Bond Reimbursement and Grant Review Committee Meeting Agenda

December 1, 2022
1:00 pm – 4:00 pm

Audio Teleconference available through free online Zoom application.
Join Online – Meeting Number: 848 9715 2242
Join by Phone – Toll Call-in number (US/Canada): 1 (253) 215-8782; Meeting: 848 9715 2242

Chair: Elwin Blackwell

Thursday, December 1, 2022

Agenda Topics

1:00 – 1:05 PM	Committee Preparation • Call-in, Roll Call, Introductions; Chair's Opening Remarks • Agenda Review/Approval • Past Meeting Minutes Review/Approval
1:05 – 1:15 PM	Public Comment (additional comments related to agenda topics may be solicited throughout the meeting)
1:15 – 1:40 PM	Department Briefing • FY2024 CIP Report ▪ Summary Statistics ▪ Initial Priority Lists • Statewide Six-year Plan • School Capital Project Funding Report • Preventive Maintenance Update (PM State of the State)
1:40 – 2:10 PM	Briefing Papers • FY2024 CIP Issues and Clarifications
2:10 – 2:30 PM	Subcommittee Reports • Design Ratios • Model School ▪ Action Item: motion to dissolve • School Space
2:30 – 2:40 PM	BREAK
2:40 – 3:10 PM	Publications • *Professional Services for School Capital Projects* • *Alaska School Facilities Preventive Maintenance Handbook (final)* Action Item: • Approve for public comment o *Professional Services for School Capital Projects* • Approve for Department use o *Alaska School Facilities Preventive Maintenance Handbook*
3:10 – 3:35	BR&GR Workplan Review & Update
3:35 – 3:45	Committee Member Terms & Appointment Process
3:45 – 3:50	Set Next Meeting Date
3:50 – 4:00 PM	Committee Member Comments
4:00 PM	Adjourn

BOND REIMBURSEMENT & GRANT REVIEW COMMITTEE
Thursday, September 1, 2022 – 1:30 p.m. – 3:15 p.m.

Held via Videoconference

DRAFT MINUTES FOR APPROVAL

Committee Members Present	**Staff**	**Additional Participants**
Elwin Blackwell, Chair	Tim Mearig	Caroline Hamp for Rep. Ortiz
Dale Smythe	Lori Weed	Clay Anderson, Fairbanks Boro.
James Estes	Sharol Roys	David Moore, Architects Alaska
Kevin Lyon	Wayne Norlund	Jeff Good, Wrangell Boro.
Branzon Anania	Wayne Marquis	Edie Knapp, Anchorage SD
		Kim Sweet, Lower Kuskokwim SD

September 1, 2022
CALL TO ORDER and ROLL CALL

Chair Elwin Blackwell called the meeting to order at 1:32 p.m. Roll call was taken, and a quorum was established to conduct business. Representative Ortiz, Senator Holland, Randy Williams, and David Kingsland were excused.

CHAIR'S OPENING REMARKS

Chair Blackwell welcomed everyone and thanked the members for attending the meeting today and said he appreciated the committee's work.

AGENDA REVIEW / APPROVAL

Chair Blackwell requested changes to the agenda as follows:

- Change the chair from Heidi Teshner to Elwin Blackwell;
- Add a position paper for design ratios; and
- Add "Set Next Meeting Date".

Kevin Lyon **MOVED** to approve the agenda as amended, **SECONDED** by James Estes. Hearing no objection, the motion **PASSED**.

PAST MEETING MINUTES REVIEW / APPROVAL – June 27, 2022

Dale Smythe **MOVED** to approve the minutes from June 27, 2022 as presented, **SECONDED** by James Estes. Hearing no objection, the motion **PASSED**.

PUBLIC COMMENT

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

PROTOTYPICAL DESIGN COMMITTEE POSITION PAPER UPDATE

Wayne Norland explained that, during the last meeting, the committee authorized changes in the guidelines to be sent out for public comment. The comments received were mostly directed toward what was removed from the previous version, and the department has prepared some

draft responses to the comments. No further changes are proposed. This new version focuses on the CIP application, and now the committee must decide whether the draft responses should be accepted and the guidelines approved, or propose some alternatives.

Dale Smythe asked if there was any consistent public comment and if there are proposed changes that would be an option. Wayne Norland stated that pages 18 and 19 of the packet show the proposed revisions, pages 16 and 17 show the comments, and there are no further revisions proposed at this time.

Tim Mearig stressed that this set of guidelines is a committee document, not one from the department. Kevin Lyon asked if the department has seen plans being forwarded as prototypical that are questionable. Tim said that was not the focus of the comments, which were more in the line of who determines what is a good prototypical design and what is the evaluation criteria.

Branzon Anania **MOVED** that the committee approve the proposed response to the public comments for the Guidelines for Prototypical Design as presented and that the committee approve proposed revision of the Guidelines for Prototypical Design, **SECONDED** by Dale Smythe. Hearing no objection, the motion **PASSED** by unanimous consent.

PROJECT DELIVERY METHOD HANDBOOK

Tim Mearig stated that there were a few changes in regulation that needed to have corresponding changes to this publication, so this is basically a technical update with some changes to checklists to make the process and the state's evaluation criteria clearer.

Dale Smythe asked if there were any public comments to the handbook, how long the handbook has been available for use, and if there were any edits foreseen from recent construction challenges. Tim Mearig replied that the publication is about 20 years old and has been consistently updated through the years. This handbook arose from concerns the state had regarding the way people were approaching design-build, which were not prohibited under regulation, but neither was there great guidance.

Wayne Norlund said that the submittals for alternate project delivery for the past year have been well supported and followed the direction of the handbook. He likes the addition of the department's checklist at the end to allow people to make sure they have included everything required. He mentioned that he had not seen anyone using the template (revised in this edition from MSPublisher to MSWord).

Dale Smythe **MOVED** that the committee approve the department's proposed update of the *Project Delivery Method Handbook* for issuance and use by the department, **SECONDED** by Kevin Lyon. Hearing no objection, the motion **PASSED** by unanimous consent.

David Moore asked what the effective date would be of the implementation of the handbook. Tim Mearig replied that he thought the changes had to be approved by the state board as a regulation change. Lori Weed said that she did not know if it is specifically cited in regulation, but more pertinent is that nothing in the review or evaluation processes changed in this edition.

Elwin Blackwell said that if it did have to go before the state board that it could be several months before it becomes effective.

PREVENTIVE MAINTENANCE HANDBOOK

Tim Mearig stated that this publication was last amended in 1999, and amendments have been brought before the committee many times since March of 2018. The structure of the current edition sets out the five major areas: Maintenance management, energy management, custodial program, training, and capital planning. Each of those areas is further broken down into three required areas of development, implementation, and actions required to sustain it. Some case studies are included in the document, and several areas that were not well developed were removed. Some comments were received during the previous comment period that ended in May, and draft responses are provided for committee review. He encouraged committee members to take the time to read the comments.

Dale Smythe asked if the removed content pertained to commissioning and retro-commissioning and requested that Tim talk a little bit about that. Tim stated that he was hoping to have some Alaskan examples of that, but there haven't been any of those kinds of projects in Alaska.

There are helpful appendices in the back. Appendix B is a list of anticipated life expectancies that aligns with a renewal and replacement schedule published by the department. That appendix will be updated prior to any public comment period.

Branzon Anania asked how the life expectancy figures were determined. Tim replied that there are industry standards and also just the experience of the collective wisdom of people in the industry, and there are also corresponding values reflected in the CIP application. Kevin Lyon commented that the numbers seem to be appropriate as the average age of buildings in his district is 46 years.

Wayne Marquis mentioned the diversity and challenges for each of the districts according to size and location, and it is challenging to develop a publication that is useful for all of the districts.

James Estes **MOVED** that the committee approve the department's final draft of the *Alaska School Facilities Preventive Maintenance & Facility Management Handbook* for a final period of public comment, **SECONDED** by Branzon Anania. Hearing no objection, the motion **PASSED** by unanimous consent.

POSITION PAPER FOR DESIGN RATIOS

Chair Blackwell stated that this position paper was sent to committee members a few days ago and asked Tim Mearig to explain. Tim Mearig said that completion of this paper has been stalled because the more detail that is received, the less clear things become in establishing the standards. He believes that the ratios in the document now are acceptable ranges for building cost-effective and efficient schools, and the final product is from the consultant running energy modeling and cost analyses and from Tim's amalgamation of information.

Two options identified were to either request DEED Facilities staff prepare draft language for review by the BRGR in December to incorporate O:EW, V:GSF and V:ES in regulation or direct the Design Ratios Subcommittee to conduct a validation and analysis of the proposed design ratios (targets and ranges) and prepare a summary report for review by the BRGR in December.

Dale Smythe suggested offering the ratios for public comment and have some language in the implementation of those that allows the design team to prove current design meets the intent. Tim supports the idea that the regulations allow a project to be evaluated under specific energy modeling that would result in an equally efficient building. He supports the opportunity to have a variance if it could be shown that the building was performing.

Branzon Anania asked if the envelope ratios could be addressed in the value-added analysis. Tim said that there is a statute that requires the department to establish design ratios for efficient design, and the normal way of doing that is through regulation. From a facility management perspective, it is very important to have something to show the people who are making funding decisions that there is a set of criteria for efficient design.

Dale Smythe asked what the next step would be in this process. Tim replied that he is not recommending it go to a comment period as it is laid out in the paper but would go to comments after some development of how it would look in regulation. Either of the two options suggest there is a path toward public comment. Dale was in favor of having the subcommittee review it, and Kevin Lyon agreed.

Chair Blackwell asked if there was consensus for choosing Option 2, noting that Dale and Kevin had already alluded to going down that path. Both Branzon Anania and James Estes were in agreement. Dale Smythe said he would commit to having a plan for December before the end of September.

SET NEXT MEETING DATE

Committee members discussed potential meeting dates for a virtual meeting in December and addressed the potential for the State Board of Education meeting and the A4LE conference to conflict with any dates.

Lori Weed will send a committee poll asking about December 1st, pending no A4LE meeting, or the 14th as the backup option.

COMMITTEE MEMBER COMMENTS

Chair Blackwell thanked the committee members and the people who tuned in to listen. He thanked Dale Smythe for taking on the design ratio project and working on that in the next several weeks.

ADJOURN

Dale Smythe **MOVED** to adjourn the meeting. Hearing no objections, the meeting adjourned at 3:15 p.m.

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Education & Early Development
FINANCE & SUPPORT SERVICES
PO Box 110500
Juneau, Alaska 99811-0500
Telephone: 907.465.6906

To: Bond Reimbursement & Grant Review Committee
From: School Facilities
Date: December 1, 2022

DEPARTMENT BRIEFING

Initial CIP Lists

The FY2024 initial CIP lists are included in the packet. The department provided a memo to the school superintendents that announced the availability of the lists. The department also transmitted the lists to the governor's office for use in developing the FY2024 capital budget.

Following are some year-to-year initial list statistics:

	FY2022	FY2023	FY2024
Districts Submitting Applications	30	29	29
Number of Applications Submitted	125	113	118
Number of Applications Scored	70	72	84
Number of Applications Reused	55	41	34
Number of Applications Ineligible	0	3	4
Number of Applications with a Change in List	4	1	8
Number of Applications with a Budget Adjustment	28	36	48
Number of Projects on the Major Maintenance List	108	97	97
State Share Request on Major Maintenance List	$186,258,645	$196,637,613	$215,103,328
Number of Projects on the School Construction List	17	13	17
State Share Request on School Construction List	$162,305,916	$182,683,686	$195,666,783

Reconsideration requests were due to the department on Wednesday, November 30, 2022. To assist districts with the reconsideration process, the department held an informational question and answer videoconference on November 10. It was attended by four persons other than Facilities staff; feedback was positive.

Issues that arose in this year's application cycle are addressed in a separate FY24 CIP Department Briefing included in the packet. Also in the packet is the revised statewide six-year plan based on compiled district reports, which shows a six-year planned project need of $1.5 billion.

Per AS 14.11.014(b)(2), the committee is to make recommendations to the State Board of Education & Early Development (SBOE) concerning school construction grants. Recommended Motion to support the process under which the application and support materials and the resulting lists were developed:

> I move that the Bond Reimbursement and Grant Review Committee recommend the State Board of Education & Early Development adopt the department's FY2024 list of projects eligible for funding under the School Construction Grant Fund and the Major Maintenance Grant Fund.

School Capital Project Funding Report

In the 32nd Legislature's second session, the legislature passed a combined operating and capital budget with appropriations to the Major Maintenance, School Construction, and REAA Grant Funds. The original Major Maintenance Grant Fund appropriation of $100 million was partially vetoed by the governor to $37,500,000. The REAA Fund received an FY2023 fund capitalization of $32,784,000; additionally, supplemental fund capitalizations for the four years that had received vetos were also received in the amounts of $17,119,000 (FY22), $36,739,000 (FY21), $19,694,500 (FY20), and $10,410,000 (FY17) for a total of $116,746,500 appropriated to the REAA Fund. Of that funding, $54,895,500 was appropriated to the School Construction Grant Fund and allocated to the William N. Miller K-12 Memorial School Replacement, Napakiak project.

From the above appropriations and existing fund balances, the department awarded grants to 3 school construction projects (ranks 1, 2, 4) from the REAA Fund and 21 major maintenance projects from a combination of the MM Fund and REAA Funds. See the FY2023 Allocations tables included with the packet for a list of projects funded. A sheet on the CIP grant request and funding history FY14-FY24 is also included for reference.

As debt reimbursement projects reach completion, the recipients may decide to pay down the bond principal or redirect the remaining unspent balance to a voter- and DEED-approved project, per 4 AAC 31.064. The department approved one FY22 project (Ketchikan) totaling $402,069. The combined operating and capital budget fully funded the FY2023 municipal debt reimbursement at $78,975,672 and made supplemental appropriations for the four prior vetoes in the amounts of $48,594,460 (FY22), $100,154,200 (FY21), $47,987,000 (FY20), and $24,104,000 (FY17).

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

All site visits were back to in-person for this past cycle. The Preventive Maintenance State of the State Report was updated on August 15, 2022, and is included in the packet with a chart showing compliance history. For the current FY24 CIP cycle, 48 of 53 school districts have certified preventive maintenance programs.

Districts not currently certified include:

- Aleutian Region
- Chatham
- Hydaburg City
- Lake & Peninsula Borough
- Skagway Borough

Eight districts provided documentation in support of a compliant plan between June 1 and August 1 and were granted provisional certification. Districts granted provisional certification and working with the department to develop a full year of evidence of plan adherence include:

- Alaska Gateway
- Bristol Bay Borough
- Craig City
- Kake City
- Klawock City
- Nenana City
- Yakutat Borough
- Yukon Flats

Problem areas continue to be maintenance management, tracking and reporting energy consumption, and maintaining maintenance and custodial personnel training plans and records.

In-person site visits for current fiscal year 2023 are scheduled to take place between November and April for the following school districts:

- Anchorage
- Chugach
- Fairbanks Borough
- Galena City
- Kenai Peninsula Borough
- North Slope Borough
- Pelican City
- Tanana City
- Valdez City

Regulations Update

Publication Updates
Regulation changes to 4 AAC 31.020(a) and 4 AAC 31.900(2) updating references to the *Site Selection Criteria and Evaluation Handbook*, approved by BRGR 9/8/21, the *Guidelines to School Equipment Purchases*, approved by BRGR 12/4/21, and the *Swimming Pool Guidelines for Educational Facilities*, approved by BRGR 7/18/2019, were adopted by the State Board of Education and Early Development at its 3/2/2022 meeting. The regulations were approved and filed by the Lt. Governor August 26, 2022, and effective September 25, 2022.

Cost Model Update

A proposal request is issued to HMS, Inc. at the end of December, annually, for an update to the DEED Program Demand Cost Model for Alaskan Schools. This will be the 22nd Edition. As part of this edition the geographic area cost factors will be updated (Instructions to the Cost Model Table 1). The geographic area cost factors were last updated in 2018, when a matrix to evaluate the individual cost factors was developed. In this cycle, we will also be working to further conform the cost model to the *Alaska School Design & Construction Standards Handbook*, adopted by the Committee as part of the FY2024 CIP application.

For the 22nd Edition, we continue to see the Committee as handling the review of the *Escalation Model School* file as in the past four years. This file includes not only price increases for labor and materials but also changes to school systems and components. The Committee has established a solid track record on vetting any adjustments of this type to the Escalation Model School. This work will dovetail with the standards conformance work mentioned in the earlier paragraph.

Special Projects

Capital Needs Forecast Database
The department continues to work with Inzata Analytics to develop a tool to establish a data-driven statewide need for capital renewal and new construction on an annual basis and provide a dashboard to align funding programs with that need. Phase 1, consisting of requirements verification and validation, was completed in July 2022. Phase 2, which was to complete a working beta version of the tool, was substantially completed on November 30th. On that date, Inzata provided the beta version which the department is now in the process of testing and evaluating. Phase 3, training and documentation, is scheduled to complete in May 2023. This approx. $200,000 investment was funded by the legislature in FY2022.

Publications Update

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

1. **Alaska School Facilities Preventive Maintenance Handbook** (1999) *[Proposed update 2022]*
2. Professional Services for School Capital Projects (2018) *[Proposed update 2023]*
3. **Life Cycle Cost Analysis Handbook** (2018) *[Proposed Update 2023]*
4. Renewal & Replacement Schedule (2001)
5. **Space Guidelines Handbook** (1996)
6. Facility Appraisal Guide (1997)
7. Outdoor Facility Guidelines for Secondary Schools (new)
8. **Swimming Pool Guidelines** (2019)
9. **A Handbook to Writing Educational Specifications** (2019)
10. **Guide for School Facility Condition Surveys** (2020)
11. Cost Format – *EED Standard Construction Cost Estimate Format* (2020)
12. Site Selection Criteria & Evaluation Handbook (2021)
13. **Guidelines for School Equipment Purchases** (2022)
14. **School Design and Construction Standards Handbook** (2022)
15. Capital Project Administration Handbook (2022)
16. **Project Delivery Method Handbook (2022)**

Professional Services for School Capital Projects
Included in the packet is proposed initial draft of the *Professional Services for School Capital Projects* to go out for public comment.

Alaska School Facilities Preventive Maintenance Handbook
Included in the packet is a proposed final draft of the *Alaska School Facilities Preventive Maintenance Handbook* for publication.

Department Staffing Update

The Technical Architect/Engineer (Facilities Manager), Tim Mearig, retired from state service on November 30, 2022. Tim contributed greatly to DEED and Facilities during his two tenures and will be missed.

We are excited to welcome Joseph Willhoite to the team as the new Facilities Manager.

