)](#)
- Site Selection Handbook – Final
- Preventive Maintenance Handbook – Final Draft (to Public Comment)

[December 2021 TBD – In Person](#)

- [Approve FY22 Initial Lists](#)
- [Construction Standards Handbook – Final](#)
- [School Equipment Purchases– Final](#)
- [Preventive Maintenance Handbook – Final](#)

Work Topics for the BR & GR Committee
AS 14.11.014

~~Updated~~ Proposed: 12/19/17 ~~3/17/2021~~

BR&GR Work Items – Master List	Responsibility	Due Date
1. CIP Grant Priority Review – [(b)(1)]		
1.1. FYXX MM & SC Grant Fund Initial Lists (4 AAC 31.022(a)(2)(B))	Committee	Annually
1.2. FYXX MM & SC Grant Fund Reconsideration Lists	Committee	TBD
1.3. FYXX MM & SC Grant Fund Final Lists	Committee	TBD
2. Grant & Debt Reimbursement Project Recommendations – [(b)(2)]		
2.1. Six-year Capital Plan (14.11.013(a)(3); 4 AAC 31.022(2)(A))	Dept	Annually
2.1.1. Statewide Inventory	Dept	TBD
2.1.2. Statewide Facility Appraisal	Dept	TBD
2.1.3. Statewide Condition Survey	Dept	TBD
2.1.4. Renewal & Replacement Database	Dept	TBD
2.1.5. Presentation by ASD on Facility Condition Indexing	Committee	TBD
2.2. School Capital Funding	Dept (w Cmte)	TBD
2.2.1. Review Process & Funding Streams for Rural & Urban Projects	Dept	TBD
2.3. State’s Role in Design & Construction		
2.3.1. In Organized City/Boroughs	Dept	TBD
2.3.2. In REAAs	Dept	TBD
3. Construction Standards for Cost-effective Construction – [(b)(3)]		
3.1. DEED Cost Model	Dept	2018
3.1.1. Model School Analysis (Allowable Costs)	Committee	Annually, Apr
 3.1.2. Site Work + Major Maintenance Line Items	Dept	TBD
3.2. Cost Standards	Dept	TBD
3.2.1. Cost/Benefit, Cost Effectiveness Guidelines	Dept	TBD
3.2.2. Life Cycle Cost Guidelines	Dept	TBD
3.3. Commissioning	Committee	2018
3.3.1. Project Categories Requiring Commissioning	Committee	2018
3.3.2. Commissioning Agent Qualifications	Committee	2018
3.3.3. System Requirements for Commissioning	Committee	2018
3.4. Materials/Systems Analysis	Committee	TBD
3.4.1. Model School Building Systems	Dept	2018
3.4.2. School District Building Systems	Dept	TBD
3.5. Design Ratios	Committee	TBD
3.5.1. <u>Building System Ratios (“Micro Ratios”) Climate Zones</u>	Committee	TBD
 3.5.2. Opening to Exterior Wall	Committee	TBD
 3.5.3. Footprint Area to Gross Square Feet	Committee	TBD
 3.5.4. Building Volume to Net Floor Area	Committee	TBD
 3.5.5. Building Volume to Exterior Surface Area	Committee	TBD
3.6. Construction	Committee	TBD
3.6.1. Construction Duration		
3.6.2. Value Analysis		
3.6.3. Component Use and Specifications		
4. Prototypical Design Analysis – [(b)(4)]		
4.1. SB87 – Amendments to 14.11.014(b)(4)	Committee	TBD

5. CIP Grant Application & Ranking – [(b)(5) & (6)]

5.1.	FYXX CIP Draft Application & Instructions (14.11.013)	Dept	Annually
5.2.	FYXX CIP Final Application & Instructions	Committee	Annually
5.3.	Separate School Construction and Major Maintenance Applications	Committee	
5.4.	Separate Grant and Debt Applications	Committee	2019
5.5.	Appendix D Update – Type of Space Added or Improved	Committee	2019
5.5.1.	New Classifications & Terminology		
5.6.	Expand Cond Survey Requirements Beyond Rehabilitations	Committee	2018
5.7.	Facility Condition Survey Minimum Standard	Dept (w Cmte)	2018
5.8.5.6.	Review Issues with “Primary Purpose” Designations		
5.8.1.5.6.1.	Playgrounds, Parking Lots, etc.		
5.9.5.7.	Rural Definition For Art (see Instructions, Appx C)	Committee	TBD
5.10.5.8.	Space Allocation Issues (4 AAC 31.020(c))	Committee	TBD
5.10.1.5.8.1.	Career Tech		
5.10.2.5.8.2.	Resource Rooms and Special Ed		
5.10.3.5.8.3.	Space Related to Security		
5.10.4.5.8.4.	Net vs. Gross		
5.10.5.5.8.5.	Electrical/Mechanical Space		
5.10.6.5.8.6.	Storage in Remote Areas		
5.10.7.5.8.7.	“Found Space” (cost-effectiveness test)		
5.10.8.5.8.8.	Replacement Schools Clarifications		
5.10.9.5.8.9.	Non-school Facilities		
5.10.10.5.8.10.	Educational Adequacy/Space Increase		
5.10.11.5.8.11.	Community Use Space		
5.10.12.5.8.12.	Pre-school		
5.10.13.5.8.13.	Out-of-District Enrollment (vocational/charters, etc.)		
5.10.14.5.8.14.	Second Attendance Area Schools		
5.10.15.5.8.15.	Enrollment Projection Models		
5.8.16.	Standard Gym Size		
5.10.16.5.8.17.	Projected Unhoused (environmental/erosion timeline)		
5.11.5.9.	Rater’s Guide Matrices		
5.11.1.5.9.1.	Life Safety/Code/Protection of Structure Matrix	Dept (w/Cmte)	Mar 2018
5.11.2.5.9.2.	Emergency Points Matrix	Dept (w/Cmte)	TBD
5.12.5.10.	Scoring Category & Weighting Factors		
5.12.1.5.10.1.	Weighting for Maintenance	Dept (w/Cmte)	TBD
5.12.2.5.10.2.	Weighting for Type of Space	Dept (w/Cmte)	TBD
5.12.3.5.10.3.	Weighting for Emergency	Dept (w/Cmte)	TBD
5.12.4.5.10.4.	Weighting for Life Safety/Code	Dept (w/Cmte)	TBD