Alaska Department of Education and Early Development
FY2024 Capital Improvement Projects
School Construction Grant Fund

Initial List

Nov 5 Rank	School District	Project Name	Amount Requested	Eligible Amount	Prior Funding	DEED Recommended Amount	Participating Share	State Share	Aggregate Amount
1	Lower Kuskokwim	Newtok Relocation/Replacement K-12 School, Mertarvik	$57,525,549	$81,466,239	$25,000,000	$56,466,239	$1,129,325	$55,336,914	$55,336,914
2	Lower Kuskokwim	Anna Tobeluk Memorial K-12 School Renovation/Addition, Nunapitchuk	$50,578,614	$46,616,611	$0	$46,616,611	$932,332	$45,684,279	$101,021,193
3	Northwest Arctic Borough	Deering K-12 School Renovation/Addition	$41,177,097	$34,544,603	$0	$34,544,603	$6,908,921	$27,635,682	$128,656,875
4	Anchorage	Homestead Elementary School Safety Improvements	$5,369,344	$5,369,344	$0	$5,369,344	$1,879,270	$3,490,074	$132,146,949
5	Bering Strait	Brevig Mission K-12 School Addition	$31,768,032	$29,361,625	$0	$29,361,625	$587,232	$28,774,393	$160,921,342
6	Hoonah City	Hoonah School Playground Improvements	$227,747	$227,747	$0	$227,747	$79,711	$148,036	$161,069,378
7	Ketchikan Borough	Valley Park Complex Upgrades	$336,403	$207,986	$0	$207,986	$72,795	$135,191	$161,204,569
8	Anchorage	Secure Vestibules, Group 3, 5 Sites	$9,036,461	$9,036,461	$0	$9,036,461	$3,162,761	$5,873,700	$167,078,269
9	Anchorage	Secure Vestibules, Group 2, 3 Sites	$881,235	$816,985	$0	$816,985	$285,945	$531,040	$167,609,309
10	Lower Kuskokwim	Water Storage and Treatment, Kongiganak	$8,286,027	$4,069,731	$0	$4,069,731	$81,395	$3,988,336	$171,597,645
11	Anchorage	Secure Vestibules, Group 1, 3 Sites	$1,085,084	$1,085,084	$0	$1,085,084	$379,779	$705,305	$172,302,950
12	Ketchikan Borough	Playground Equipment and Surface Upgrades, 3 Sites	$439,846	$405,655	$0	$405,655	$141,979	$263,676	$172,566,626
13	Kenai Peninsula Borough	Kenai Middle School Security Remodel	$1,753,359	$1,753,359	$0	$1,753,359	$613,676	$1,139,683	$173,706,309
14	Mat-Su Borough	Mat-Su Central Replacement Facility	$24,230,364	$24,230,364	$0	$24,230,364	$8,480,627	$15,749,737	$189,456,046
15	Mat-Su Borough	District Athletic Field Upgrades	$10,088,661	$7,773,555	$0	$7,773,555	$2,720,744	$5,052,811	$194,508,857
16	Fairbanks Borough	University Park Elementary Site Improvements	$2,002,757	$1,156,684	$0	$1,156,684	$404,839	$751,845	$195,260,702
17	Fairbanks Borough	West Valley High School Auditorium Upgrade	$1,209,046	$624,740	$0	$624,740	$218,659	$406,081	$195,666,783
		Totals:	**$245,995,626**	**$248,746,773**	**$25,000,000**	**$223,746,773**	**$28,079,990**	**$195,666,783**	

Alaska Department of Education and Early Development
FY2024 Capital Improvement Projects
Major Maintenance Grant Fund

Initial List

Nov 5 Rank	School District	Project Name	Amount Requested	Eligible Amount	Prior Funding	DEED Recommended Amount	Participating Share	State Share	Aggregate Amount
1	Yukon-Koyukuk	Rampart K-12 School Renewal	$9,142,300	$6,742,498	$0	$6,742,498	$134,850	$6,607,648	$6,607,648
2	Bristol Bay Borough	Bristol Bay School Renovations, Phase 2 Supplemental	$1,905,631	$1,905,631	$0	$1,905,631	$666,971	$1,238,660	$7,846,308
3	Iditarod Area	Blackwell K-12 School Renovations, Anvik	$6,165,943	$5,107,092	$0	$5,107,092	$102,142	$5,004,950	$12,851,258
4	Lower Kuskokwim	Nuniwaarmiut K-12 School Wastewater Upgrades, Mekoryuk Supplemental	$834,508	$834,508	$0	$834,508	$16,690	$817,818	$13,669,076
5	Anchorage	Orion Elementary School Roof Replacement	$4,949,761	$4,949,761	$0	$4,949,761	$1,732,416	$3,217,345	$16,886,421
6	Kenai Peninsula Borough	Homer High School Partial Roof Replacement	$3,459,625	$2,945,029	$0	$2,945,029	$1,030,760	$1,914,269	$18,800,690
7	Anchorage	Government Hill Elementary School Roof Replacement	$2,635,154	$2,635,154	$0	$2,635,154	$922,304	$1,712,850	$20,513,540
8	Lower Kuskokwim	Bethel Campus Fire Pump House and Fire Protection Upgrades Supplemental	$252,526	$252,526	$0	$252,526	$5,051	$247,475	$20,761,015
9	Nome City	Nome Beltz Jr/Sr High School Roof Replacement Supplemental	$5,672,472	$5,672,472	$0	$5,672,472	$1,701,742	$3,970,730	$24,731,745
10	Lower Yukon	Hooper Bay K-12 School Exterior Repairs	$2,296,607	$2,296,607	$0	$2,296,607	$45,932	$2,250,675	$26,982,420
11	Anchorage	Stellar Secondary School Fire Alarm	$397,170	$389,096	$0	$389,096	$136,184	$252,912	$27,235,332
12	Anchorage	Birchwood Elementary School Boiler Replacement	$2,076,786	$2,076,786	$0	$2,076,786	$726,875	$1,349,911	$28,585,243
13	Nenana City	Nenana School Flooring and Asbestos Abatement	$516,633	$516,633	$0	$516,633	$25,832	$490,801	$29,076,044
14	Anchorage	Mears Middle School Roof Replacement	$7,081,039	$6,403,930	$0	$6,403,930	$2,241,375	$4,162,555	$33,238,599
15	Denali Borough	Tri-Valley School Partial Roof Replacement	$2,103,851	$2,103,851	$0	$2,103,851	$420,770	$1,683,081	$34,921,680
16	Kake City	Exterior Upgrades - Main School Facilities	$331,134	$331,134	$0	$331,134	$66,227	$264,907	$35,186,587
17	Nome City	Nome Beltz Jr/Sr High School Generator Replacement	$948,937	$948,937	$0	$948,937	$284,681	$664,256	$35,850,843
18	Lower Kuskokwim	Qugcuun Memorial K-12 School Renovation,	$4,471,558	$4,471,558	$0	$4,471,558	$89,431	$4,382,127	$40,232,970
19	Valdez City	Districtwide Generator Replacement	$1,146,505	$1,146,505	$0	$1,146,505	$401,277	$745,228	$40,978,198
20	Ketchikan Borough	Ketchikan High School Security Upgrades	$599,984	$457,087	$0	$457,087	$159,980	$297,107	$41,275,305
21	Anchorage	Homestead Elementary School Roof Replacement	$3,515,805	$3,515,805	$0	$3,515,805	$1,230,532	$2,285,273	$43,560,578
22	Anchorage	King Tech High School Roof Replacement	$3,829,327	$3,829,327	$0	$3,829,327	$1,340,264	$2,489,063	$46,049,641
23	Anchorage	East High School Gym Improvements	$8,726,669	$8,726,669	$0	$8,726,669	$3,054,334	$5,672,335	$51,721,976
24	Kuspuk	Jack Egnaty Sr. K-12 School Roof Replacement, Sleetmute	$742,538	$1,513,970	$0	$1,513,970	$30,279	$1,483,691	$53,205,667
25	Nenana City	Nenana School Boiler Replacement	$209,352	$194,697	$0	$194,697	$9,735	$184,962	$53,390,629
26	Lower Yukon	Marshall K-12 School Emergency Tank Farm Repair	$1,809,501	$1,809,501	$0	$1,809,501	$36,190	$1,773,311	$55,163,940
27	Aleutians East Borough	Sand Point K-12 School Pool Major Maintenance	$102,608	$102,608	$0	$102,608	$35,913	$66,695	$55,230,635

Alaska Department of Education and Early Development
FY2024 Capital Improvement Projects
Major Maintenance Grant Fund

Initial List

Nov 5 Rank	School District	Project Name	Amount Requested	Eligible Amount	Prior Funding	DEED Recommended Amount	Participating Share	State Share	Aggregate Amount
28	Anchorage	North Star Elementary School Roof Replacement	$3,003,681	$3,003,681	$0	$3,003,681	$1,051,288	$1,952,393	$57,183,028
29	Anchorage	Service High School Health and Safety Improvements	$5,462,781	$5,462,781	$0	$5,462,781	$1,911,973	$3,550,808	$60,733,836
30	Haines Borough	Haines High School Roof Replacement	$2,051,991	$1,876,677	$0	$1,876,677	$656,837	$1,219,840	$61,953,676
31	Lower Kuskokwim	Gladys Jung Elementary School Heating Mains	$1,188,713	$1,188,713	$0	$1,188,713	$23,774	$1,164,939	$63,118,615
32	Anchorage	O'Malley Elementary School Renovation	$3,693,410	$3,693,410	$0	$3,693,410	$1,292,693	$2,400,717	$65,519,332
33	Northwest Arctic Borough	June Nelson Elementary School Partial Roof Replacement	$1,751,514	$1,751,514	$0	$1,751,514	$350,303	$1,401,211	$66,920,543
34	Valdez City	Hermon Hutchens Elementary School Partial Flooring Replacement	$419,222	$419,222	$0	$419,222	$146,728	$272,494	$67,193,037
35	Lower Kuskokwim	Akula Elitnauvik K-12 School Renovation, Kasigluk-Akula	$4,975,460	$4,975,460	$0	$4,975,460	$99,509	$4,875,951	$72,068,988
36	Denali Borough	Districtwide Electrical Code Upgrades	$1,291,535	$1,291,535	$0	$1,291,535	$258,307	$1,033,228	$73,102,216
37	Anchorage	Bear Valley Elementary School Domestic Water Replacement	$2,666,958	$2,665,758	$0	$2,665,758	$933,015	$1,732,743	$74,834,959
38	Anchorage	Abbott Loop Elementary School Fire Sprinklers	$2,544,565	$2,313,143	$0	$2,313,143	$809,600	$1,503,543	$76,338,502
39	Haines Borough	Haines High School Locker Room Renovation	$1,371,179	$1,371,179	$0	$1,371,179	$479,913	$891,266	$77,229,768
40	Hoonah City	Hoonah Central Boiler Replacement	$340,053	$340,053	$0	$340,053	$119,019	$221,034	$77,450,802
41	Nome City	Nome Elementary School Fire Alarm Replacement	$529,683	$529,683	$0	$529,683	$158,905	$370,778	$77,821,580
42	Yupiit	Mechanical System Improvements, 3 Schools	$4,734,985	$652,506	$0	$652,506	$13,050	$639,456	$78,461,036
43	Denali Borough	Tri-Valley School Septic System Upgrades	$515,692	$515,692	$0	$515,692	$103,138	$412,554	$78,873,590
44	Alaska Gateway	Tetlin K-12 School Renovation	$2,312,145	$1,866,054	$0	$1,866,054	$37,321	$1,828,733	$80,702,323
45	Lower Yukon	Hooper Bay K-12 School Emergency Lighting and Retrofit	$234,545	$234,545	$0	$234,545	$4,691	$229,854	$80,932,177
46	Alaska Gateway	Tok K-12 School Partial Roof Replacement	$512,791	$512,791	$0	$512,791	$10,256	$502,535	$81,434,712
47	Northwest Arctic Borough	Davis-Ramoth K-12 School Rehabilitation, Selawik	$10,312,923	$10,312,923	$0	$10,312,923	$2,062,585	$8,250,338	$89,685,050
48	Kodiak Island Borough	Main Elementary School Roof Replacement	$1,369,078	$1,369,078	$0	$1,369,078	$479,177	$889,901	$90,574,951
49	Alaska Gateway	Northway K-12 School Mechanical Renovation	$1,195,524	$1,195,524	$0	$1,195,524	$23,910	$1,171,614	$91,746,565
50	Southeast Island	Thorne Bay K-12 School Fire Suppression System	$638,360	$638,360	$0	$638,360	$12,767	$625,593	$92,372,158
51	Lower Yukon	Scammon Bay K-12 School Emergency Lighting and Retrofit	$119,467	$119,467	$0	$119,467	$2,389	$117,078	$92,489,236

Alaska Department of Education and Early Development
FY2024 Capital Improvement Projects
Major Maintenance Grant Fund

Initial List

Nov 5 Rank	School District	Project Name	Amount Requested	Eligible Amount	Prior Funding	DEED Recommended Amount	Participating Share	State Share	Aggregate Amount
52	Yupiit	Tuluksak K-12 School Generator Replacement	$597,214	$152,002	$0	$152,002	$3,040	$148,962	$92,638,198
53	Yukon-Koyukuk	Roof Replacement, 3 Schools	$2,114,243	$1,997,707	$0	$1,997,707	$39,954	$1,957,753	$94,595,951
54	Lower Yukon	Scammon Bay K-12 School Exterior Upgrades	$663,922	$663,922	$0	$663,922	$13,278	$650,644	$95,246,595
55	Southwest Region	Twin Hills K-12 School Renovation	$7,631,386	$6,342,575	$0	$6,342,575	$126,851	$6,215,724	$101,462,319
56	Kodiak Island Borough	Chiniak K-12 School Water Code Compliance and Upgrade	$434,124	$147,968	$0	$147,968	$51,789	$96,179	$101,558,498
57	Lower Kuskokwim	Bethel Regional High School Boardwalk Replacement	$2,562,064	$1,308,239	$0	$1,308,239	$26,165	$1,282,074	$102,840,572
58	Fairbanks Borough	Administrative Center Exterior Renovation	$5,505,076	$2,529,356	$0	$2,529,356	$885,275	$1,644,081	$104,484,653
59	Southeast Island	Thorne Bay K-12 School Mechanical Control Upgrades	$1,404,113	$1,404,113	$0	$1,404,113	$28,082	$1,376,031	$105,860,684
60	Southeast Island	Thorne Bay K-12 School Flooring Replacement	$71,549	$71,549	$0	$71,549	$1,431	$70,118	$105,930,802
61	Sitka Borough	Keet Gooshi Heen Elementary Covered PE Structure Renovation	$643,966	$643,966	$0	$643,966	$225,388	$418,578	$106,349,380
62	Denali Borough	Generator Replacement, 3 Schools	$2,501,045	$2,501,045	$0	$2,501,045	$500,209	$2,000,836	$108,350,216
63	Fairbanks Borough	North Pole High School Renovation	$7,056,943	$6,107,614	$0	$6,107,614	$2,137,665	$3,969,949	$112,320,165
64	Iditarod Area	David-Louis Memorial K-12 School Roof Replacement, Grayling	$3,440,804	$3,440,804	$0	$3,440,804	$68,816	$3,371,988	$115,692,153
65	Kake City	Kake High School Flooring Replacement	$727,285	$727,285	$0	$727,285	$145,457	$581,828	$116,273,981
66	Nome City	Nome Beltz Jr/Sr High and Nome Elementary Schools Secure Access and ADA Improvements	$342,551	$342,551	$0	$342,551	$102,765	$239,786	$116,513,767
67	Nenana City	Nenana School Fire Suppression System Replacement	$1,334,313	$1,334,313	$0	$1,334,313	$66,716	$1,267,597	$117,781,364
68	Saint Marys City	St. Mary's Campus Renewal and Repairs	$1,440,629	$992,463	$0	$992,463	$99,246	$893,217	$118,674,581
69	Fairbanks Borough	Arctic Light Elementary School Exterior Renovation	$8,405,365	$7,547,890	$0	$7,547,890	$2,641,761	$4,906,129	$123,580,710
70	Lower Kuskokwim	Akiuk Memorial K-12 School Renovation, Kasigluk-Akiuk	$3,604,231	$3,604,231	$0	$3,604,231	$72,085	$3,532,146	$127,112,856
71	Southeast Island	Port Alexander K-12 School Domestic Water Pipe Replacement	$279,133	$162,572	$0	$162,572	$3,251	$159,321	$127,272,177
72	Southwest Region	Ekwok K-12 School Renovation	$9,513,926	$7,999,176	$0	$7,999,176	$159,984	$7,839,192	$135,111,369
73	Kenai Peninsula Borough	West Homer Elementary School North Wall Improvement	$595,308	$490,082	$0	$490,082	$171,529	$318,553	$135,429,922
74	Yupiit	Tuluksak K-12 School Fuel Tank Replacement	$4,664,317	$4,664,317	$0	$4,664,317	$93,286	$4,571,031	$140,000,953
75	Kake City	Kake High School Plumbing Replacement	$1,047,345	$1,047,345	$0	$1,047,345	$209,469	$837,876	$140,838,829

Alaska Department of Education and Early Development
FY2024 Capital Improvement Projects
Major Maintenance Grant Fund

Initial List

Nov 5 Rank	School District	Project Name	Amount Requested	Eligible Amount	Prior Funding	DEED Recommended Amount	Participating Share	State Share	Aggregate Amount
76	Ketchikan Borough	Houghtaling Elementary School Transformer Replacement	$61,798	$577,027	$0	$577,027	$201,959	$375,068	$141,213,897
77	Mat-Su Borough	Elevator Code and Compliance Upgrades, 6 Sites	$1,767,988	$1,767,988	$0	$1,767,988	$618,796	$1,149,192	$142,363,089
78	Lower Yukon	LYSD Central Office Renovation	$4,909,855	$4,909,855	$0	$4,909,855	$98,197	$4,811,658	$147,174,747
79	Fairbanks Borough	Lathrop High School Kitchen Upgrade	$3,277,438	$1,649,500	$0	$1,649,500	$577,325	$1,072,175	$148,246,922
80	Juneau Borough	Dzantiki Heen'i Middle School Roof Replacement	$2,650,000	$2,650,000	$0	$2,650,000	$927,500	$1,722,500	$149,969,422
81	Ketchikan Borough	Schoenbar Middle School Gym Floor Replacement	$1,191,191	$731,951	$0	$731,951	$256,183	$475,768	$150,445,190
82	Fairbanks Borough	Tanana Middle School Classroom Upgrades	$10,471,326	$10,471,326	$0	$10,471,326	$3,664,964	$6,806,362	$157,251,552
83	Kake City	Kake High School Gym Floor Replacement	$306,042	$306,042	$0	$306,042	$61,208	$244,834	$157,496,386
84	Fairbanks Borough	Weller Elementary School Classroom Upgrades	$6,573,339	$6,573,339	$0	$6,573,339	$2,300,669	$4,272,670	$161,769,056
85	Mat-Su Borough	Structural Seismic Upgrades, 5 Sites	$13,394,677	$13,394,677	$0	$13,394,677	$4,688,137	$8,706,540	$170,475,596
86	Kenai Peninsula Borough	Seward Middle School Exterior Repair	$896,630	$896,630	$0	$896,630	$313,820	$582,810	$171,058,406
87	Juneau Borough	Riverbend Elementary School Roof Replacement	$2,800,000	$2,800,000	$0	$2,800,000	$980,000	$1,820,000	$172,878,406
88	Mat-Su Borough	Colony and Wasilla Middle Schools Roof Replacement	$5,218,877	$5,218,877	$0	$5,218,877	$1,826,607	$3,392,270	$176,270,676
89	Southwest Region	Aleknagik K-12 School Renovation	$12,409,382	$9,219,351	$0	$9,219,351	$184,387	$9,034,964	$185,305,640
90	Southeast Island	Thorne Bay K-12 School Underground Storage Tank Replacement	$782,932	$782,932	$0	$782,932	$15,659	$767,273	$186,072,913
91	Fairbanks Borough	Pearl Creek Elementary School Classroom	$6,360,238	$6,360,238	$0	$6,360,238	$2,226,083	$4,134,155	$190,207,068
92	Southeast Island	Port Alexander and Thorne Bay K-12 Schools Roof Replacement	$4,575,722	$4,575,722	$0	$4,575,722	$91,514	$4,484,208	$194,691,276
93	Lower Yukon	Kotlik and Pilot Station K-12 Schools Renewal and Repair	$4,854,617	$4,854,617	$0	$4,854,617	$97,092	$4,757,525	$199,448,801
94	Fairbanks Borough	Anne Wien Elementary School Exterior	$7,921,479	$5,974,021	$0	$5,974,021	$2,090,907	$3,883,114	$203,331,915
95	Mat-Su Borough	Ceiling and Sprinkler Seismic Mitigation, 5 Sites	$4,150,251	$4,150,251	$0	$4,150,251	$1,452,588	$2,697,663	$206,029,578
96	Mat-Su Borough	HVAC Control Upgrades, 5 Sites	$10,983,451	$10,983,451	$0	$10,983,451	$3,844,208	$7,139,243	$213,168,821
97	Lower Yukon	Sheldon Point K-12 School Exterior Repairs, Nunam Iqua	$1,973,987	$1,973,987	$0	$1,973,987	$39,480	$1,934,507	$215,103,328
		Totals:	**$303,272,251**	**$277,223,988**	**$0**	**$277,223,988**	**$62,120,660**	**$215,103,328**	

Alaska Department of Education and Early Development
FY2024 Capital Improvement Projects
School Construction and Major Maintenance by Districts

Total Points - Formula-Driven and Evaluative
Initial List

School District	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	Emer-gency	Life/Safety and Code Conditions	Exist-ing Space	Cost Esti-mate	Proj vs Oper Cost	Alter nat-ives	Options	Total Project Points
Alaska Gateway	44	M	Tetlin K-12 School Renovation	30.00	23.00	0.00	10.00	0.00	2.40	0.00	0.00	0.00	10.00	25.00	3.33	2.00	3.00	1.67	3.00	0.00	20.66	0.00	16.00	2.67	0.00	1.67	154.39
Alaska Gateway	46	M	Tok K-12 School Partial Roof Replacement	27.00	11.00	0.00	10.00	0.00	2.40	0.00	0.00	0.00	10.00	25.00	3.33	2.00	3.00	1.67	3.00	0.00	25.00	2.00	14.33	2.33	0.00	11.67	153.73
Alaska Gateway	49	M	Northway K-12 School Mechanical Renovation	24.00	30.00	0.00	10.00	0.00	2.40	0.00	0.00	0.00	10.00	25.00	3.33	2.00	3.00	1.67	3.00	0.00	13.61	0.00	15.67	5.67	0.00	1.33	150.68
Aleutians East Boroı	27	M	Sand Point K-12 School Pool Major Maintenance	30.00	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	168.92
Anchorage	4	C	Homestead Elementary School Safety Improvements	0.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	16.57	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	12.58	2.33	26.00	3.67	0.00	5.00	181.11
Anchorage	8	C	Secure Vestibules, Group 3, 5 Sites	6.00	30.00	0.00	25.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	0.00	6.00	26.33	1.00	3.00	5.67	152.27
Anchorage	9	C	Secure Vestibules, Group 2, 3 Sites	9.00	24.68	0.00	25.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	0.00	6.00	25.67	1.00	3.00	5.67	149.29
Anchorage	11	C	Secure Vestibules, Group 1, 3 Sites	12.00	11.43	0.00	25.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	0.00	6.00	27.00	1.00	3.00	5.67	140.37
Anchorage	5	M	Orion Elementary School Roof Replacement	15.00	30.00	0.00	25.00	0.00	4.61	0.00	0.00	0.00	10.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	18.31	2.33	25.00	5.33	0.00	6.33	186.59
Anchorage	7	M	Government Hill Elementary School Roof Replacement	0.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	0.00	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	27.66	2.00	27.67	3.00	0.00	5.33	180.63
Anchorage	11	M	Stellar Secondary School Fire Alarm	24.00	30.00	0.00	25.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	20.00	0.00	26.33	4.67	0.00	0.00	179.27
Anchorage	12	M	Birchwood Elementary School Boiler Replacement	27.00	30.00	0.00	25.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	3.32	1.67	26.33	5.33	0.00	10.33	178.27
Anchorage	14	M	Mears Middle School Roof Replacement	18.00	24.75	0.00	25.00	0.00	4.61	0.00	0.00	0.00	10.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	9.54	2.00	27.67	4.67	0.00	6.67	177.56
Anchorage	21	M	Homestead Elementary School Roof Replacement	0.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	0.00	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	21.05	1.67	27.00	2.67	0.00	5.33	172.69
Anchorage	22	M	King Tech High School Roof Replacement	0.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	0.00	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	21.35	1.67	27.33	1.67	0.00	5.00	171.98
Anchorage	23	M	East High School Gym Improvements	3.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	0.00	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	20.98	1.33	25.67	3.00	0.00	2.00	170.94
Anchorage	28	M	North Star Elementary School Roof Replacement	0.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	0.00	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	16.34	1.67	26.00	3.00	0.00	5.67	167.63
Anchorage	29	M	Service High School Health and Safety Improvements	0.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	0.00	5.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	20.20	2.67	27.00	2.33	0.00	5.33	167.50
Anchorage	32	M	O'Malley Elementary School Renovation	0.00	30.00	0.00	10.00	0.00	4.63	0.00	0.00	0.00	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	22.84	1.33	27.00	4.67	0.00	7.67	163.47
Anchorage	37	M	Bear Valley Elementary School Domestic Water Replacement	21.00	26.50	0.00	20.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	8.95	0.00	26.67	4.67	0.00	3.00	160.06
Anchorage	38	M	Abbott Loop Elementary School Fire Sprinklers	30.00	30.00	0.00	0.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	31.42	0.00	14.67	1.00	0.00	3.67	160.03
Bering Strait	5	C	Brevig Mission K-12 School Addition	30.00	15.57	0.00	0.00	0.00	2.18	7.89	12.88	21.88	8.00	25.00	2.00	1.00	3.00	1.33	1.00	0.00	5.71	15.00	17.67	0.00	1.33	6.33	177.77
Bristol Bay Borough	2	M	Bristol Bay School Renovations, Phase 2 Supplemental	30.00	30.00	0.00	25.00	0.00	0.89	0.00	0.00	0.00	0.00	30.00	2.00	2.00	3.00	1.67	2.00	0.00	29.69	2.00	28.00	6.33	0.00	10.67	203.25
Denali Borough	15	M	Tri-Valley School Partial Roof Replacement	30.00	20.89	0.00	10.00	0.00	2.63	0.00	0.00	0.00	10.00	30.00	2.00	3.00	3.00	2.00	2.67	0.00	31.46	2.33	14.00	5.00	0.00	7.33	176.31
Denali Borough	36	M	Districtwide Electrical Code Upgrades	24.00	30.00	0.00	10.00	0.00	2.63	0.00	0.00	0.00	8.00	30.00	2.00	3.00	3.00	2.00	2.67	0.00	20.52	0.00	15.67	1.33	0.00	5.33	160.16
Denali Borough	43	M	Tri-Valley School Septic System Upgrades	27.00	30.00	0.00	10.00	0.00	2.63	0.00	0.00	0.00	8.00	30.00	2.00	3.00	3.00	2.00	2.67	0.00	12.11	0.00	14.33	1.67	0.00	7.67	156.07
Denali Borough	62	M	Generator Replacement, 3 Schools	21.00	30.00	0.00	10.00	0.00	2.63	0.00	0.00	0.00	8.00	30.00	2.00	3.00	3.00	2.00	2.67	0.00	4.31	0.00	14.00	1.33	0.00	5.67	139.60
Fairbanks Borough	16	C	University Park Elementary Site Improvements	27.00	17.75	0.00	0.00	0.00	3.45	0.00	0.00	0.00	0.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	3.03	0.00	5.67	0.00	0.00	0.00	101.56
Fairbanks Borough	17	C	West Valley High School Auditorium Upgrade	3.00	20.60	0.00	0.00	0.00	3.45	0.00	0.00	0.00	8.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	1.00	0.00	8.67	0.00	0.00	0.00	89.38
Fairbanks Borough	58	M	Administrative Center Exterior Renovation	21.00	11.75	0.00	10.00	0.00	3.45	0.00	0.00	0.00	10.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	19.26	0.00	11.33	4.33	0.00	6.00	141.80
Fairbanks Borough	63	M	North Pole High School Renovation	24.00	26.50	0.00	10.00	0.00	3.45	0.00	0.00	0.00	8.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	13.41	0.00	8.67	0.00	0.00	0.00	138.69

Alaska Department of Education and Early Development
FY2024 Capital Improvement Projects
School Construction and Major Maintenance by Districts

Total Points - Formula-Driven and Evaluative
Initial List

School District	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	Emer-gency	Life/Safety and Code Conditions	Exist-ing Space	Cost Esti-mate	Proj vs Oper Cost	Alter nat-ives	Options	Total Project Points
Fairbanks Borough	69	M	Arctic Light Elementary School Exterior Renovation	18.00	11.75	0.00	0.00	0.00	3.45	0.00	0.00	0.00	0.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	33.28	0.00	12.67	4.67	0.00	6.67	135.14
Fairbanks Borough	79	M	Lathrop High School Kitchen Upgrade	30.00	30.00	0.00	0.00	0.00	3.45	0.00	0.00	0.00	8.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	2.60	0.00	8.00	0.00	0.00	0.00	126.72
Fairbanks Borough	82	M	Tanana Middle School Classroom Upgrades	12.00	30.00	0.00	0.00	0.00	3.45	0.00	0.00	0.00	0.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	17.98	0.00	12.67	0.00	0.00	3.33	124.09
Fairbanks Borough	84	M	Weller Elementary School Classroom Upgrades	6.00	28.25	0.00	0.00	0.00	3.45	0.00	0.00	0.00	8.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	14.11	0.00	14.00	0.00	0.00	3.67	122.14
Fairbanks Borough	91	M	Pearl Creek Elementary School Classroom Upgrades	9.00	28.25	0.00	0.00	0.00	3.45	0.00	0.00	0.00	0.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	10.02	0.00	14.00	0.00	0.00	3.67	113.05
Fairbanks Borough	94	M	Anne Wien Elementary School Exterior Renovation	15.00	10.25	0.00	0.00	0.00	3.45	0.00	0.00	0.00	0.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	9.41	0.00	14.00	5.67	0.00	6.33	108.78
Haines Borough	30	M	Haines High School Roof Replacement	30.00	30.00	0.00	10.00	0.00	1.27	0.00	0.00	0.00	8.00	30.00	2.67	2.00	3.00	2.00	2.00	5.67	15.00	0.00	14.00	3.33	0.00	8.33	167.27
Haines Borough	39	M	Haines High School Locker Room Renovation	27.00	30.00	0.00	10.00	0.00	1.27	0.00	0.00	0.00	3.00	30.00	2.67	2.00	3.00	2.00	2.00	0.00	20.69	0.00	13.00	4.33	0.00	9.00	159.97
Hoonah City	6	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	40	M	Hoonah Central Boiler Replacement	30.00	30.00	0.00	10.00	0.00	1.49	0.00	0.00	0.00	8.00	30.00	1.67	2.00	2.00	2.67	2.00	0.00	6.00	0.00	14.00	8.33	0.00	9.67	157.83
Iditarod Area	3	M	Blackwell K-12 School Renovations, Anvik	27.00	30.00	0.00	10.00	0.00	2.65	0.00	0.00	0.00	10.00	30.00	2.00	1.67	1.33	2.00	1.67	6.67	43.42	0.00	15.00	3.00	0.00	4.67	191.07
Iditarod Area	64	M	David-Louis Memorial K-12 School Roof Replacement, Grayling	30.00	19.50	0.00	10.00	0.00	2.67	0.00	0.00	0.00	5.00	30.00	2.00	1.67	1.00	1.00	2.00	0.00	5.42	0.00	14.33	2.67	0.00	10.67	137.92
Juneau Borough	80	M	Dzantiki Heen'i Middle School Roof Replacement	30.00	11.00	0.00	10.00	0.00	2.23	0.00	0.00	0.00	8.00	25.00	2.33	2.00	2.33	2.33	3.00	0.00	8.00	0.00	11.00	3.00	0.00	6.00	126.23
Juneau Borough	87	M	Riverbend Elementary School Roof Replacement	27.00	8.75	0.00	10.00	0.00	2.23	0.00	0.00	0.00	3.00	25.00	2.33	2.00	2.33	2.33	3.00	0.00	8.00	0.00	11.00	3.00	0.00	7.33	117.31
Kake City	16	M	Exterior Upgrades - Main School Facilities	30.00	30.00	0.00	10.00	0.00	1.56	0.00	0.00	0.00	8.00	30.00	3.00	3.33	3.00	2.00	3.00	5.00	20.01	0.00	15.00	2.00	0.00	9.00	174.91
Kake City	65	M	Kake High School Flooring Replacement	24.00	30.00	0.00	10.00	0.00	1.56	0.00	0.00	0.00	0.00	30.00	3.00	3.33	3.00	2.00	3.00	0.00	4.00	0.00	14.67	1.00	0.00	8.00	137.56
Kake City	75	M	Kake High School Plumbing Replacement	27.00	30.00	0.00	0.00	0.00	1.56	0.00	0.00	0.00	0.00	30.00	3.00	3.33	3.00	2.00	3.00	0.00	4.00	0.00	14.00	1.00	0.00	7.33	129.23
Kake City	83	M	Kake High School Gym Floor Replacement	21.00	30.00	0.00	0.00	0.00	1.56	0.00	0.00	0.00	0.00	30.00	3.00	3.33	3.00	2.00	3.00	0.00	4.00	0.00	14.00	1.00	0.00	7.67	123.56
Kenai Peninsula Borough	13	C	Kenai Middle School Security Remodel	21.00	30.00	0.00	10.00	0.00	2.78	0.00	0.00	0.00	0.00	30.00	3.00	2.33	4.00	3.00	4.00	0.00	3.18	5.67	12.67	0.00	0.00	6.33	137.96
Kenai Peninsula Borough	6	M	Homer High School Partial Roof Replacement	30.00	24.75	0.00	25.00	0.00	2.78	0.00	0.00	0.00	5.00	30.00	3.00	2.33	4.00	3.00	4.00	0.00	10.25	0.00	26.00	3.33	0.00	7.67	181.11
Kenai Peninsula Borough	73	M	West Homer Elementary School North Wall Improvement	27.00	9.50	0.00	10.00	0.00	2.78	0.00	0.00	0.00	10.00	30.00	3.00	2.33	4.00	3.00	4.00	0.00	5.90	0.00	16.00	1.33	0.00	3.00	131.84
Kenai Peninsula Borough	86	M	Seward Middle School Exterior Repair	24.00	3.50	0.00	10.00	0.00	2.78	0.00	0.00	0.00	8.00	30.00	3.00	2.33	4.00	3.00	4.00	0.00	8.00	0.00	12.33	1.00	0.00	4.33	120.28
Ketchikan Borough	7	C	Valley Park Complex Upgrades	24.00	30.00	0.00	25.00	0.00	2.38	0.00	0.00	0.00	0.00	30.00	2.67	2.33	2.00	2.33	2.00	0.00	0.00	1.00	26.33	1.67	0.00	5.33	157.05
Ketchikan Borough	12	C	Playground Equipment and Surface Upgrades, 3 Sites	21.00	30.00	0.00	10.00	0.00	2.38	0.00	0.00	0.00	0.00	30.00	2.67	2.33	2.00	2.33	2.00	0.00	6.26	5.00	14.33	3.33	0.00	6.33	139.97
Ketchikan Borough	20	M	Ketchikan High School Security Upgrades	30.00	30.00	0.00	25.00	0.00	2.38	0.00	0.00	0.00	0.00	30.00	2.67	2.33	2.00	2.33	2.00	0.00	0.00	0.00	24.67	12.00	0.00	7.67	173.05
Ketchikan Borough	76	M	Houghtaling Elementary School Transformer Replacement	18.00	30.00	0.00	0.00	0.00	2.38	0.00	0.00	0.00	10.00	30.00	2.67	2.33	2.00	2.33	2.00	0.00	11.00	0.33	7.00	1.67	0.00	7.00	128.71
Ketchikan Borough	81	M	Schoenbar Middle School Gym Floor Replacement	27.00	30.00	0.00	0.00	0.00	2.38	0.00	0.00	0.00	0.00	30.00	2.67	2.33	2.00	2.33	2.00	0.00	5.05	1.33	9.67	1.67	0.00	5.67	124.10

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Kodiak Island Borough	48	M	Main Elementary School Roof Replacement	30.00	30.00	0.00	10.00	0.00	2.61	0.00	0.00	0.00	10.00	30.00	2.67	2.00	3.00	2.33	2.00	0.00	8.00	0.00	13.00	1.33	0.00	4.33	151.28
Kodiak Island Borough	56	M	Chiniak K-12 School Water Code Compliance and Upgrade	27.00	30.00	0.00	10.00	0.00	2.61	0.00	0.00	0.00	0.00	30.00	2.67	2.00	3.00	2.33	2.00	0.00	18.00	0.00	11.67	2.33	0.00	2.33	145.94
Kuspuk	24	M	Jack Egnaty Sr. K-12 School Roof Replacement, Sleetmute	30.00	30.00	0.00	10.00	0.00	1.76	0.00	0.00	0.00	10.00	30.00	2.33	2.00	2.00	2.00	2.00	9.67	8.19	2.00	13.67	5.67	0.00	9.00	170.29
Lower Kuskokwim	1	C	Newtok Relocation/Replacement K-12 School, Mertarvik	30.00	11.08	30.00	20.00	0.00	3.17	50.00	30.00	22.24	10.00	30.00	4.00	2.33	2.67	2.00	3.00	25.00	2.86	18.00	20.67	3.00	4.67	11.00	335.69
Lower Kuskokwim	2	C	Anna Tobeluk Memorial K-12 School Renovation/Addition, Nunapitchuk	24.00	25.45	0.00	10.00	0.00	3.30	26.50	17.55	21.89	10.00	30.00	4.00	2.00	2.33	2.00	2.00	0.00	15.82	20.00	13.33	4.00	3.00	13.67	250.84
Lower Kuskokwim	10	C	Water Storage and Treatment, Kongiganak	15.00	1.00	0.00	20.00	0.00	3.17	0.00	0.00	0.00	8.00	30.00	4.00	2.00	3.00	2.00	3.00	0.00	23.00	0.00	16.67	3.00	2.00	10.33	146.17
Lower Kuskokwim	4	M	Nuniwaarmiut K-12 School Wastewater Upgrades, Mekoryuk Supplemental	21.00	30.00	0.00	25.00	0.00	3.17	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	2.00	3.00	7.00	18.00	0.00	19.00	3.33	0.00	19.33	189.84
Lower Kuskokwim	8	M	Bethel Campus Fire Pump House and Fire Protection Upgrades Supplemental	18.00	30.00	0.00	20.00	0.00	3.17	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	2.00	3.00	5.00	16.41	0.00	19.67	2.67	0.00	21.33	180.25
Lower Kuskokwim	18	M	Qugcuun Memorial K-12 School Renovation, Oscarville	3.00	30.00	0.00	10.00	0.00	3.30	0.00	0.00	0.00	10.00	30.00	4.00	2.00	2.33	2.00	2.00	0.00	50.00	1.67	13.33	3.67	0.00	7.33	174.63
Lower Kuskokwim	31	M	Gladys Jung Elementary School Heating Mains Replacement	27.00	2.80	0.00	25.00	0.00	3.30	0.00	0.00	0.00	3.00	30.00	4.00	2.00	2.33	2.00	2.00	5.00	17.64	0.00	29.00	2.33	0.00	7.67	165.07
Lower Kuskokwim	35	M	Akula Elitnauvik K-12 School Renovation, Kasigluk-Akula	12.00	26.76	0.00	10.00	0.00	3.30	0.00	0.00	0.00	10.00	30.00	4.00	2.00	2.33	2.00	2.00	5.00	23.04	2.33	14.00	3.33	0.00	9.33	161.43
Lower Kuskokwim	57	M	Bethel Regional High School Boardwalk Replacement	6.00	30.00	0.00	10.00	0.00	3.17	0.00	0.00	0.00	8.00	30.00	4.00	2.00	3.00	2.00	3.00	0.00	19.06	0.00	14.67	2.00	0.00	7.00	143.90
Lower Kuskokwim	70	M	Akiuk Memorial K-12 School Renovation, Kasigluk-Akiuk	9.00	11.50	0.00	10.00	0.00	3.30	0.00	0.00	0.00	10.00	30.00	4.00	2.00	2.33	2.00	2.00	0.00	22.99	2.00	14.00	2.67	0.00	6.33	134.12
Lower Yukon	10	M	Hooper Bay K-12 School Exterior Repairs	27.00	2.50	0.00	25.00	0.00	2.18	0.00	0.00	0.00	8.00	30.00	3.67	2.00	2.33	3.67	2.00	5.00	19.25	3.67	27.00	4.00	0.00	12.33	179.60
Lower Yukon	26	M	Marshall K-12 School Emergency Tank Farm Repair	30.00	0.50	0.00	25.00	0.00	2.18	0.00	0.00	0.00	10.00	30.00	3.67	2.00	2.33	3.67	2.00	6.67	9.61	0.00	28.00	4.33	1.33	7.67	168.96
Lower Yukon	45	M	Hooper Bay K-12 School Emergency Lighting and Retrofit	15.00	2.50	0.00	25.00	0.00	2.18	0.00	0.00	0.00	5.00	30.00	3.67	2.00	2.33	3.67	2.00	0.00	9.07	1.67	28.67	11.00	0.00	10.00	153.75
Lower Yukon	51	M	Scammon Bay K-12 School Emergency Lighting and Retrofit	12.00	3.00	0.00	25.00	0.00	2.18	0.00	0.00	0.00	5.00	30.00	3.67	2.00	2.33	3.67	2.00	0.00	9.07	1.67	28.67	10.33	0.00	10.00	150.59
Lower Yukon	54	M	Scammon Bay K-12 School Exterior Upgrades	24.00	3.50	0.00	25.00	0.00	2.29	0.00	0.00	0.00	8.00	30.00	2.33	2.00	2.33	3.00	3.00	0.00	1.86	0.00	26.33	4.00	0.00	9.67	147.31
Lower Yukon	78	M	LYSD Central Office Renovation	9.00	29.69	0.00	0.00	0.00	2.18	0.00	0.00	0.00	0.00	30.00	3.67	2.00	2.33	3.67	2.00	0.00	16.53	0.00	13.00	5.33	0.00	7.33	126.74
Lower Yukon	93	M	Kotlik and Pilot Station K-12 Schools Renewal and Repair	18.00	5.00	0.00	10.00	0.00	2.29	0.00	0.00	0.00	5.00	30.00	2.33	2.00	2.33	3.00	3.00	0.00	5.69	0.00	13.00	2.67	0.00	5.00	109.32
Lower Yukon	97	M	Sheldon Point K-12 School Exterior Repairs, Nunam Iqua	21.00	2.00	0.00	0.00	0.00	2.29	0.00	0.00	0.00	5.00	30.00	2.33	2.00	2.33	3.00	3.00	0.00	0.65	0.00	13.33	3.00	0.00	8.00	97.94
Mat-Su Borough	14	C	Mat-Su Central Replacement Facility	30.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	21.96	0.00	25.00	1.00	1.00	2.00	2.00	1.00	0.00	0.00	6.67	7.00	1.33	1.00	3.67	105.88
Mat-Su Borough	15	C	District Athletic Field Upgrades	12.00	22.53	0.00	10.00	0.00	2.25	0.00	0.00	0.00	0.00	25.00	1.00	1.00	2.00	2.00	1.00	0.00	0.80	7.33	8.00	1.67	1.00	4.00	101.58
Mat-Su Borough	77	M	Elevator Code and Compliance Upgrades, 6 Sites	27.00	28.25	0.00	10.00	0.00	2.25	0.00	0.00	0.00	10.00	20.00	1.00	1.00	2.00	2.00	2.00	0.00	4.20	0.00	13.00	1.33	0.00	4.00	128.03
Mat-Su Borough	85	M	Structural Seismic Upgrades, 5 Sites	21.00	30.00	0.00	10.00	0.00	2.25	0.00	0.00	0.00	10.00	20.00	1.00	1.00	2.00	2.00	2.00	0.00	6.00	0.00	10.33	1.00	0.00	3.33	121.91
Mat-Su Borough	88	M	Colony and Wasilla Middle Schools Roof Replacement	27.00	15.30	0.00	10.00	0.00	2.25	0.00	0.00	0.00	8.00	20.00	1.00	1.00	2.00	2.00	2.00	0.00	8.02	0.00	14.00	2.00	0.00	2.00	116.56
Mat-Su Borough	95	M	Ceiling and Sprinkler Seismic Mitigation, 5 Sites	18.00	30.00	0.00	10.00	0.00	2.25	0.00	0.00	0.00	0.00	20.00	1.00	1.00	2.00	2.00	2.00	0.00	3.75	0.00	11.33	1.00	0.00	3.33	107.66