6. CIP Approval Process Recommendations – [(b)(7)]

6.1.	Publication Updates (4 AAC 31.020(a))		
6.1.1.	Program Demand Cost Model for Alaskan Schools	Dept	Annually
6.1.2.	Capital Project Administration Handbook	Dept	2022
6.1.3.	Alaska School Facilities Preventive Maintenance. Handbook	Dept (w Cmte)	2018 2021
6.1.4.	Project Delivery Method Handbook	Dept	2022
6.1.5.	Cost Format – <i>EED Standard Construction Cost Estimate</i>	Dept	2018 2025
6.1.6.	Space Guidelines Handbook	Dept (w Cmte)	TBD
6.1.7.	Life Cycle Cost Analysis Handbook	Dept (w Cmte)	2018 2023
6.1.8.	Swimming Pool Guidelines	Dept (w Cmte)	2019 2024
6.1.9.	Guide for School Facility Condition Surveys	Dept (w Cmte)	2019 2025
6.1.10.	A Handbook to Writing Educational Specifications	Dept (w Cmte)	2020 2025
6.1.11.	Site Selection Criteria and Evaluation Handbook	Dept	2020 2021
6.1.12.	Facility Appraisal Guide	Dept	TBD
6.1.13.	Guidelines for School Equipment Purchases	Dept (w Cmte)	2021
6.1.13.6.1.14.	Architectural and Engineering Services for School Facilities	Dept	2023

6.2. New Publications

6.2.1.	School Design & Construction Standards	Dept (w Cmte)	2018 <u>2021</u>
6.2.2.	Architectural and Engineering Services for School Facilities	Dept	2020
6.2.3.	Outdoor Facility Guidelines for Secondary- Schools	Dept	TBD
6.2.4.	Renewal & Replacement Guideline	Dept	TBD

6.3. Regulations

6.3.1.	Commissioning Requirements	Dept (w Cmte)	2018
6.3.2. <u>6.3.1.</u>	<u>CIP "Primary Purpose" (see 5.6 Primary Purpose)</u>	Dept (w Cmte)	TBD
6.3.3.	Facility "Clean-up" Reg Project	Dept (w/Cmte)	2018

6.4. Online Application

Dept TBD

6.5. Database Review

6.5.1.	Consolidate Into Single Database	Dept	TBD
6.5.2.	Coordination With Unity Project	Dept	TBD
6.5.3.	ADM By Grade Level	Dept (SERRC)	TBD

7. Energy Efficiency Standards – [(b)(8)]

7.1.	Reporting Requirements	Dept (w Cmte)	TBD
<u>7.2.</u>	<u>Energy Modeling</u>	Dept (w Cmte)	TBD
7.2. <u>7.3.</u>	<u>Retro-Commissioning Evaluation Tool</u>	<u>Dept (w Cmte)</u>	<u>2020</u>



Bond Reimbursement and Grant Review Committee

As of: March 23, 2021

Member	Appointed	Re-appointed	Term Expires
Heidi Teshner Commissioner or Commissioner's Designee	Chair Commissioner's Designee	--	--
Rep. Dan Ortiz House of Representatives Member	Appointed by Speaker	--	--
Sen. Roger Holland Senate Member	Appointed by President	--	--
Randy Williams Professional Degrees & Experience in School Construction	03/01/2019		02/28/2023
Dale Smythe Professional Degrees & Experience in School Construction	03/01/2017	03/01/2021	02/28/2025
James Estes Experience in Urban or Rural School Facilities Management	03/01/2019		02/28/2023
Kevin Lyon Experience in Urban or Rural School Facilities Management	03/01/2021		02/28/2025
David Kingsland Public Representative	03/01/2019		02/28/2023
Branzon Anania Public Representative	03/01/2021		02/28/2025

Members appointed by commissioner unless noted. See AS 14.11.014 and 4 AAC 31.087.