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Mat-Su Borough	96	M	HVAC Control Upgrades, 5 Sites	15.00	24.51	0.00	10.00	0.00	2.25	0.00	0.00	0.00	0.00	20.00	1.00	1.00	2.00	2.00	2.00	0.00	5.60	2.33	12.00	4.33	0.00	3.00	107.03
Nenana City	13	M	Nenana School Flooring and Asbestos Abatement	30.00	30.00	0.00	25.00	0.00	3.25	0.00	0.00	0.00	5.00	30.00	2.00	2.33	3.00	2.00	3.00	0.00	8.00	2.33	21.67	2.67	0.00	7.67	177.92
Nenana City	25	M	Nenana School Boiler Replacement	27.00	30.00	0.00	20.00	0.00	3.25	0.00	0.00	0.00	3.00	30.00	2.00	2.33	3.00	2.00	3.00	0.00	15.00	0.00	17.00	4.00	0.00	7.67	169.25
Nenana City	67	M	Nenana School Fire Suppression System Replacement	24.00	30.00	0.00	0.00	0.00	3.25	0.00	0.00	0.00	0.00	30.00	2.00	2.33	3.00	2.00	3.00	10.00	2.00	0.00	15.67	2.00	0.00	7.33	136.59
Nome City	9	M	Nome Beltz Jr/Sr High School Roof Replacement Supplemental	30.00	30.00	0.00	25.00	0.00	1.30	0.00	0.00	0.00	0.00	30.00	3.00	2.67	3.00	2.00	1.00	0.00	13.99	0.00	24.33	5.00	0.00	8.67	179.96
Nome City	17	M	Nome Beltz Jr/Sr High School Generator Replacement	24.00	30.00	0.00	25.00	0.00	1.31	0.00	0.00	0.00	0.00	30.00	2.67	3.00	2.33	2.33	2.67	0.00	15.00	0.00	24.33	0.00	0.00	12.00	174.65
Nome City	41	M	Nome Elementary School Fire Alarm Replacement	27.00	21.25	0.00	25.00	0.00	1.30	0.00	0.00	0.00	0.00	30.00	3.00	2.67	3.00	2.00	1.00	5.00	7.00	0.00	21.33	1.33	0.00	6.33	157.22
Nome City	66	M	Nome Beltz Jr/Sr High and Nome Elementary Schools Secure Access and ADA Improvements	21.00	30.00	0.00	10.00	0.00	1.30	0.00	0.00	0.00	0.00	30.00	3.00	2.67	3.00	2.00	1.00	0.00	6.49	2.00	16.33	2.33	0.00	5.67	136.79
Northwest Arctic Borough	3	C	Deering K-12 School Renovation/Addition	24.00	22.31	0.00	10.00	0.00	2.58	9.18	12.34	24.21	10.00	25.00	2.00	2.00	2.67	2.00	2.67	0.00	14.24	18.33	15.00	6.67	4.00	8.67	217.86
Northwest Arctic Borough	33	M	June Nelson Elementary School Partial Roof Replacement	30.00	30.00	0.00	10.00	0.00	2.58	0.00	0.00	0.00	10.00	25.00	2.00	2.00	2.67	2.00	2.67	3.33	13.43	0.00	16.00	3.33	0.00	7.00	162.02
Northwest Arctic Borough	47	M	Davis-Ramoth K-12 School Rehabilitation, Selawik	27.00	14.73	0.00	10.00	0.00	2.69	0.00	0.00	0.00	10.00	25.00	3.00	2.33	3.00	2.33	2.67	0.00	11.50	5.33	17.33	4.67	0.00	11.67	153.25
Saint Marys City	68	M	St. Mary's Campus Renewal and Repairs	30.00	30.00	0.00	10.00	0.00	1.12	0.00	0.00	0.00	0.00	30.00	2.00	3.00	3.00	2.33	2.33	0.00	3.03	1.00	13.33	0.00	0.00	4.67	135.82
Sitka Borough	61	M	Keet Gooshi Heen Elementary Covered PE Structure Renovation	30.00	19.50	0.00	10.00	0.00	0.90	0.00	0.00	0.00	3.00	30.00	2.67	2.00	2.00	2.00	2.67	0.00	5.15	1.00	16.33	3.00	0.00	10.00	140.22
Southeast Island	50	M	Thorne Bay K-12 School Fire Suppression System	30.00	13.49	0.00	10.00	0.00	2.57	0.00	0.00	0.00	8.00	30.00	1.67	3.00	2.00	2.00	2.00	10.00	6.87	0.00	13.67	5.00	0.00	10.33	150.60
Southeast Island	59	M	Thorne Bay K-12 School Mechanical Control Upgrades	27.00	13.49	0.00	10.00	0.00	2.57	0.00	0.00	0.00	8.00	30.00	1.67	3.00	2.00	2.00	2.00	3.33	8.00	0.00	14.33	8.00	0.00	6.33	141.73
Southeast Island	60	M	Thorne Bay K-12 School Flooring Replacement	15.00	13.49	0.00	25.00	0.00	2.57	0.00	0.00	0.00	0.00	30.00	1.67	3.00	2.00	2.00	2.00	0.00	4.00	0.00	28.00	3.33	0.00	8.67	140.73
Southeast Island	71	M	Port Alexander K-12 School Domestic Water Pipe Replacement	18.00	28.13	0.00	0.00	0.00	2.39	0.00	0.00	0.00	3.00	30.00	2.00	3.67	2.67	2.00	2.00	5.00	11.67	0.00	14.00	2.67	0.00	6.33	133.52
Southeast Island	90	M	Thorne Bay K-12 School Underground Storage Tank Replacement	24.00	13.49	0.00	10.00	0.00	2.57	0.00	0.00	0.00	0.00	30.00	1.67	3.00	2.00	2.00	2.00	0.00	2.00	0.00	15.00	0.00	0.00	6.00	113.73
Southeast Island	92	M	Port Alexander and Thorne Bay K-12 Schools Roof Replacement	21.00	15.78	0.00	0.00	0.00	2.39	0.00	0.00	0.00	0.00	30.00	2.00	3.67	2.67	2.00	2.00	0.00	6.00	0.67	14.33	2.67	0.00	5.00	110.17
Southwest Region	55	M	Twin Hills K-12 School Renovation	30.00	30.00	0.00	10.00	0.00	1.48	0.00	0.00	0.00	10.00	25.00	1.00	2.00	2.33	2.00	2.00	0.00	8.71	0.00	11.00	8.00	0.00	3.67	147.18
Southwest Region	72	M	Ekwok K-12 School Renovation	27.00	30.00	0.00	0.00	0.00	1.48	0.00	0.00	0.00	0.00	25.00	1.00	2.00	2.33	2.00	2.00	0.00	18.71	0.00	11.33	6.67	0.00	3.67	133.19
Southwest Region	89	M	Aleknagik K-12 School Renovation	24.00	30.00	0.00	0.00	0.00	1.48	0.00	0.00	0.00	0.00	25.00	1.00	2.00	2.33	2.00	2.00	0.00	4.26	0.00	10.33	6.00	0.00	4.00	114.40
Valdez City	19	M	Districtwide Generator Replacement	30.00	19.69	0.00	25.00	0.00	1.37	0.00	0.00	0.00	10.00	30.00	3.00	3.00	2.33	2.33	2.33	0.00	4.00	0.00	28.33	2.33	0.00	10.67	174.40
Valdez City	34	M	Hermon Hutchens Elementary School Partial Flooring Replacement	27.00	30.00	0.00	25.00	0.00	1.34	0.00	0.00	0.00	3.00	20.00	2.33	2.33	2.67	2.00	3.00	0.00	4.00	0.00	28.67	2.67	0.00	7.67	161.67
Yukon-Koyukuk	1	M	Rampart K-12 School Renewal	27.00	30.00	0.00	20.00	0.00	2.49	0.00	0.00	0.00	10.00	30.00	3.00	2.33	3.00	2.00	2.67	0.00	44.46	6.33	20.67	5.67	0.00	11.67	221.28
Yukon-Koyukuk	53	M	Roof Replacement, 3 Schools	30.00	29.85	0.00	10.00	0.00	2.49	0.00	0.00	0.00	10.00	30.00	3.00	2.33	3.00	2.00	2.67	0.00	0.00	0.00	15.00	3.67	0.00	4.67	148.67
Yupiit	42	M	Mechanical System Improvements, 3 Schools	30.00	3.69	0.00	25.00	0.00	1.80	0.00	0.00	0.00	0.00	30.00	2.00	3.33	3.00	3.00	3.00	0.00	6.77	1.33	27.00	8.33	0.00	8.00	156.25
Yupiit	52	M	Tuluksak K-12 School Generator Replacement	24.00	4.00	0.00	25.00	0.00	1.80	0.00	0.00	0.00	0.00	30.00	2.00	3.33	3.00	3.00	3.00	5.67	15.00	0.00	16.33	3.00	0.00	10.33	149.46
Yupiit	74	M	Tuluksak K-12 School Fuel Tank Replacement	27.00	4.00	0.00	10.00	0.00	1.80	0.00	0.00	0.00	3.00	30.00	2.00	3.33	3.00	3.00	3.00	6.67	10.00	0.00	14.00	2.67	0.00	8.33	131.80

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1	Lower Kuskokwim	Newtok Relocation/Replacement K-12 School, Mertarvik	30.00	11.08	30.00	20.00	0.00	3.17	50.00	30.00	22.24	10.00	30.00	4.00	2.33	2.67	2.00	3.00	25.00	2.86	18.00	20.67	3.00	4.67	11.00	335.69
2	Lower Kuskokwim	Anna Tobeluk Memorial K-12 School Renovation/Addition, Nunapitchuk	24.00	25.45	0.00	10.00	0.00	3.30	26.50	17.55	21.89	10.00	30.00	4.00	2.00	2.33	2.00	2.00	0.00	15.82	20.00	13.33	4.00	3.00	13.67	250.84
3	Northwest Arctic Bor	Deering K-12 School Renovation/Addition	24.00	22.31	0.00	10.00	0.00	2.58	9.18	12.34	24.21	10.00	25.00	2.00	2.00	2.67	2.00	2.67	0.00	14.24	18.33	15.00	6.67	4.00	8.67	217.86
4	Anchorage	Homestead Elementary School Safety Improvements	0.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	16.57	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	12.58	2.33	26.00	3.67	0.00	5.00	181.11
5	Bering Strait	Brevig Mission K-12 School Addition	30.00	15.57	0.00	0.00	0.00	2.18	7.89	12.88	21.88	8.00	25.00	2.00	1.00	3.00	1.33	1.00	0.00	5.71	15.00	17.67	0.00	1.33	6.33	177.77
6	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
7	Ketchikan Borough	Valley Park Complex Upgrades	24.00	30.00	0.00	25.00	0.00	2.38	0.00	0.00	0.00	0.00	30.00	2.67	2.33	2.00	2.33	2.00	0.00	0.00	1.00	26.33	1.67	0.00	5.33	157.05
8	Anchorage	Secure Vestibules, Group 3, 5 Sites	6.00	30.00	0.00	25.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	0.00	6.00	26.33	1.00	3.00	5.67	152.27
9	Anchorage	Secure Vestibules, Group 2, 3 Sites	9.00	24.68	0.00	25.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	0.00	6.00	25.67	1.00	3.00	5.67	149.29
10	Lower Kuskokwim	Water Storage and Treatment, Kongiganak	15.00	1.00	0.00	20.00	0.00	3.17	0.00	0.00	0.00	8.00	30.00	4.00	2.00	3.00	2.00	3.00	0.00	23.00	0.00	16.67	3.00	2.00	10.33	146.17
11	Anchorage	Secure Vestibules, Group 1, 3 Sites	12.00	11.43	0.00	25.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	0.00	6.00	27.00	1.00	3.00	5.67	140.37
12	Ketchikan Borough	Playground Equipment and Surface Upgrades, 3 Sites	21.00	30.00	0.00	10.00	0.00	2.38	0.00	0.00	0.00	0.00	30.00	2.67	2.33	2.00	2.33	2.00	0.00	6.26	5.00	14.33	3.33	0.00	6.33	139.97
13	Kenai Peninsula Bor	Kenai Middle School Security Remodel	21.00	30.00	0.00	10.00	0.00	2.78	0.00	0.00	0.00	0.00	30.00	3.00	2.33	4.00	3.00	4.00	0.00	3.18	5.67	12.67	0.00	0.00	6.33	137.96
14	Mat-Su Borough	Mat-Su Central Replacement Facility	30.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	21.96	0.00	25.00	1.00	1.00	2.00	2.00	1.00	0.00	0.00	6.67	7.00	1.33	1.00	3.67	105.88
15	Mat-Su Borough	District Athletic Field Upgrades	12.00	22.53	0.00	10.00	0.00	2.25	0.00	0.00	0.00	0.00	25.00	1.00	1.00	2.00	2.00	1.00	0.00	0.80	7.33	8.00	1.67	1.00	4.00	101.58
16	Fairbanks Borough	University Park Elementary Site Improvements	27.00	17.75	0.00	0.00	0.00	3.45	0.00	0.00	0.00	0.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	3.03	0.00	5.67	0.00	0.00	0.00	101.56
17	Fairbanks Borough	West Valley High School Auditorium Upgrade	3.00	20.60	0.00	0.00	0.00	3.45	0.00	0.00	0.00	8.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	1.00	0.00	8.67	0.00	0.00	0.00	89.38

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1	Yukon-Koyukuk	Rampart K-12 School Renewal	27.00	30.00	0.00	20.00	0.00	2.49	0.00	0.00	0.00	10.00	30.00	3.00	2.33	3.00	2.00	2.67	0.00	44.46	6.33	20.67	5.67	0.00	11.67	221.28
2	Bristol Bay Borough	Bristol Bay School Renovations, Phase 2 Supplemental	30.00	30.00	0.00	25.00	0.00	0.89	0.00	0.00	0.00	0.00	30.00	2.00	2.00	3.00	1.67	2.00	0.00	29.69	2.00	28.00	6.33	0.00	10.67	203.25
3	Iditarod Area	Blackwell K-12 School Renovations, Anvik	27.00	30.00	0.00	10.00	0.00	2.65	0.00	0.00	0.00	10.00	30.00	2.00	1.67	1.33	2.00	1.67	6.67	43.42	0.00	15.00	3.00	0.00	4.67	191.07
4	Lower Kuskokwim	Nuniwaarmiut K-12 School Wastewater Upgrades, Mekoryuk Supplemental	21.00	30.00	0.00	25.00	0.00	3.17	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	2.00	3.00	7.00	18.00	0.00	19.00	3.33	0.00	19.33	189.84
5	Anchorage	Orion Elementary School Roof Replacement	15.00	30.00	0.00	25.00	0.00	4.61	0.00	0.00	0.00	10.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	18.31	2.33	25.00	5.33	0.00	6.33	186.59
6	Kenai Peninsula Borough	Homer High School Partial Roof Replacement	30.00	24.75	0.00	25.00	0.00	2.78	0.00	0.00	0.00	5.00	30.00	3.00	2.33	4.00	3.00	4.00	0.00	10.25	0.00	26.00	3.33	0.00	7.67	181.11
7	Anchorage	Government Hill Elementary School Roof Replacement	0.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	0.00	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	27.66	2.00	27.67	3.00	0.00	5.33	180.63
8	Lower Kuskokwim	Bethel Campus Fire Pump House and Fire Protection Upgrades Supplemental	18.00	30.00	0.00	20.00	0.00	3.17	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	2.00	3.00	5.00	16.41	0.00	19.67	2.67	0.00	21.33	180.25
9	Nome City	Nome Beltz Jr/Sr High School Roof Replacement Supplemental	30.00	30.00	0.00	25.00	0.00	1.30	0.00	0.00	0.00	0.00	30.00	3.00	2.67	3.00	2.00	1.00	0.00	13.99	0.00	24.33	5.00	0.00	8.67	179.96
10	Lower Yukon	Hooper Bay K-12 School Exterior Repairs	27.00	2.50	0.00	25.00	0.00	2.18	0.00	0.00	0.00	8.00	30.00	3.67	2.00	2.33	3.67	2.00	5.00	19.25	3.67	27.00	4.00	0.00	12.33	179.60
11	Anchorage	Stellar Secondary School Fire Alarm	24.00	30.00	0.00	25.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	20.00	0.00	26.33	4.67	0.00	0.00	179.27
12	Anchorage	Birchwood Elementary School Boiler Replacement	27.00	30.00	0.00	25.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	3.32	1.67	26.33	5.33	0.00	10.33	178.27
13	Nenana City	Nenana School Flooring and Asbestos Abatement	30.00	30.00	0.00	25.00	0.00	3.25	0.00	0.00	0.00	5.00	30.00	2.00	2.33	3.00	2.00	3.00	0.00	8.00	2.33	21.67	2.67	0.00	7.67	177.92
14	Anchorage	Mears Middle School Roof Replacement	18.00	24.75	0.00	25.00	0.00	4.61	0.00	0.00	0.00	10.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	9.54	2.00	27.67	4.67	0.00	6.67	177.56
15	Denali Borough	Tri-Valley School Partial Roof Replacement	30.00	20.89	0.00	10.00	0.00	2.63	0.00	0.00	0.00	10.00	30.00	2.00	3.00	3.00	2.00	2.67	0.00	31.46	2.33	14.00	5.00	0.00	7.33	176.31
16	Kake City	Exterior Upgrades - Main School Facilities	30.00	30.00	0.00	10.00	0.00	1.56	0.00	0.00	0.00	8.00	30.00	3.00	3.33	3.00	2.00	3.00	5.00	20.01	0.00	15.00	2.00	0.00	9.00	174.91
17	Nome City	Nome Beltz Jr/Sr High School Generator Replacement	24.00	30.00	0.00	25.00	0.00	1.31	0.00	0.00	0.00	0.00	30.00	2.67	3.00	2.33	2.33	2.67	0.00	15.00	0.00	24.33	0.00	0.00	12.00	174.65
18	Lower Kuskokwim	Qugcuun Memorial K-12 School Renovation, Oscarville	3.00	30.00	0.00	10.00	0.00	3.30	0.00	0.00	0.00	10.00	30.00	4.00	2.00	2.33	2.00	2.00	0.00	50.00	1.67	13.33	3.67	0.00	7.33	174.63
19	Valdez City	Districtwide Generator Replacement	30.00	19.69	0.00	25.00	0.00	1.37	0.00	0.00	0.00	10.00	30.00	3.00	3.00	2.33	2.33	2.33	0.00	4.00	0.00	28.33	2.33	0.00	10.67	174.40
20	Ketchikan Borough	Ketchikan High School Security Upgrades	30.00	30.00	0.00	25.00	0.00	2.38	0.00	0.00	0.00	0.00	30.00	2.67	2.33	2.00	2.33	2.00	0.00	0.00	0.00	24.67	12.00	0.00	7.67	173.05

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21	Anchorage	Homestead Elementary School Roof Replacement	0.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	0.00	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	21.05	1.67	27.00	2.67	0.00	5.33	172.69
22	Anchorage	King Tech High School Roof Replacement	0.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	0.00	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	21.35	1.67	27.33	1.67	0.00	5.00	171.98
23	Anchorage	East High School Gym Improvements	3.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	0.00	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	20.98	1.33	25.67	3.00	0.00	2.00	170.94
24	Kuspuk	Jack Egnaty Sr. K-12 School Roof Replacement, Sleetmute	30.00	30.00	0.00	10.00	0.00	1.76	0.00	0.00	0.00	10.00	30.00	2.33	2.00	2.00	2.00	2.00	9.67	8.19	2.00	13.67	5.67	0.00	9.00	170.29
25	Nenana City	Nenana School Boiler Replacement	27.00	30.00	0.00	20.00	0.00	3.25	0.00	0.00	0.00	3.00	30.00	2.00	2.33	3.00	2.00	3.00	0.00	15.00	0.00	17.00	4.00	0.00	7.67	169.25
26	Lower Yukon	Marshall K-12 School Emergency Tank Farm Repair	30.00	0.50	0.00	25.00	0.00	2.18	0.00	0.00	0.00	10.00	30.00	3.67	2.00	2.33	3.67	2.00	6.67	9.61	0.00	28.00	4.33	1.33	7.67	168.96
27	Aleutians East Borough	Sand Point K-12 School Pool Major Maintenance	30.00	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	168.92
28	Anchorage	North Star Elementary School Roof Replacement	0.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	0.00	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	16.34	1.67	26.00	3.00	0.00	5.67	167.63
29	Anchorage	Service High School Health and Safety Improvements	0.00	30.00	0.00	25.00	0.00	4.63	0.00	0.00	0.00	5.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	20.20	2.67	27.00	2.33	0.00	5.33	167.50
30	Haines Borough	Haines High School Roof Replacement	30.00	30.00	0.00	10.00	0.00	1.27	0.00	0.00	0.00	8.00	30.00	2.67	2.00	3.00	2.00	2.00	5.67	15.00	0.00	14.00	3.33	0.00	8.33	167.27
31	Lower Kuskokwim	Gladys Jung Elementary School Heating Mains Replacement	27.00	2.80	0.00	25.00	0.00	3.30	0.00	0.00	0.00	3.00	30.00	4.00	2.00	2.33	2.00	2.00	5.00	17.64	0.00	29.00	2.33	0.00	7.67	165.07
32	Anchorage	O'Malley Elementary School Renovation	0.00	30.00	0.00	10.00	0.00	4.63	0.00	0.00	0.00	10.00	30.00	4.00	2.33	2.00	3.00	4.00	0.00	22.84	1.33	27.00	4.67	0.00	7.67	163.47
33	Northwest Arctic Borough	June Nelson Elementary School Partial Roof Replacement	30.00	30.00	0.00	10.00	0.00	2.58	0.00	0.00	0.00	10.00	25.00	2.00	2.00	2.67	2.00	2.67	3.33	13.43	0.00	16.00	3.33	0.00	7.00	162.02
34	Valdez City	Hermon Hutchens Elementary School Partial Flooring Replacement	27.00	30.00	0.00	25.00	0.00	1.34	0.00	0.00	0.00	3.00	20.00	2.33	2.33	2.67	2.00	3.00	0.00	4.00	0.00	28.67	2.67	0.00	7.67	161.67
35	Lower Kuskokwim	Akula Elitnauvik K-12 School Renovation, Kasigluk-Akula	12.00	26.76	0.00	10.00	0.00	3.30	0.00	0.00	0.00	10.00	30.00	4.00	2.00	2.33	2.00	2.00	5.00	23.04	2.33	14.00	3.33	0.00	9.33	161.43
36	Denali Borough	Districtwide Electrical Code Upgrades	24.00	30.00	0.00	10.00	0.00	2.63	0.00	0.00	0.00	8.00	30.00	2.00	3.00	3.00	2.00	2.67	0.00	20.52	0.00	15.67	1.33	0.00	5.33	160.16
37	Anchorage	Bear Valley Elementary School Domestic Water Replacement	21.00	26.50	0.00	20.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	8.95	0.00	26.67	4.67	0.00	3.00	160.06
38	Anchorage	Abbott Loop Elementary School Fire Sprinklers	30.00	30.00	0.00	0.00	0.00	4.61	0.00	0.00	0.00	0.00	30.00	4.00	2.00	3.00	3.00	2.67	0.00	31.42	0.00	14.67	1.00	0.00	3.67	160.03
39	Haines Borough	Haines High School Locker Room Renovation	27.00	30.00	0.00	10.00	0.00	1.27	0.00	0.00	0.00	3.00	30.00	2.67	2.00	3.00	2.00	2.00	0.00	20.69	0.00	13.00	4.33	0.00	9.00	159.97
40	Hoonah City	Hoonah Central Boiler Replacement	30.00	30.00	0.00	10.00	0.00	1.49	0.00	0.00	0.00	8.00	30.00	1.67	2.00	2.00	2.67	2.00	0.00	6.00	0.00	14.00	8.33	0.00	9.67	157.83

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41	Nome City	Nome Elementary School Fire Alarm Replacement	27.00	21.25	0.00	25.00	0.00	1.30	0.00	0.00	0.00	0.00	30.00	3.00	2.67	3.00	2.00	1.00	5.00	7.00	0.00	21.33	1.33	0.00	6.33	157.22
42	Yupiit	Mechanical System Improvements, 3 Schools	30.00	3.69	0.00	25.00	0.00	1.80	0.00	0.00	0.00	0.00	30.00	2.00	3.33	3.00	3.00	3.00	0.00	6.77	1.33	27.00	8.33	0.00	8.00	156.25
43	Denali Borough	Tri-Valley School Septic System Upgrades	27.00	30.00	0.00	10.00	0.00	2.63	0.00	0.00	0.00	8.00	30.00	2.00	3.00	3.00	2.00	2.67	0.00	12.11	0.00	14.33	1.67	0.00	7.67	156.07
44	Alaska Gateway	Tetlin K-12 School Renovation	30.00	23.00	0.00	10.00	0.00	2.40	0.00	0.00	0.00	10.00	25.00	3.33	2.00	3.00	1.67	3.00	0.00	20.66	0.00	16.00	2.67	0.00	1.67	154.39
45	Lower Yukon	Hooper Bay K-12 School Emergency Lighting and Retrofit	15.00	2.50	0.00	25.00	0.00	2.18	0.00	0.00	0.00	5.00	30.00	3.67	2.00	2.33	3.67	2.00	0.00	9.07	1.67	28.67	11.00	0.00	10.00	153.75
46	Alaska Gateway	Tok K-12 School Partial Roof Replacement	27.00	11.00	0.00	10.00	0.00	2.40	0.00	0.00	0.00	10.00	25.00	3.33	2.00	3.00	1.67	3.00	0.00	25.00	2.00	14.33	2.33	0.00	11.67	153.73
47	Northwest Arctic Borough	Davis-Ramoth K-12 School Rehabilitation, Selawik	27.00	14.73	0.00	10.00	0.00	2.69	0.00	0.00	0.00	10.00	25.00	3.00	2.33	3.00	2.33	2.67	0.00	11.50	5.33	17.33	4.67	0.00	11.67	153.25
48	Kodiak Island Borough	Main Elementary School Roof Replacement	30.00	30.00	0.00	10.00	0.00	2.61	0.00	0.00	0.00	10.00	30.00	2.67	2.00	3.00	2.33	2.00	0.00	8.00	0.00	13.00	1.33	0.00	4.33	151.28
49	Alaska Gateway	Northway K-12 School Mechanical Renovation	24.00	30.00	0.00	10.00	0.00	2.40	0.00	0.00	0.00	10.00	25.00	3.33	2.00	3.00	1.67	3.00	0.00	13.61	0.00	15.67	5.67	0.00	1.33	150.68
50	Southeast Island	Thorne Bay K-12 School Fire Suppression System	30.00	13.49	0.00	10.00	0.00	2.57	0.00	0.00	0.00	8.00	30.00	1.67	3.00	2.00	2.00	2.00	10.00	6.87	0.00	13.67	5.00	0.00	10.33	150.60
51	Lower Yukon	Scammon Bay K-12 School Emergency Lighting and Retrofit	12.00	3.00	0.00	25.00	0.00	2.18	0.00	0.00	0.00	5.00	30.00	3.67	2.00	2.33	3.67	2.00	0.00	9.07	1.67	28.67	10.33	0.00	10.00	150.59
52	Yupiit	Tuluksak K-12 School Generator Replacement	24.00	4.00	0.00	25.00	0.00	1.80	0.00	0.00	0.00	0.00	30.00	2.00	3.33	3.00	3.00	3.00	5.67	15.00	0.00	16.33	3.00	0.00	10.33	149.46
53	Yukon-Koyukuk	Roof Replacement, 3 Schools	30.00	29.85	0.00	10.00	0.00	2.49	0.00	0.00	0.00	10.00	30.00	3.00	2.33	3.00	2.00	2.67	0.00	0.00	0.00	15.00	3.67	0.00	4.67	148.67
54	Lower Yukon	Scammon Bay K-12 School Exterior Upgrades	24.00	3.50	0.00	25.00	0.00	2.29	0.00	0.00	0.00	8.00	30.00	2.33	2.00	2.33	3.00	3.00	0.00	1.86	0.00	26.33	4.00	0.00	9.67	147.31
55	Southwest Region	Twin Hills K-12 School Renovation	30.00	30.00	0.00	10.00	0.00	1.48	0.00	0.00	0.00	10.00	25.00	1.00	2.00	2.33	2.00	2.00	0.00	8.71	0.00	11.00	8.00	0.00	3.67	147.18
56	Kodiak Island Borough	Chiniak K-12 School Water Code Compliance and Upgrade	27.00	30.00	0.00	10.00	0.00	2.61	0.00	0.00	0.00	0.00	30.00	2.67	2.00	3.00	2.33	2.00	0.00	18.00	0.00	11.67	2.33	0.00	2.33	145.94
57	Lower Kuskokwim	Bethel Regional High School Boardwalk Replacement	6.00	30.00	0.00	10.00	0.00	3.17	0.00	0.00	0.00	8.00	30.00	4.00	2.00	3.00	2.00	3.00	0.00	19.06	0.00	14.67	2.00	0.00	7.00	143.90
58	Fairbanks Borough	Administrative Center Exterior Renovation	21.00	11.75	0.00	10.00	0.00	3.45	0.00	0.00	0.00	10.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	19.26	0.00	11.33	4.33	0.00	6.00	141.80
59	Southeast Island	Thorne Bay K-12 School Mechanical Control Upgrades	27.00	13.49	0.00	10.00	0.00	2.57	0.00	0.00	0.00	8.00	30.00	1.67	3.00	2.00	2.00	2.00	3.33	8.00	0.00	14.33	8.00	0.00	6.33	141.73
60	Southeast Island	Thorne Bay K-12 School Flooring Replacement	15.00	13.49	0.00	25.00	0.00	2.57	0.00	0.00	0.00	0.00	30.00	1.67	3.00	2.00	2.00	2.00	0.00	4.00	0.00	28.00	3.33	0.00	8.67	140.73
61	Sitka Borough	Keet Gooshi Heen Elementary Covered PE Structure Renovation	30.00	19.50	0.00	10.00	0.00	0.90	0.00	0.00	0.00	3.00	30.00	2.67	2.00	2.00	2.00	2.67	0.00	5.15	1.00	16.33	3.00	0.00	10.00	140.22
62	Denali Borough	Generator Replacement, 3 Schools	21.00	30.00	0.00	10.00	0.00	2.63	0.00	0.00	0.00	8.00	30.00	2.00	3.00	3.00	2.00	2.67	0.00	4.31	0.00	14.00	1.33	0.00	5.67	139.60

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63	Fairbanks Borough	North Pole High School Renovation	24.00	26.50	0.00	10.00	0.00	3.45	0.00	0.00	0.00	8.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	13.41	0.00	8.67	0.00	0.00	0.00	138.69
64	Iditarod Area	David-Louis Memorial K-12 School Roof Replacement, Grayling	30.00	19.50	0.00	10.00	0.00	2.67	0.00	0.00	0.00	5.00	30.00	2.00	1.67	1.00	1.00	2.00	0.00	5.42	0.00	14.33	2.67	0.00	10.67	137.92
65	Kake City	Kake High School Flooring Replacement	24.00	30.00	0.00	10.00	0.00	1.56	0.00	0.00	0.00	0.00	30.00	3.00	3.33	3.00	2.00	3.00	0.00	4.00	0.00	14.67	1.00	0.00	8.00	137.56
66	Nome City	Nome Beltz Jr/Sr High and Nome Elementary Schools Secure Access and ADA Improvements	21.00	30.00	0.00	10.00	0.00	1.30	0.00	0.00	0.00	0.00	30.00	3.00	2.67	3.00	2.00	1.00	0.00	6.49	2.00	16.33	2.33	0.00	5.67	136.79
67	Nenana City	Nenana School Fire Suppression System Replacement	24.00	30.00	0.00	0.00	0.00	3.25	0.00	0.00	0.00	0.00	30.00	2.00	2.33	3.00	2.00	3.00	10.00	2.00	0.00	15.67	2.00	0.00	7.33	136.59
68	Saint Marys City	St. Mary's Campus Renewal and Repairs	30.00	30.00	0.00	10.00	0.00	1.12	0.00	0.00	0.00	0.00	30.00	2.00	3.00	3.00	2.33	2.33	0.00	3.03	1.00	13.33	0.00	0.00	4.67	135.82
69	Fairbanks Borough	Arctic Light Elementary School Exterior Renovation	18.00	11.75	0.00	0.00	0.00	3.45	0.00	0.00	0.00	0.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	33.28	0.00	12.67	4.67	0.00	6.67	135.14
70	Lower Kuskokwim	Akiuk Memorial K-12 School Renovation, Kasigluk-Akiuk	9.00	11.50	0.00	10.00	0.00	3.30	0.00	0.00	0.00	10.00	30.00	4.00	2.00	2.33	2.00	2.00	0.00	22.99	2.00	14.00	2.67	0.00	6.33	134.12
71	Southeast Island	Port Alexander K-12 School Domestic Water Pipe Replacement	18.00	28.13	0.00	0.00	0.00	2.39	0.00	0.00	0.00	3.00	30.00	2.00	3.67	2.67	2.00	2.00	5.00	11.67	0.00	14.00	2.67	0.00	6.33	133.52
72	Southwest Region	Ekwok K-12 School Renovation	27.00	30.00	0.00	0.00	0.00	1.48	0.00	0.00	0.00	0.00	25.00	1.00	2.00	2.33	2.00	2.00	0.00	18.71	0.00	11.33	6.67	0.00	3.67	133.19
73	Kenai Peninsula Borough	West Homer Elementary School North Wall Improvement	27.00	9.50	0.00	10.00	0.00	2.78	0.00	0.00	0.00	10.00	30.00	3.00	2.33	4.00	3.00	4.00	0.00	5.90	0.00	16.00	1.33	0.00	3.00	131.84
74	Yupiit	Tuluksak K-12 School Fuel Tank Replacement	27.00	4.00	0.00	10.00	0.00	1.80	0.00	0.00	0.00	3.00	30.00	2.00	3.33	3.00	3.00	3.00	6.67	10.00	0.00	14.00	2.67	0.00	8.33	131.80
75	Kake City	Kake High School Plumbing Replacement	27.00	30.00	0.00	0.00	0.00	1.56	0.00	0.00	0.00	0.00	30.00	3.00	3.33	3.00	2.00	3.00	0.00	4.00	0.00	14.00	1.00	0.00	7.33	129.23
76	Ketchikan Borough	Houghtaling Elementary School Transformer Replacement	18.00	30.00	0.00	0.00	0.00	2.38	0.00	0.00	0.00	10.00	30.00	2.67	2.33	2.00	2.33	2.00	0.00	11.00	0.33	7.00	1.67	0.00	7.00	128.71
77	Mat-Su Borough	Elevator Code and Compliance Upgrades, 6 Sites	27.00	28.25	0.00	10.00	0.00	2.25	0.00	0.00	0.00	10.00	20.00	1.00	1.00	2.00	2.00	2.00	0.00	4.20	0.00	13.00	1.33	0.00	4.00	128.03
78	Lower Yukon	LYSD Central Office Renovation	9.00	29.69	0.00	0.00	0.00	2.18	0.00	0.00	0.00	0.00	30.00	3.67	2.00	2.33	3.67	2.00	0.00	16.53	0.00	13.00	5.33	0.00	7.33	126.74
79	Fairbanks Borough	Lathrop High School Kitchen Upgrade	30.00	30.00	0.00	0.00	0.00	3.45	0.00	0.00	0.00	8.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	2.60	0.00	8.00	0.00	0.00	0.00	126.72
80	Juneau Borough	Dzantiki Heen'i Middle School Roof Replacement	30.00	11.00	0.00	10.00	0.00	2.23	0.00	0.00	0.00	8.00	25.00	2.33	2.00	2.33	2.33	3.00	0.00	8.00	0.00	11.00	3.00	0.00	6.00	126.23
81	Ketchikan Borough	Schoenbar Middle School Gym Floor Replacement	27.00	30.00	0.00	0.00	0.00	2.38	0.00	0.00	0.00	0.00	30.00	2.67	2.33	2.00	2.33	2.00	0.00	5.05	1.33	9.67	1.67	0.00	5.67	124.10
82	Fairbanks Borough	Tanana Middle School Classroom Upgrades	12.00	30.00	0.00	0.00	0.00	3.45	0.00	0.00	0.00	0.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	17.98	0.00	12.67	0.00	0.00	3.33	124.09
83	Kake City	Kake High School Gym Floor Replacement	21.00	30.00	0.00	0.00	0.00	1.56	0.00	0.00	0.00	0.00	30.00	3.00	3.33	3.00	2.00	3.00	0.00	4.00	0.00	14.00	1.00	0.00	7.67	123.56

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84	Fairbanks Borough	Weller Elementary School Classroom Upgrades	6.00	28.25	0.00	0.00	0.00	3.45	0.00	0.00	0.00	8.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	14.11	0.00	14.00	0.00	0.00	3.67	122.14
85	Mat-Su Borough	Structural Seismic Upgrades, 5 Sites	21.00	30.00	0.00	10.00	0.00	2.25	0.00	0.00	0.00	10.00	20.00	1.00	1.00	2.00	2.00	2.00	0.00	6.00	0.00	10.33	1.00	0.00	3.33	121.91
86	Kenai Peninsula Borough	Seward Middle School Exterior Repair	24.00	3.50	0.00	10.00	0.00	2.78	0.00	0.00	0.00	8.00	30.00	3.00	2.33	4.00	3.00	4.00	0.00	8.00	0.00	12.33	1.00	0.00	4.33	120.28
87	Juneau Borough	Riverbend Elementary School Roof Replacement	27.00	8.75	0.00	10.00	0.00	2.23	0.00	0.00	0.00	3.00	25.00	2.33	2.00	2.33	2.33	3.00	0.00	8.00	0.00	11.00	3.00	0.00	7.33	117.31
88	Mat-Su Borough	Colony and Wasilla Middle Schools Roof Replacement	27.00	15.30	0.00	10.00	0.00	2.25	0.00	0.00	0.00	8.00	20.00	1.00	1.00	2.00	2.00	2.00	0.00	8.02	0.00	14.00	2.00	0.00	2.00	116.56
89	Southwest Region	Aleknagik K-12 School Renovation	24.00	30.00	0.00	0.00	0.00	1.48	0.00	0.00	0.00	0.00	25.00	1.00	2.00	2.33	2.00	2.00	0.00	4.26	0.00	10.33	6.00	0.00	4.00	114.40
90	Southeast Island	Thorne Bay K-12 School Underground Storage Tank Replacement	24.00	13.49	0.00	10.00	0.00	2.57	0.00	0.00	0.00	0.00	30.00	1.67	3.00	2.00	2.00	2.00	0.00	2.00	0.00	15.00	0.00	0.00	6.00	113.73
91	Fairbanks Borough	Pearl Creek Elementary School Classroom Upgrades	9.00	28.25	0.00	0.00	0.00	3.45	0.00	0.00	0.00	0.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	10.02	0.00	14.00	0.00	0.00	3.67	113.05
92	Southeast Island	Port Alexander and Thorne Bay K-12 Schools Roof Replacement	21.00	15.78	0.00	0.00	0.00	2.39	0.00	0.00	0.00	0.00	30.00	2.00	3.67	2.67	2.00	2.00	0.00	6.00	0.67	14.33	2.67	0.00	5.00	110.17
93	Lower Yukon	Kotlik and Pilot Station K-12 Schools Renewal and Repair	18.00	5.00	0.00	10.00	0.00	2.29	0.00	0.00	0.00	5.00	30.00	2.33	2.00	2.33	3.00	3.00	0.00	5.69	0.00	13.00	2.67	0.00	5.00	109.32
94	Fairbanks Borough	Anne Wien Elementary School Exterior Renovation	15.00	10.25	0.00	0.00	0.00	3.45	0.00	0.00	0.00	0.00	30.00	2.00	3.00	4.00	2.67	3.00	0.00	9.41	0.00	14.00	5.67	0.00	6.33	108.78
95	Mat-Su Borough	Ceiling and Sprinkler Seismic Mitigation, 5 Sites	18.00	30.00	0.00	10.00	0.00	2.25	0.00	0.00	0.00	0.00	20.00	1.00	1.00	2.00	2.00	2.00	0.00	3.75	0.00	11.33	1.00	0.00	3.33	107.66
96	Mat-Su Borough	HVAC Control Upgrades, 5 Sites	15.00	24.51	0.00	10.00	0.00	2.25	0.00	0.00	0.00	0.00	20.00	1.00	1.00	2.00	2.00	2.00	0.00	5.60	2.33	12.00	4.33	0.00	3.00	107.03
97	Lower Yukon	Sheldon Point K-12 School Exterior Repairs, Nunam Iqua	21.00	2.00	0.00	0.00	0.00	2.29	0.00	0.00	0.00	5.00	30.00	2.33	2.00	2.33	3.00	3.00	0.00	0.65	0.00	13.33	3.00	0.00	8.00	97.94

FY2024 District Six-Year Plan Projects

District Name	District #	Priority	Project Location and Description	Primary Purpose	FY24	FY25	FY26	FY27	FY28	FY29	*FY24 Reuse*
Alaska Gateway	3	1	TetlinK-12 School Renovation	C	$ 1,866,054						*N*
Alaska Gateway	3	2	Tok K-12 School Partial Roof Renovation	C	$ 512,791						*N*
Alaska Gateway	3	3	Northway K-12 School Mechanical Renovation	C	$ 1,195,524						*N*
Alaska Gateway	3	4	Tanacross K-12 School Renovation	C		$ 3,350,000					*N*
Alaska Gateway	3	5	Tok K-12 School Renovation	C			$ 9,415,000				*N*
Alaska Gateway	3	6	Eagle K-12 chool renovation	C				$ 3,950,000			*N*
Alaska Gateway	3	7	Northway K-12 School Renovation	C					$ 3,800,000		*N*
Alaska Gateway	3	8	Distrrict Office Complex Renovation	C						$ 2,400,000	*N*
Aleutians East Borough	56	1	Sand Point K-12 School Pool Major Maintenance	C	$ 102,608						*Y*
Aleutians East Borough	56	2	Sand Point K-12 School Pool Liner	C	$ 464,000						*N*
Anchorage	5	1	Abbott Loop Elementary Fire Sprinkler	C	$ 2,313,143						*N*
Anchorage	5	2	Birchwood Elementary School Boiler Replacement	C	$ 2,076,786						*N*
Anchorage	5	3	Stellar Secondary School Fire Alarm	C	$ 389,096						*N*
Anchorage	5	4	Bear Valley Elementary School Domestic Water Replacement	C	$ 2,665,758						*N*
Anchorage	5	5	Mears Middle School Roof Replacement	C	$ 6,403,930						*N*
Anchorage	5	6	Orion Roof Replacement	C	$ 4,949,761						*N*
Anchorage	5	7	Secure Vestibules, Group 1, 3 Sites	F	$ 1,153,000						*N*
Anchorage	5	8	Secure Vestibules, Group 2, 3 Sites	F	$ 951,669						*N*
Anchorage	5	9	Secure Vestibules, Group 3, 5 Sites	F	$ 9,036,461						*N*
Anchorage	5	10	Secure Vestibules, Group 4, 8 Sites	F	$ 3,901,000						*N*
Anchorage	5	11	West High School Partial Roof Replacement	C	$ 7,154,552						*N*
Anchorage	5	12	East High School Gym Improvements	C	$ 8,726,669						*Y*
Anchorage	5	13	Service High School Health and Safety Improvements	C	$ 5,462,781						*Y*
Anchorage	5	14	Taku Elementary School Roof Replacement	C	$ 3,562,698						*N*
Anchorage	5	15	Government Hill Elementary School Roof Replacement	C	$ 2,635,154						*Y*
Anchorage	5	16	Homestead Elementary School Roof Replacement	C	$ 4,051,144						*Y*
Anchorage	5	17	North Star Elementary School Roof Replacement	C	$ 3,003,681						*Y*
Anchorage	5	18	King Tech High School Roof Replacement	C	$ 3,829,327						*Y*
Anchorage	5	19	Homestead Elementary School Roof Replacement	C	$ 3,515,805						*Y*
Anchorage	5	20	O'Malley Elementary School Renovation	C	$ 3,693,410						*Y*
Anchorage	5	21	Romig Middle School Special Education Classroom Renovation	C	$ 920,000						*N*
Anchorage	5	22	Inlet View Elementary School Replacement Construction	F		$ 30,967,000					*N*
Anchorage	5	23	East High School Academic Area Safety	D		$ 6,073,000					*N*
Anchorage	5	24	Chinook Elementary School Roof Replacement and Seismic Structural Up	C		$ 5,489,000					*N*
Anchorage	5	25	1990 Prototypical Roof Improvements, 8 Schools	C		$ 5,379,000					*N*
Anchorage	5	26	Campbell Elementary School Roof Replacement and Seismic Structural U	C		$ 5,950,000					*N*
Anchorage	5	27	College Gate Elementary School Roof Replacement and Seismic Structura	C		$ 6,663,000					*N*
Anchorage	5	28	Lake Otis Elementary School Building Improvements	C		$ 12,942,000					*N*
Anchorage	5	29	Birchwood Elementary School Boiler Replacement	C		$ 3,832,000					*N*
Anchorage	5	30	Kincaid Elementary School Site Improvements	F		$ 5,725,000					*N*
Anchorage	5	31	Maintenance Building Roof Restoration	C		$ 1,804,000					*N*
Anchorage	5	32	Ursa Minor Elementary School Roof Restoration	C		$ 1,556,000					*N*

District Name	District #	Priority	Project Location and Description	Primary Purpose	FY24	FY25	FY26	FY27	FY28	FY29	*FY24 Reuse*
Anchorage	5	33	Chugiak Elementary School Roof Replacement and Seismic Structural Up	C		$ 5,900,000					*N*
Anchorage	5	34	Planning & Design for 2024 Deferred Requirements Projects	C		$ 2,780,000					*N*
Anchorage	5	35	Wonder Park Elementary School Replacement Design	F			$ 2,767,000				*N*
Anchorage	5	36	Romig Middle School Renovation Design	C			$ 2,426,500				*N*
Anchorage	5	37	Bartlett High School Building Improvements Planning, Design and Infrastructure	C			$ 11,897,000				*N*
Anchorage	5	38	Scenic Park Elementary School Roof Replacement and Seismic Structural Upgrades	C			$ 5,900,000				*N*
Anchorage	5	39	Warehouse-Purchasing Roof Replacement and Seismic Structural	C			$ 4,379,000				*N*
Anchorage	5	40	Alpenglow Elementary School Partial Roof Replacement and Seismic Structural Upgrades	C			$ 4,797,000				*N*
Anchorage	5	41	Spring Hill Elementary School Roof Replacement and Seismic Structural Upgrades	C			$ 5,509,000				*N*
Anchorage	5	42	Chugiak High School Roof Replacement and Seismic Structural Upgrades	C			$ 17,912,000				*N*
Anchorage	5	43	West High School Utilidor Improvements Phase 3	C			$ 8,699,000				*N*
Anchorage	5	44	Bear Valley Elementary School Building Improvements	C			$ 8,621,000				*N*
Anchorage	5	45	Spring Hill Elementary School Improvements	C			$ 7,686,000				*N*
Anchorage	5	46	Chugiak Elementary School Building Improvements	C			$ 4,815,000				*N*
Anchorage	5	47	Planning & Design for 2028 Deferred Requirements Projects	C			$ 475,000				*N*
Anchorage	5	48	Tudor Elementary School Roof & Mechnical Replacement	C					$ 2,800,000		*N*
Anchorage	5	49	Wonder Park Elementary School Replacement Construction	F					$ 33,001,000		*N*
Anchorage	5	50	Romig Middle School Renovation	C					$ 24,711,000		*N*
Anchorage	5	51	Bartlett High School Phase 3 West Wing Building Renovation	C					$ 33,707,500		*N*
Anchorage	5	52	SAVE High School Building Improvements	C					$ 3,923,000		*N*
Anchorage	5	53	Benny Benson Secondary School Building & Roof Improvements	C					$ 5,110,000		*N*
Anchorage	5	54	Planning & Design for FY2030 Deferred Requirement projects	C					$ 4,152,000		N
Annette Island	6	3	Metlakatla District Office Renovation	C	* District did not submit a 6-year plan or application. Fiscal year data left as-is from original submittal.						*N*
Annette Island	6	4	Elementary School Classroom Addition	B	$ 1,500,000						*N*
Annette Island	6	5	Metlakatla Music Building	C		$ 300,000					*N*
Annette Island	6	6	Metlakatla Middle School Parking Lot Expansion	F			$ 500,000				*N*
Bering Strait	7	1	Brevig Mission K-12 School Addition	C	$ 29,361,625						*N*
Bering Strait	7	2	Little Diomede Consolidation to High School Building	A		$ 12,000,000					*N*
Bering Strait	7	3	Stebbins K-12 School Addition/renovation	B						$ 24,000,000	*N*
Bristol Bay Borough	8	1	Bristol Bay School Renovations, Phase 2 Supplemental	C	$ 1,905,631						*N*
Chatham	9	3	Angoon School Roof Replacement	C	$ 1,985,000	* District did not submit a 6-year plan or application. Fiscal year data left as-is from original submittal.					*N*
Chugach	10	3	Whittier K-12 School Renovation	C	$ 570,000						*N*
Chugach	10	4	Tatitlek K-12 School Playground Rehabilitation	F		$ 235,000					*N*
Copper River	11	2	Glennallen High School Auditorium Roof Replacement	C	$ 450,000	* District did not submit a 6-year plan or application. Fiscal year data left as-is from original submittal.					*N*
Copper River	11	3	Kenny Lake Boiler Replacement	C		$ 350,000					*N*
Copper River	11	4	Kenny Lake School Flooring Replacement	C			$ 75,000				*N*
Copper River	11	5	Glennallen High School Partial Flooring Replacement	C				$ 150,000			*N*
Copper River	11	6	Slana School Exterior Renovation	C					$ 75,000		*N*
Craig City	13	3	Craig High School Security Upgrades	C	$ 575,000	* District did not submit a 6-year plan or application. Fiscal year data left as-is from original submittal.					*N*
Craig City	13	4	Craig High School HVAC Controls Upgrades	E	$ 1,200,000						*N*

District Name	District #	Priority	Project Location and Description	Primary Purpose	FY24	FY25	FY26	FY27	FY28	FY29	*FY24 Reuse*
Craig City	13	5	Craig Middle School Gym Roof Replacement	C		$ 900,000					*N*
Craig City	13	6	Craig Elementary School Boiler Replacement	C			$ 250,000				*N*
Craig City	13	7	Craig High School Flooring Replacement	C				$ 400,000			*N*
Craig City	13	8	District Bus Barn Construction	F					$ 350,000		*N*
Denali Borough	2	1	Tri-Valley School Partial Roof Replacement	C	$ 2,103,851						*N*
Denali Borough	2	2	Tri-Valley School Septic System Upgrades	D	$ 515,692						*N*
Denali Borough	2	3	Districtwide Electrical Code Upgrades	D	$ 1,291,534						*N*
Denali Borough	2	4	Generator Replacement, 3 Schools	C	$ 2,501,045						*N*
Denali Borough	2	5	Electronic Door Locking Systems, 3 Schools	C		$ 201,133					*N*
Denali Borough	2	7	Tri-Valley School Boiler Replacement	C			$ 500,000				*N*
Denali Borough	2	8	Cantwell School Electrical Upgrades	D			$ TBD				*N*
Denali Borough	2	9	Cantwell School Heating System Upgrade	E			$ TBD				*N*
Denali Borough	2	10	Cantwell School Restroom ADA Remodel	D			$ TBD				*N*
Denali Borough	2	11	Anderson K-12 School Heating Upgrades	C					$ 2,000,000		*N*
Denali Borough	2	12	Kitchen Renovations, 3 Schools	C					$ TBD		*N*
Denali Borough	2	13	Anderson School Egress and Acceesibility Upgrades	D						$ TBD	*N*
Denali Borough	2	14	Tri-Valley School Library and Restroom Renovation	D						$ TBD	*N*
Denali Borough	2	15	Cantwell School Renovation	C						$ TBD	*N*
Fairbanks N Star Borough	16	1	Lathrop High School Kitchen Upgrade	D	$ 1,649,500						*N*
Fairbanks N Star Borough	16	2	University Park Elementary Site Improvements	A	$ 1,156,684						*N*
Fairbanks N Star Borough	16	3	North Pole High School Renovation	E	$ 6,107,614						*N*
Fairbanks N Star Borough	16	4	Administrative Center Exterior Renovation	C	$ 2,529,356						*N*
Fairbanks N Star Borough	16	5	Arctic Light Elementary School Exterior Renovation	C	$ 7,547,890						*N*
Fairbanks N Star Borough	16	6	Anne Wien Elementary School Exterior Renovation	C	$ 5,974,021						*N*
Fairbanks N Star Borough	16	7	Tanana Middle School Classroom Upgrades	C	$ 10,471,326						*N*
Fairbanks N Star Borough	16	8	Pearl Creek Elementary School Classroom Upgrades	C	$ 6,360,238						*N*
Fairbanks N Star Borough	16	9	Weller Elementary School Classroom Upgrades	C	$ 6,573,339						*N*
Fairbanks N Star Borough	16	10	West Valley High School Auditorium Upgrade	F	$ 624,740						*N*
Fairbanks N Star Borough	16	11	Two Rivers Elementary Interior Renovation	C	$ 329,084						*N*
Fairbanks N Star Borough	16	12	Tanana Middle School Exterior Renovation	C	$ 2,782,296						*N*
Fairbanks N Star Borough	16	13	North Pole Middle School Exterior Renovation	C	$ 2,026,184						*N*
Fairbanks N Star Borough	16	14	Howard Luke High School Exterior Renovation	C		$ 1,759,028					*N*
Fairbanks N Star Borough	16	15	Crawford Elementary School Exterior Renovation	C		$ 5,038,160					*N*
Fairbanks N Star Borough	16	16	Woodriver Elementary School Renovation, Phase III	C		$ 6,377,551					*N*
Fairbanks N Star Borough	16	17	University Park Elementary Classroom Upgrades, Phase I	C		$ 3,239,814					*N*
Fairbanks N Star Borough	16	18	Howard Luke Classroom Upgrades, Phase I	C		$ 1,619,538					*N*
Fairbanks N Star Borough	16	19	Lathrop High School Partial Roof Replacement	C			$ 3,770,591				*N*
Fairbanks N Star Borough	16	20	Facilities Management Dept , Phase III	C			$ 2,895,845				*N*
Fairbanks N Star Borough	16	21	Tanana Middle School Renovation, Phase III	E			$ 8,420,682				*N*
Fairbanks N Star Borough	16	22	West Valley High School Gym Wing Renovation	C			$ 5,400,000				*N*
Fairbanks N Star Borough	16	23	Salcha Elementary School Classroom Upgrades, Phase I	E			$ 722,551				*N*
Fairbanks N Star Borough	16	24	Ticasuk Brown Elementary School Classroom Upgrades, Phase I	C			$ 3,106,504				*N*
Fairbanks N Star Borough	16	25	Randy Smith Middle School Exterior Renovation	C				$ 4,571,885			*N*
Fairbanks N Star Borough	16	26	Two Rivers Elementary School Renovation, Phase III	E				$ 2,243,512			*N*

District Name	District #	Priority	Project Location and Description	Primary Purpose	FY24	FY25	FY26	FY27	FY28	FY29	*FY24 Reuse*
Fairbanks N Star Borough	16	27	Pearl Creek Elementary School Renovation, Phase III	E				$ 6,189,581			*N*
Fairbanks N Star Borough	16	28	Ladd Elementary School Classroom Upgrades, Phase I	C				$ 3,369,048			*N*
Fairbanks N Star Borough	16	29	Administrative Center Flooring Replacement	C				$ 2,118,518			*N*
Fairbanks N Star Borough	16	30	Facilities Management Dept, Interior Upgrades, Phase I	C				$ 1,559,153			*N*
Fairbanks N Star Borough	16	31	Hunter Elementary Exterior Renovation, Phase II	C					$ 3,326,996		*N*
Fairbanks N Star Borough	16	32	Weller Elementary School Renovation, Phase III	E					$ 6,038,717		*N*
Fairbanks N Star Borough	16	33	Salcha Elementary School Renovation, Phase III	E					$ 1,337,508		*N*
Fairbanks N Star Borough	16	34	Arctic Light Elementary School Classroom Upgrades, Phase I	C					$ 3,625,236		*N*
Fairbanks N Star Borough	16	35	Anne Wien Elementary School Classroom Upgrades, Phase I	C					$ 3,559,134		*N*
Fairbanks N Star Borough	16	36	Midnight Sun Elementary Site Upgrades & Safety Improvements	F					$ 1,800,000		*N*
Fairbanks N Star Borough	16	37	North Pole High School Site Upgrades & Safety Improvements	F					$ 3,500,000		*N*
Fairbanks N Star Borough	16	38	West Valley High School Exterior Renovation	C						$ 10,141,554	*N*
Fairbanks N Star Borough	16	39	Ticasuk Brown Elementary Renovation, Phase III	E						$ 5,750,428	*N*
Fairbanks N Star Borough	16	40	Howard Luke High School Renovation, Phase III	E						$ 2,997,918	*N*
Fairbanks N Star Borough	16	41	Crawfor Elementary School Classroom Upgrades, Phase I	C						$ 4,638,641	*N*
Fairbanks N Star Borough	16	42	Lathrop High School Classroom Upgrades, Phase I	C						$ 11,613,133	*N*
Fairbanks N Star Borough	16	43	Ticsuk Brown Elementary Site Upgrades & Safety Improvements	F						$ 1,800,000	*N*
Fairbanks N Star Borough	16	44	Howard Luke Traffic Safey Improvements	F						$ 1,500,000	*N*
Galena City	17	2	Sidney C. Huntington Elementary School Renovation	E	$ 5,510,000	* District did not submit a 6-year plan or application. Fiscal year data left as-is from original submittal.					*N*
Galena City	17	3	Sidney C. Huntington Elementary School Fire Protection Upgrade	D		$ 170,000					*N*
Galena City	17	4	Sidney C. Huntington School Floor Renovation	C			$ 270,000				*N*
Galena City	17	5	Galena Interior Learning Academy Automotive Lab Energy Upgrades	E				$ 54,000			*N*
Galena City	17	6	Galena Interior Learning Academy Cosmetology Building Energy Upgrade	E					$ 43,000		*N*
Haines	18	1	Haines High School Roof Replacement	C	$ 1,876,677						*N*
Haines	18	2	Haines High School Locker Room Renovation	D	$ 1,371,179						*N*
Haines	18	3	Haines High School Track Renovation and Upgrade	F		$ 1,000,000					*N*
Hoonah	19	1	Hoonah Central Boiler Replacement	C	$ 340,053						*Y*
Hoonah	19	2	Hoonah School Playground Improvements	F	$ 227,747						*Y*
Iditarod Area	21	1	David-Louis Memorial K-12 School Roof Replacement, Grayling	C	$ 3,440,804						*Y*
Iditarod Area	21	2	Blackwell K-12 School Renovations, Anvik	C	$ 5,107,092						*N*
Iditarod Area	21	3	McGrath School Backup Generator	C		$ 70,000					*N*
Juneau Borough	22	1	Dzantiki Heen'i Middle School Roof Replacement	C	$ 2,650,000						*N*
Juneau Borough	22	2	Riverbend Elementary School Roof Replacement	C	$ 2,800,000						*N*
Juneau Borough	22	3	Juneau-Douglas High School Partial Roof Replacement	C		$ 1,450,000					*N*
Juneau Borough	55	4	Floyd Dryden Middle School Partial Roof Replacement	C			$ 1,330,000				*N*
Juneau Borough	22	5	Mendenhall River Community School Renovation	C				$ 35,000,000			*N*
Juneau Borough	22	6	Marie Drake School Renovation	C					$ 45,000,000		*N*
Kake City	23	1	Exterior Upgrades - Main School Facilities	C	$ 331,134						*N*
Kake City	23	2	Kake High School Plumbing Replacement	C	$ 1,047,345						*N*
Kake City	23	3	Kake High School Flooring Replacement	C	$ 727,285						*N*
Kake City	23	4	Kake High School Gym Floor Replacement	C	$ 306,042						*N*
Kake City	23	5	Covered Play Area Construction and Playground Renewal	F		$ 800,000					*N*
Kake City	23	6	Vocational Building Renovations	C		$ 400,000					*N*
Kake City	23	7	Kake Middle School and Library HVAC Upgrades	C			$ TBD				*N*

District Name	District #	Priority	Project Location and Description	Primary Purpose	FY24	FY25	FY26	FY27	FY28	FY29	*FY24 Reuse*
Kake City	23	8	Kake High School HVAC Upgrades	D				$ TBD			*N*
Kake City	23	9	Kake Elementary School Roof Replacement	C					$ 1,500,000		*N*
Kake City	23	10	Kake Vocational Building Replacement	F						$ 5,494,843	*N*
Kenai Peninsula Borough	24	1	Homer High School Partial Roof Replacement	C	$ 2,945,029						*N*
Kenai Peninsula Borough	24	2	West Homer Elementary School North Wall Improvement	C	$ 490,082						*N*
Kenai Peninsula Borough	24	3	Seward Middle School Exterior Repair	C	$ 896,630						*N*
Kenai Peninsula Borough	24	4	Kenai Middle School Security Remodel	F	$ 1,753,359						*N*
Kenai Peninsula Borough	24	5	Parking & Traffic Upgrade, 4 Sites	F	$ 5,500,000						*N*
Kenai Peninsula Borough	24	6	Kenai Central High School Field Restrooms	F	$ 500,000						*N*
Kenai Peninsula Borough	24	7	Seward High School Field Turf and Track	F	$ 2,250,000						*N*
Kenai Peninsula Borough	24	8	Nikiski Middle/Senior High School Field Turf and Track	F	$ 2,250,000						*N*
Kenai Peninsula Borough	24	9	Roof Replacements, 3 Schools	C	$ 6,450,000						*N*
Kenai Peninsula Borough	24	10	Homer High School Front Entrance Improvements	F	$ 850,000						*N*
Kenai Peninsula Borough	24	11	Soldotna Elementary School Reconstruction	F/E	$ 21,500,000						*N*
Kenai Peninsula Borough	24	12	Soldotna High School Siding Repair	E	$ 2,000,000						*N*
Kenai Peninsula Borough	24	13	Soldotna Prep School Repurposing & Consolidation	F/E	$ 18,500,000						*N*
Kenai Peninsula Borough	24	14	Maintenance Shop	E	$ 5,000,000						*N*
Kenai Peninsula Borough	24	15	Nikiski High School Building Automation System Upgrade	E		$ 1,157,415					*N*
Kenai Peninsula Borough	24	16	Kenai Alt/ABC Window and Siding Replacement	C		$ 550,000					*N*
Kenai Peninsula Borough	24	17	Ninilchik School Window Replacement	C		$ 201,017					*N*
Kenai Peninsula Borough	24	18	Homer Middle School Drainage Improvements	F		$ 750,000					*N*
Kenai Peninsula Borough	24	19	Tebughna School Window Replacement	C			$ 832,500				*N*
Kenai Peninsula Borough	24	20	Nikiski High School Building Automation System Upgrade	C			$ 1,153,444				*N*
Kenai Peninsula Borough	24	21	Paul Banks Elementary Parking and Traffic Upgrades	F			$ 850,000				*N*
Kenai Peninsula Borough	24	22	Seward High School Security Remodel	F				$ 4,171,299			*N*
Kenai Peninsula Borough	24	23	Nanwalek Middle/High School Replacement	B				$ 25,000,000			*N*
Kenai Peninsula Borough	24	24	Cooper River Window and Siding Replacement	C/E					$ 308,580		*N*
Kenai Peninsula Borough	24	25	Kenai Central High School Building Automation System Upgrade	E					$ 1,701,794		*N*
Kenai Peninsula Borough	24	26	Redoubt Elementary Parking Lot Improvements	F						$ 420,690	*N*
Kenai Peninsula Borough	24	27	Ninilchik School Bus Drop Off & Parking Lot Improvements	F						$ 250,000	*N*
Kenai Peninsula Borough	24	28	School District Warehouse Backup Generator	C						$ 85,000	*N*
Ketchikan Borough	25	1	Ketchikan High School Security Upgrades	E	$ 457,087						*N*
Ketchikan Borough	25	2	Schoenbar Middle School Gym Floor Replacement	D	$ 731,951						*N*
Ketchikan Borough	25	3	Valley Park Complex Upgrades	F	$ 207,986						*N*
Ketchikan Borough	25	4	Playground Equipment and Surface Upgrades, 3 Sites	F	$ 405,655						*N*
Ketchikan Borough	25	5	Houghtaling Elementary School Transformer Replacement	D	$ 577,027						*N*
Ketchikan Borough	25	6	Revilla High School Roof and Siding Replacement	C		$ 1,200,000					*N*
Ketchikan Borough	25	7	Pt. Higgins Elementary School Renovations	C			$ 6,037,295				*N*
Kodiak Island Borough	28	1	Main Elementary School Roof Replacement	C	$ 1,369,078						*N*
Kodiak Island Borough	28	2	Chiniak K-12 School Water Code Compliance and Upgrade	D	$ 147,968						*N*
Kodiak Island Borough	28	3	North Star Elementary School Siding and Window Replacement	C	$ 630,522						*N*
Kodiak Island Borough	28	4	Peterson Elementary School Roof Replacement	C		$ 2,678,478					*N*
Kodiak Island Borough	28	5	Main Elementary School Siding Replacement	C		$ 616,181					*N*
Kodiak Island Borough	28	6	East Elementary School Metal Roof Replacement	C		$ 1,635,000					*N*

District Name	District #	Priority	Project Location and Description	Primary Purpose	FY24	FY25	FY26	FY27	FY28	FY29	*FY24 Reuse*
Kodiak Island Borough	28	7	North Star Elementary HVAC Controls Replacement	E			$ 1,137,417				*N*
Kodiak Island Borough	28	8	Chiniak School HVAC Controls Replacement	E			$ 244,142				*N*
Kodiak Island Borough	28	9	Main Elementary School HVAC Controls Replacement	E			$ 1,086,578				*N*
Kodiak Island Borough	28	10	Akhiok School HVAC Controls Replacement	E				$ 268,618			*N*
Kodiak Island Borough	28	11	Port Lions School HVAC Controls Replacement	E				$ 689,729			*N*
Kodiak Island Borough	28	12	East Elementary School Parking Lot Safety Upgrade and Repaving	F					$ 533,653		*N*
Kodiak Island Borough	28	13	East Elementary School Siding Replacement	C					$ 326,214		*N*
Kodiak Island Borough	28	14	Kodiak Schools Aquatic Training Facility Finishes	C					$ 1,635,000		*N*
Kodiak Island Borough	28	15	Chiniak School Flooring Replacement	C						$ 94,760	*N*
Kodiak Island Borough	28	16	Port Lions School Flooring Replacement	C						$ 285,172	*N*
Kodiak Island Borough	28	17	Kodiak Middle School Exterior Improvements	C						$ 679,007	*N*
Kodiak Island Borough	28	18	Peterson Elementary Exterior Improvements	C						$ 437,087	*N*
Kuspuk	29	1	Jack Egnaty Sr. K-12 School Roof Replacement, Sleetmute	C	$ 1,513,970						*N*
Kuspuk	29	3	Johnnie John Sr. School Major Maintenance, Crooked Creek	C		$ 2,000,000					*N*
Lake & Peninsula Boroug	30	3	Districtwide Playground Safety Upgrades	C	$ 300,000	* District not CIP eligible FY21-FY24. Fiscal year data left as-is from original submittal.					*N*
Lake & Peninsula Boroug	30	4	Districtwide Roof Replacements	C		$ 800,000					*N*
Lower Kuskokwim	31	1	Newtok K-12 School Relocation/Replacement, Merkarvik	B	$ 81,499,239						*N*
Lower Kuskokwim	31	2	Gladys Jung Elementary School Heating Mains Replacement	C	$ 1,188,713						*Y*
Lower Kuskokwim	31	3	Anna Tobeluk Memorial K-12 School Renovation/Addition, Nunapitchuk	B	$ 46,616,611						*Y*
Lower Kuskokwim	31	4	Nuniwaarmiut K-12 School Wastewater Upgrades, Mekoryuk Supplemental	D	$ 834,508						*N*
Lower Kuskokwim	31	5	Bethel Campus fire Pump House and Fire Preotection Upgrades Supplemental	C	$ 252,526						*N*
Lower Kuskokwim	31	6	Water Storage and Treatment, Kongiganak	A	$ 4,069,731						*Y*
Lower Kuskokwim	31	7	Akula Elitnauvik K-12 School Renovation, Kasigluk-Akula	C	$ 4,975,460						*Y*
Lower Kuskokwim	31	8	Akiuk Memorial K-12 School Renovation, Kasigluk-Akiuk	C	$ 3,604,231						*Y*
Lower Kuskokwim	31	9	Bethel Regional High School Boardwalk Replacement	D	$ 1,308,239						*N*
Lower Kuskokwim	31	10	Qugcuun Memorial K-12 School Renovation, Oscarville	C	$ 4,471,558						*Y*
Lower Kuskokwim	31	11	Arviq School Improvement, Platinum	D		$ TBD					*N*
Lower Kuskokwim	31	12	Bethel Campus Transportation and Drainage Upgrades	F		$ 1,065,532					*Y*
Lower Kuskokwim	31	13	Districtwide Fuel Tank Disposition	D		$ 2,031,078					*N*
Lower Kuskokwim	31	14	Fuel Tank Remediation, Bethel	D		$ 215,152					*N*
Lower Kuskokwim	31	15	Districtwide Fuel Tank Upgrades	D			$ 7,250,000				*N*
Lower Kuskokwim	31	16	Nelson Island School Renovation, Toksook Bay	C				$ 40,300,000			*N*
Lower Kuskokwim	31	17	Districtwide Roof Replacement	C				$ 27,800,000			*N*
Lower Kuskokwim	31	18	Districtwide Wastewater Upgrades	D					$ 14,200,000		*N*
Lower Kuskokwim	31	19	Districtwide Water Treatment and Storage Upgrades	D						$ 8,400,000	*N*
Lower Kuskokwim	31	20	Districtwide Fire Alarm and Sprinkler Upgrades	D						$ TBD	*N*
Lower Yukon	32	1	Marshall K-12 School Emergency Tank Farm Repair	C	$ 1,809,501						*Y*
Lower Yukon	32	2	Hooper Bay K-12 School Exterior Repairs	C	$ 2,296,607						*Y*
Lower Yukon	32	3	Scammon Bay K-12 School Exterior Upgrades	C	$ 663,922						*N*
Lower Yukon	32	4	Sheldon Point K-12 School Exterior Repairs, Nunam Iqua	C	$ 1,973,987						*N*
Lower Yukon	32	5	Kotlik and Pilot Station K-12 Schools Renewal and Repair	C	$ 4,854,617						*N*
Lower Yukon	32	6	Hooper Bay K-12 School Emergency Lighting and Retrofit	D	$ 234,545						*Y*

District Name	District #	Priority	Project Location and Description	Primary Purpose	FY24	FY25	FY26	FY27	FY28	FY29	*FY24 Reuse*
Lower Yukon	32	7	Scammon Bay K-12 School Emergency Lighting and Retrofit	D	$ 119,467						*Y*
Lower Yukon	32	8	LYSD Central Office Renovation	C	$ 4,909,855						*N*
Lower Yukon	32	9	Districtwide HVAC Update and Recommissioning	D	$ 8,000,000						*N*
Lower Yukon	32	10	Hooper Bay Tank Farm Stabilization	C	$ 2,500,000						*N*
Mat-Su Borough	32	1	Mat-Su Central Replacement Facility	A	$ 24,230,364						*N*
Mat-Su Borough	33	2	Colony and Wasilla Middle Schools Roof Replacement	D	$ 5,218,877						*Y*
Mat-Su Borough	33	3	Elevator Code and Compliance Upgrades, 6 Sites	D	$ 1,767,988						*Y*
Mat-Su Borough	33	4	Structural Seismic Upgrades, 5 Sites	D	$ 13,394,677						*Y*
Mat-Su Borough	33	5	Ceiling and Sprinkler Seismic Mitigation, 5 Sites	D	$ 4,150,251						*Y*
Mat-Su Borough	33	6	HVAC Control Upgrades, 5 Sites	D	$ 10,983,451						*Y*
Mat-Su Borough	33	7	District Athletic Field Upgrades	C	$ 7,773,555						*N*
Mat-Su Borough	33	8	Box School Renovations, 4 Schools (Butte, Pioneer Peak, Cottonwood Creek, Snowshoe Elementary)	C				$ 20,320,000			*N*
Mat-Su Borough	33	9	Emergency Generator Replacements Phase 2, 7 Schools	D				$ 6,760,486			*N*
Mat-Su Borough	33	10	Palmer High School Mechanical Upgrade, Phase 3	C				$ 3,652,000			*N*
Mat-Su Borough	33	11	District Exterior Envelope Repairs and Upgrades	C				$ 9,500,000			*N*
Nenana City	34	1	Nenana School Flooring and Asbestos Abatement	C	$ 516,633						*N*
Nenana City	34	2	Nenana School Boiler Replacement	C	$ 194,697						*N*
Nenana City	34	3	Nenana School Fire Suppression System Replacement	D	$ 1,334,313						*N*
Nenana City	34	4	Nenana K-12 School Major Maintenance	D		$ 1,600,000					*N*
Nenana City	34	5	Nenana K-12 School Roof Replacement	C			$ 1,400,000				*N*
Nenana City	34	6	Nenana K-12 School Energy Efficiency Upgrades	E				$ 600,000			*N*
Nenana City	34	7	Nenana K-12 School Site Improvements	F					$ 650,000		*N*
Nenana City	34	8	Nenana K-12 School ADA Access Improvements	D						$ 1,350,000	*N*
Nenana City	34	9	Nenana K-12 School Career and Technical Education Classroom Upgrade	F						$ 1,100,000	*N*
Nome City	35	1	Nome Beltz Jr/Sr High School Roof Replacement Supplemental	C	$ 5,672,472						*N*
Nome City	35	2	Nome Elementary School Fire Alarm Replacement	D	$ 529,683						*N*
Nome City	35	3	Nome Beltz Jr/Sr High School Generator Replacement	C	$ 948,937						*Y*
Nome City	35	4	Nome Beltz Jr/Sr High and Nome Elementary Schoosl Secure Access and ADA Improvements	D	$ 342,551						*N*
Nome City	35	6	Hot Water Heater and Plumbing Upgrades	D		$ 500,000					*N*
Nome City	35	7	Nome Elementary School Exterior Structure and Parking Upgrades	C		$ 2,500,000					*N*
Nome City	35	8	Nome Beltz Jr/Sr High School Exterior Renovation	C		$ 425,000					*N*
Nome City	35	9	DDC Control System , Phases 2	E			$ 250,000				*N*
Nome City	35	10	Nome Beltz Jr/Sr High School Interior Renovation	C			$ 450,000				*N*
Nome City	35	11	Charter School Building Plumbing Upgrades	C				$ 150,000			*N*
Nome City	35	12	Nome Elementary School Interior renovation	C				$ 350,000			*N*
Nome City	35	13	Building D Exterior Upgrades	C					$ 200,000		*N*
North Slope Borough	36	5	Districtwide Renovations and Systems Upgrades	C		$ 8,295,000	* District did not submit a 6-year plan or application. Fiscal year data left as-is fro				*N*
Northwest Arctic	37	1	June Nelson Elementary School Roof Replacement	E	$ 1,751,514						*N*
Northwest Arctic	37	2	Davis-Ramoth K-12 School Renovation	C	$ 10,312,923						*Y*
Northwest Arctic	37	3	Deering K-12 School Renovation/Addition	B	$ 34,544,603						*N*
Northwest Arctic	37	4	Buckland K-12 School Exterior Envelope Replacement	C		$ 3,000,000					*N*
Northwest Arctic	37	5	Noorvik K-12 School Roof Replacement	C			$ 2,500,000				*N*

District Name	District #	Priority	Project Location and Description	Primary Purpose	FY24	FY25	FY26	FY27	FY28	FY29	*FY24 Reuse*
Northwest Arctic	37	6	Noorvik K-12 School HVAC Controls	C				$ 500,000			*N*
Northwest Arctic	37	7	June Nelson Elementary School Renovation	C					$ 3,500,000		*N*
Northwest Arctic	37	8	Kiana K-12 School Renovation	C						$ 3,500,000	*N*
Petersburg Borough	39	5	Districtwide ADA Renovations	D		$ 1,000,000	* District did not submit a 6-year plan or application. Fiscal year data left as-is fro				*N*
Saint Mary's City	46	1	St. Mary's Campus Renewal and Repairs	C	$ 992,463						*N*
Sitka Borough	42	1	Keet Gooshi Heen Elementary Covered PE Structure Renovation	C	$ 643,966						*N*
Sitka Borough	42	2	Keet Gooshi Heen Playground Equipment Refurbishment	C		$ 180,000					*N*
Sitka Borough	42	3	Baranof School Playground Equipment Refurbishment	C		$ 180,000					*N*
Sitka Borough	42	4	Keet Gooshi Heen Electrical Boiler Installation	E			$ 350,000				*N*
Sitka Borough	42	5	Baranof School Electrical Boiler Installation	C			$ 350,000				*N*
Sitka Borough	42	6	Districtwide LED Lighting Upgrade	E			$ 400,000				*N*
Sitka Borough	42	7	Sitka High School Parking Area Paving	F				$ 275,000			*N*
Sitka Borough	42	8	Keet Gooshi Heen Parking/Play Area Paving	F				$ 300,000			*N*
Sitka Borough	42	9	Blatchley School Parking Area Paving	F					$ 200,000		*N*
Sitka Borough	42	10	Baranof School Parking/Play Area Paving	F						$ 275,000	*N*
Southeast Island	44	1	Thorne Bay K-12 Fire Suppression System	D	$ 638,360						*Y*
Southeast Island	44	2	Thorne Bay K-12 Mechanical Control Upgrades	C	$ 1,404,113						*Y*
Southeast Island	44	3	Thorne Bay K-12 Underground Storage Tank Replacement	C	$ 782,932						*Y*
Southeast Island	44	4	Port Alexander & Thorne Bay K-12 Roof Replacement	C	$ 4,575,722						*N*
Southeast Island	44	5	Port Alexander & Thorne Bay K-12 Domestic Water Pipe Replacement	D	$ 162,572						*N*
Southeast Island	44	6	Thorne Bay K-12 School Flooring Replacement	C	$ 71,549						*Y*
Southeast Island	44	7	Barry Craig Stewart Kasaan K-12 School Renovation	C		$ 120,000					*N*
Southwest Region	45	1	Twin Hills K-12 School Renovation	C	$ 6,342,575						*N*
Southwest Region	45	2	Ekwok K-12 School Renovation	C	$ 7,999,176						*N*
Southwest Region	45	3	Aleknagik K-12 School Renovation	C	$ 9,219,351						*N*
Southwest Region	45	4	Manokotak K-12 School Fire Panel Replacement	D		$ 85,000					*N*
Southwest Region	45	5	Manokotak K-12 School Interior Finishes Replacement	C			$ 1,548,020				*N*
Southwest Region	45	6	Togiak K-12 HVAC Controls Upgrade	E				$ 610,900			*N*
Southwest Region	45	7	New Stuyahok K-12 Roof Replacement	C						$ 250,000	*N*
Valdez City	48	1	Districtwide Generator Replacement	C	$ 1,146,505						*Y*
Valdez City	48	2	Hermon Hutchens Elementary Partial Flooring Replacement	C	$ 419,222						*N*
Valdez City	48	3	Hermon Hutchens Elemetary Exterior Renovation	C		$ 4,050,000					*N*
Valdez City	48	4	Hermon Hutchens Elementary Flooring Replacement, Ph 2	C			$ 550,000				*N*
Valdez City	48	5	Hermon Hutchens Elementary Flooring Replacement, Ph3	C				$ 500,000			*N*
Valdez City	48	6	Valdez High School Renovation	C					$ 20,000,000		*N*
Valdez City	48	7	Hermon Hutchens Elementary School Kitchen Upgrade	C						$ 350,000	*N*
Yukon-Koyukuk	52	1	Roof Replacement, 3 Schools	C	$ 1,997,707						*N*
Yukon-Koyukuk	52	2	Rampart K-12 School Renewal	D	$ 6,742,498						*N*
Yukon-Koyukuk	52	3	Nulato K-12 School Entry Canopy	C		$ 200,000					*N*
Yukon-Koyukuk	52	4	Koyukuk K-12 School Boiler Replacement	C		$ 675,000					*N*
Yukon-Koyukuk	52	5	Hughes K-12 School Renovation	D		$ 5,000,000					*N*
Yukon-Koyukuk	52	6	Minto Contaminated Soil Remediation Plan	D			$ 300,000				*N*
Yukon-Koyukuk	52	7	Kaltag K-12 School Kitchen Code Upgrade	D				$ 250,000			*N*

District Name	District #	Priority	Project Location and Description	Primary Purpose	FY24	FY25	FY26	FY27	FY28	FY29	*FY24 Reuse*
Yupiit	54	1	Mechanical System Improvements, 3 Schools	C	$ 652,506						*N*
Yupiit	54	2	Tuluksak K-12 School Fuel Tank Replacement	D	$ 4,664,317						*N*
Yupiit	54	3	Tuluksak K-12 School Generator Replacement	C	$ 152,002						*N*
Yupiit	54	4	Structural Leveling, 3 Schools	C		$ 5,000,000					*N*
Yupiit	54	5	Kitchen Upgrades, 3 Schools	C		$ 4,376,304					*N*
Yupiit	54	6	Mechanical and Fire Protection Upgrades	D		$ 1,583,814					*N*
Yupiit	54	7	Playground Construction, 3 Schools	F			$ 635,670				*N*
Yupiit	54	8	Classroom Flooring Replacement, 3 Schools	C			$ 728,000				*N*
Yupiit	54	9	Bathroom and Locker Room Renovation, 3 Schools	C			$ 2,739,489				*N*
Yupiit	54	10	Window Replacement, 3 Schools	C			$ 286,063				*N*
Yupiit	54	11	Locker Renewal, 3 Schools	C				$ 72,036			*N*
Yupiit	54	12	Classroom Cabinetry and Countertop Replacement, 3 Schools	C				$ 806,536			*N*
Yupiit	54	13	Tuluksak School Fuel Tank Barrier Replacement	C				$ 349,000			*N*
Yupiit	54	14	IT Infastructure/Electrical Upgrades, 3 Schools	C				$ 405,464			*N*
Yupiit	54	15	Window Replacement, 3 Schools	C				$ 604,173			*N*
Yupiit	54	16	Exterior Door Replacement, 3 Schools	C				$ 100,376			*N*
Yupiit	54	17	Akiachak and Akiak Generator Refurbishment	C					$ 79,438		*N*
Yupiit	54	18	Boiler Refurbishment, 3 Schools	F					$ 769,080		*N*
Yupiit	54	19	Interior Door Replacements	F					$ 142,695		*N*
Yupiit	54	20	Classroom Furniture Replacement	F					$ 267,312		*N*
Yupiit	54	21	Tuluksak School Generator Replacement	F						$ 691,361	*N*
Yupiit	54	22	Exterior Renovations, 3 Schools	C						$ 4,609,818	*N*
Yupiit	54	23	Akiakchak BIA School Abatement and Demolition	A						$ 5,000,000	*N*
Yupiit	54	24	Akiak BIA School Abatement and Demolition	A						$ 1,500,000	*N*
Yupiit	54	25	Boiler Upgrades, 3 Schools	C						$ 2,543,800	*N*
Total Six-Year Plan Estimate:			**$ 1,507,086,565**	FY Totals:	$ 634,048,496	$ 187,990,195	$ 153,618,291	$ 203,941,314	$ 227,873,857	$ 99,614,412	*$ 159,236,170*

Department of Education & Early Development

FY2023 Funding Allocations to School Construction & Major Maintenance Projects

Prepared 8/15/2022

Funding for three FY2023 grants from the Regional Educational Attendance Area and Small Municipal School District School Fund (REAA Fund) to the following School Construction projects:

District	Project	State Share
LKSD	William N. Miller Memorial K-12 School Replacement, Napakiak	$54,895,500
LKSD	Newtok K-12 School Relocation/Replacement, Mertarvik*	$25,000,000
YKSD	Minto K-12 School Renovation/Addition	$11,849,624
	Total	$91,745,124

*Appoximately 40% of the full FY23 state share amount.

Funding for six FY2023 grants from the REAA Fund to the following Major Maintenance

District	Project	State Share
Kake	Kake Schools Heating Upgrades	$191,618
Chugach	Chenga Bay K-12 School Renovation	$5,759,942
CRSD	Copper River District Office Roof Replacement	$581,556
LYSD	Sheldon Point K-12 School Foundation Cooling & Repairs, Nunam Iqua	$3,157,373
Iditarod	David-Louis Memorial K-12 School HVAC Control Upgrades, Grayling	$113,750
Iditarod	Blackwell K-12 School Fire Alarm Upgrades, Anvik	$79,975
	Total	$9,884,214

Funding for 15 FY2023 grants from the Major Maintenance Grant Fund to the following Major Maintenance projects:

District	Project	State Share
Galena	Galena Interior Learning Academy Composite Building Renovation	$5,904,081
Craig	Craig Middle School Rehabilitation	$5,668,124
Anchorage	Eagle River Elementary School Improvements	$3,937,972
Denali	Anderson K-12 School Partial Roof Replacement	$1,015,574
Craig	Craig Elementary School Rehabilitation	$1,905,489
Chugach	Tatitlek K-12 School Renovation	$6,972,263
Anchorage	West High School Partial Roof Replacement	$4,322,259
Valdez	Valdez HS, Hermon Hutchens ES Domestic Water Piping Replacement	$830,671
Anchorage	Taku Elementary School Roof Replacement	$2,315,754
Juneau	Sayéik: Gastineau Community School Partial Roof Replacement	$1,039,438
AEBSD	Sand Point K-12 School Major Maintenance	$1,929,575
BBBSD	Bristol Bay School Elementary and Gym Roof Replacement	$1,679,510
YKSD	YKSD District Office Roof Replacement	$157,119
Nome	Nome-Beltz Jr/Sr High School Boiler Replacement	$71,999
Nome	Anvil City Charter School Restroom Renovation	$258,551
	Total	$38,008,379

CIP Grant Requests and Funding History FY14 to FY24

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
CIP Grant Requests											
Total Applications	137	121	126	127	131	105	86	120	125	113	118
Percent of Districts Applying	66%	64%	66%	68%	70%	58%	51%	64%	57%	55%	55%
# Projects Reusing Scores	52	23	57	27	67	39	24	40	55	41	34
Major Maintenance	111	102	102	98	107	84	72	102	108	97	97
MM Total $ (*)	$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	$196,637,613	$215,103,328
School Construction	24	17	18	18	15	11	11	14	17	13	17
SC Total $ (*)	$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	$192,775,088	$195,666,783

Notes:
(*) Total $ is State Share

School Construction and Major Maintenance Funding											
Grant Projects Funded	$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)	$12,608,008 (1)	$139,638,217 (1)	$0 (1)
Percent Grant $ Funded	17.5%	9.5%	14.1%	8.6%	17.3%	15.5%	14.0%	0.6%	3.6%	35.9%	0.0%
Percent Applications Funde	11.9%	1.7%	4.2%	3.4%	16.4%	25.3%	3.6%	0.9%	1.6%	21.8%	0.0%
Debt Projects	$138,622,000 (2)	$13,353,394 (2)	$0	$0	$0	$0	$0	$0	$0	$0	$0

Notes:
Grant Projects Funded includes all reappropriated or reallocated funding, including grant funding reported in prior fiscal years, as of August 24, 2022
(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 08/15/2022

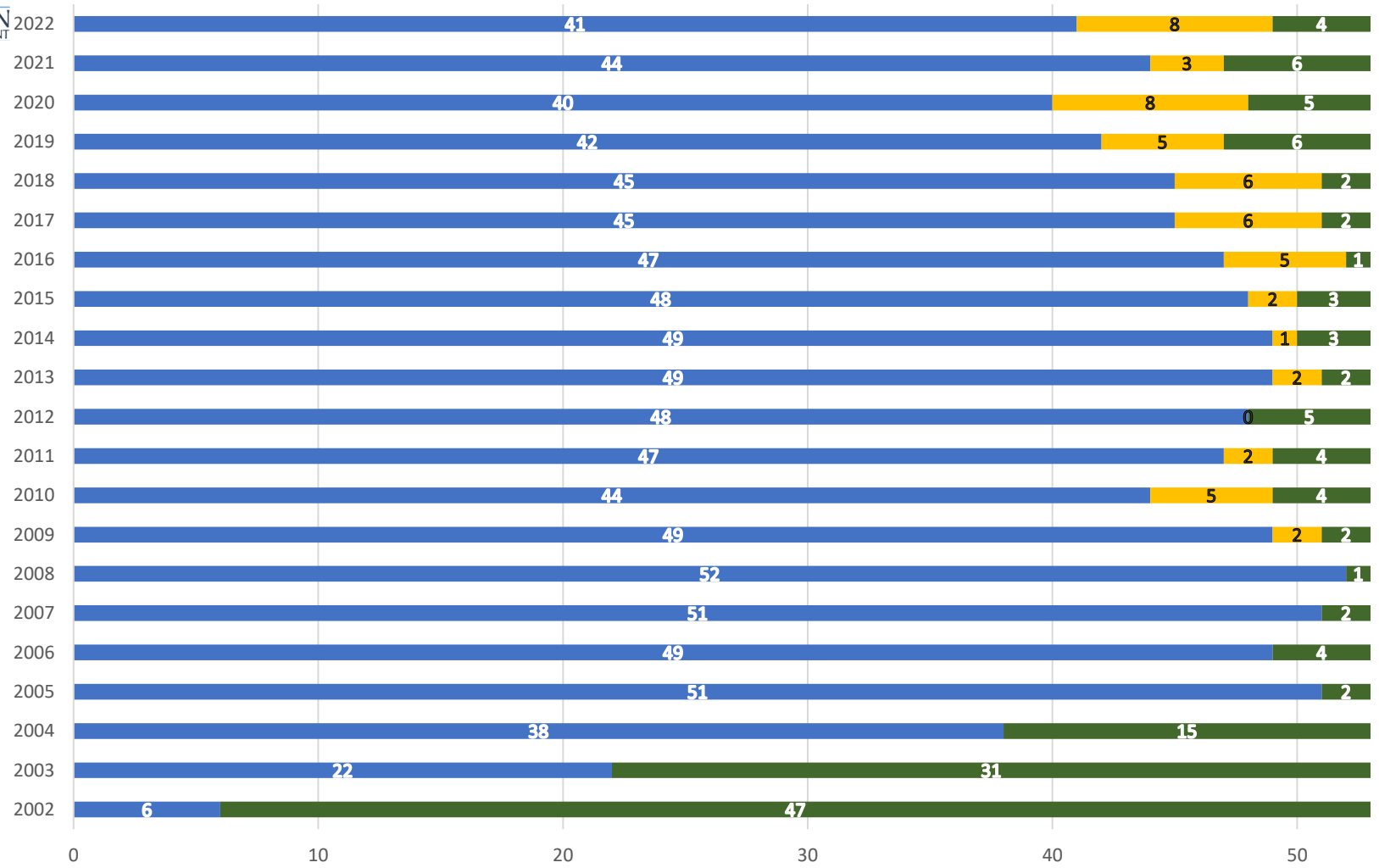
District	Date of Last Visit	Year of Next Visit	Approved FAIS	Maintenance Management	Energy	Custodial	Training	R&R Schedule	Status	Maint. Program	Program Name	CIP Eligible
Alaska Gateway	4/11/2022	2027	Y	Y	Y P	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Aleutian Region	7/19/2011	2016	Y	N	Y	Y	Y	Y	5 of 6	W	Dude Solutions	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	2/12/2021	2026	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	4/27/2022	2027	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	4/13/2022	2027	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	11/15/2021	2027	Y	Y	Y P	Y	Y	Y	6 of 6	W	MC*	Yes
Delta/Greely	4/4/2022	2027	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	4/6/2021	2026	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	1/19/2021	2026	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Hoonah City	4/28/2022	2027	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Hydaburg City	11/17/2021	2027	Y	Y	N	Y	Y	Y	5 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	5/17/2021	2026	Y	Y	Y	Y	Y	Y	6 of 6	L	TMA	Yes
Kake City	2/4/2020	2025	Y	Y	Y	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	2/8/2021	2026	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Klawock City	11/16/2021	2022	Y	Y	Y P	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	Y	Y	Y	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	Y	Y	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	2/1/2022	2027	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	5/3/2022	2027	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	5/4/2021	2026	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Pelican City	4/9/2018	2023	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Petersburg City	3/9/2021	2026	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	3/8/2022	2027	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	11/18/2022	2027	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Southwest Region	4/7/2021	2026	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	3/11/2021	2026	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
Yakutat City	1/14/2020	2025	Y	Y	Y P	Y	Y	Y	6 of 6	W	MC*	Yes
Yukon Flats	11/12/2018	2024	Y	Y P	Y P	Y	Y P	Y	6 of 6	W	MC*	Yes
Yukon-Koyukuk	11/15/2018	2024	Y	Y	Y	Y	Y	Y	6 of 6	W	Dude Solutions	Yes
Yupiit	2/27/2020	2025	Y	Y	Y	Y	Y	Y	6 of 6	W	MC*	Yes
In Compliance			53	51	50	53	52	53	49			49

Legend

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

MAINTENANCE & FACILITY MANAGMENT - HISTORY OF DISTRICT COMPLIANCE



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Aug Full Compliant	6	22	38	51	49	51	52	49	44	47	48	49	49	48	47	45	45	42	40	44	41
Aug Provisional								2	5	2	0	2	1	2	5	6	6	5	8	3	8
Aug Ineligible	47	31	15	2	4	2	1	2	4	4	5	2	3	3	1	2	2	6	5	6	4

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Education & Early Development
FINANCE & SUPPORT SERVICES
PO Box 110500
Juneau, Alaska 99811-0500
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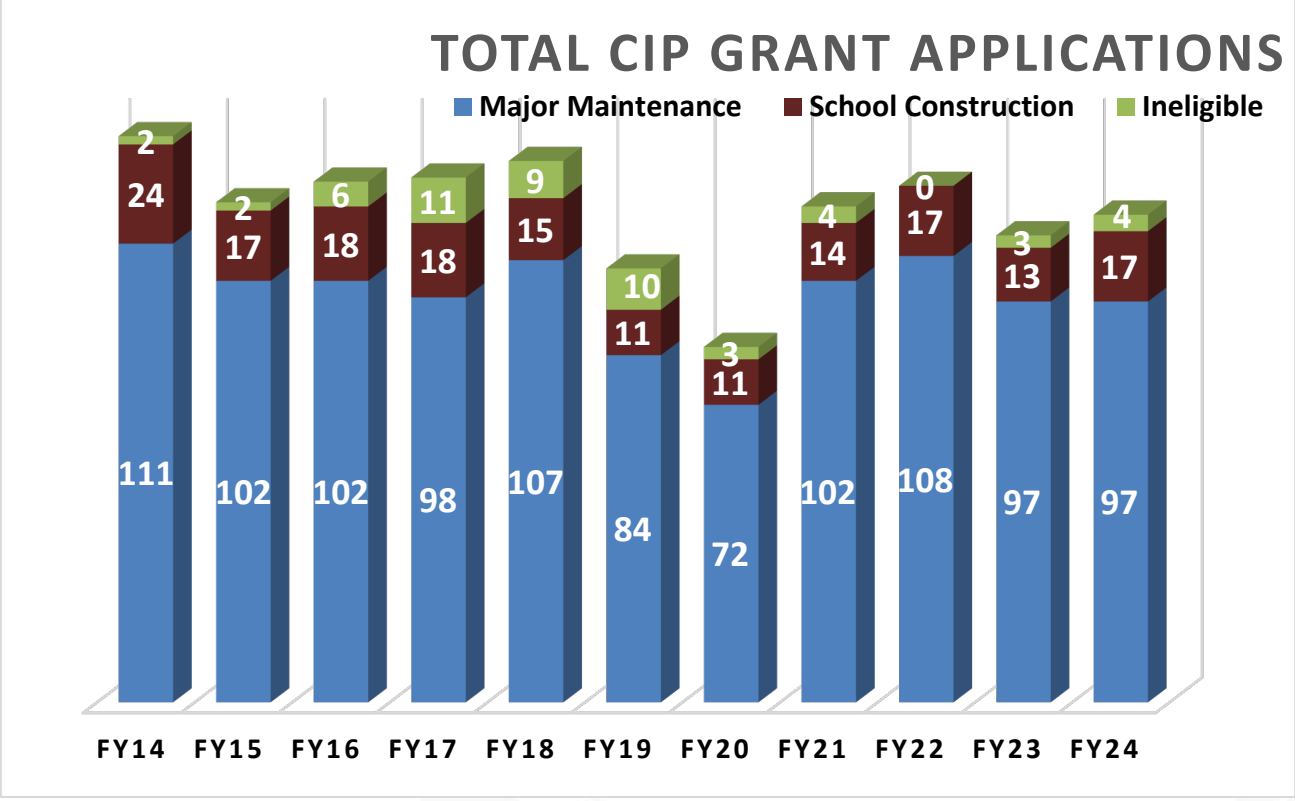
To: Bond Reimbursement & Grant Review Committee
From: School Facilities
Date: December 1, 2022

CIP APPLICATION BRIEFING

General Issues

The application numbers stayed fairly steady this cycle, even with 24 projects funded in FY2023. While there is still uncertainty regarding available state funding for school capital projects when compared with the expense of preparing applications, the allocations in FY2023 appear to have encouraged additional districts to participate. The still somewhat lower overall participation may be accounted for by districts using the federal covid-relief funding to complete HVAC, plumbing, and other allowable project scopes. The graph below shows the department's standard data points for this assessment.



The steady numbers in total applications was also reflected in the number of districts participating, which stayed at 29 although some districts that participated last year did not submit due to their projects being funded and a few districts that had not submitted in the past few years rejoined the process. This

included districts the department was tracking last year, where known capital needs were not applied for: Bering Strait School District, Southwest Region School District, and Yupiit.

Eligibility

It remains the goal of the department to have zero applications deemed ineligible. Having a district make the effort to prepare an application only to have the intent of that effort go unrealized when that application is disappointing—for everyone. Every reasonable effort to minimize this occurrence is warranted.

Out-of-cycle Applications

In the FY24 CIP cycle, as in several previous years, several applications were deemed ineligible under AS 14.11.013 and 4 AAC 31.022(b). These applications were submitted but were not identified in the first year of the district's six-year plan. As a matter of practicality rather than punishment, the aforementioned regulations are very clear on this matter and read:

> *(b) When reviewing the six-year capital improvement plans and the grant applications submitted by school districts, department staff shall separately rank projects in the first year of the plan, in decreasing order of priority . . .*

As an alternative to the strict reading of this provision, the department could allow for 'scrivener's' error situations by evaluating if the apparent intent of the district was to have the application ranked in the current year but placed the project in an incorrect year of the plan.

Duplicate Funding

One additional application was submitted but was deemed ineligible due to having been previously approved for participation in the debt reimbursement program. This appears to have been an oversight resulting from personnel changes at the district and borough. We have no alternative consideration, or proposal for this situation.

Correspondence Program Space

A district submitted an application requesting school space in support of their correspondence program. Initially, it appeared this application would have to be deemed ineligible since there is clear guidance in regulation that students in a district's correspondence program are not to be considered 'unhoused' for the purpose of school space. Since the program in question was to serve a districtwide program, an initial review of space eligibility districtwide (i.e., combining analyses from all attendance areas) was conducted. This review showed no eligibility at that level of aggregation. However, after consideration, the department determined that eligible space could be calculated without strict regard to the proposed use of the space (some consideration of grades served was required). Further, after making an eligibility calculation using the only the attendance area in which the requested school was proposed to be located, it was determined that projected non-correspondence student ADM provided space eligibility in the amount requested. The project was therefore retained as eligible. This determination may need additional review by the Committee to confirm an appropriate precedent.

Rating Issues

During the FY2024 rating process, a couple of items were flagged as being worthy of a discussion and possible change. In addition, some legacy issues which remain unattended have been retained.

Evaluative Scoring

Evaluative scoring continues to improve in consistency and transparency. The cornerstone for this improvement is the *Rater's Guidelines* document, which as of the BRGR adoption of the *District*

Preventive Maintenance and Facility Management matrices for FY23, and re-adjusted for FY24, provides bracketed scoring rubrics for all eight of the evaluative criteria.

Code Deficiency, Protection of Structure, Life Safety

After four cycles of utilizing the "*Code Deficiency, Protection of Structure, Life Safety*" (LS) matrix, for FY24, the Committee—on recommendation from the Facilities staff—simplified the formula used to determine the weighting factor for projects that combine both LS and non-LS work. The new weighting factor performed as expected at the macro level. The table below shows the top 20 scores awarded (and reused) in the LS category over the past 10 CIP years.

	FY15	**FY16**	**FY17 ***	**FY18**	**FY19**	**FY20 ****	**FY21**	**FY22**	**FY23**	**FY24 (Init)**
High	20.00	23.33	35.00	30.67	30.67	39.50	50.00	50.00	50.00	50.00
2nd	19.67	21.33	31.33	29.67	29.33	39.41	42.00	50.00	50.00	44.46
3rd	18.00	19.67	30.67	29.33	29.00	29.64	40.64	48.30	48.30	43.42
4th	18.00	18.33	29.33	29.33	27.00	29.63	39.50	41.42	48.17	33.28
5th	17.33	18.00	28.33	29.00	24.33	27.48	37.51	39.33	41.50	31.46
6th	17.00	18.00	28.33	28.33	24.33	26.67	35.85	38.00	41.42	31.42
7th	16.67	17.33	28.33	27.00	22.67	23.21	34.91	37.51	39.33	29.69
8th	16.00	17.33	27.33	26.67	21.67	21.67	33.77	35.85	38.00	27.66
9th	15.33	17.00	27.33	26.67	21.00	21.28	31.91	33.77	34.03	25.00
10th	15.00	15.33	26.67	26.33	21.00	20.67	29.64	31.91	29.19	23.04
11th	15.00	15.00	26.33	26.33	20.67	19.67	29.63	29.16	28.62	23.00
12th	14.33	14.67	26.33	26.33	20.33	19.00	29.00	29.00	28.40	22.99
13th	14.00	14.00	26.33	26.00	20.00	18.18	27.67	28.40	27.90	22.84
14th	14.00	13.67	26.00	25.67	20.00	18.00	27.48	27.67	27.66	21.35
15th	14.00	13.67	25.67	25.33	20.00	17.33	27.00	27.00	26.76	21.05
16th	13.67	13.33	25.67	25.00	19.67	17.33	26.67	23.58	25.56	20.98
17th	13.67	13.33	25.67	24.67	19.67	17.13	24.00	21.87	25.00	20.69
18th	13.33	13.33	25.33	24.33	19.67	16.67	23.21	21.84	23.58	20.66
19th	13.33	13.33	25.00	24.33	19.67	15.58	21.59	21.00	23.04	20.52
20th	13.00	13.00	24.67	24.00	19.33	15.33	21.28	20.79	22.99	20.20
Average of above	15.57	16.15	27.48	26.75	22.50	22.67	31.66	32.91	33.97	27.69

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.

The FY24 adjustment was to continue addressing instances on some projects with high point-value LS items having a low cost-to-correct with low-point value items with a high cost-to-correct. The FY24 weighing appears to have been successful in corrected the prior erroneous scoring and moderated the number of projects close to the maximum score, providing a reasonable overall spread of the scores.

The department is proposing to stay with the FY24 weighting factor for at least the next rating year, or until an issue is observed. The department will continue to review potential weighting formulas that allow 'single-scope' projects to be appropriately competitive with renovation projects.

Emergency

Emergency scoring continues to have minor issues. Districts continue to check 'yes' that a project is an emergency and the department often determines that the project does not meet the standards of an emergency. Some of the differences could be in evaluating "potential" of the possibility of failure beyond normal repairs whereas the scoring rubric is written to address current situations.

The department has regularly asserted that the statutory funding process in AS 14.11 does not handle "emergency" projects well due to the timelines involved. In the FY17 CIP Application rewrite, language was put in regarding whether the district had submitted an insurance claim related to the project scope – this is useful information to have because the department should not be asked to cover items that should be covered by the mandated insurance policies. The reasoning behind the inclusion was to provide an indicator to applicants regarding the level of disaster that would achieve emergency points.

The FY21 Houston MS Reno/Add project was in response to earthquake damage that rendered portions of the facility unoccupiable. MSBSD submitted an application for $30,839,706 and DEED adjusted the cost of the project on the list to remove those portions it considered to be covered by insurance – leaving $4,458,740 for component upgrades, etc., not included in the required coverages. On this heavily impacted school facility, with substantial insurance claims (and funding), the evaluative CIP criteria resulted in a project with 41 points in emergency and 40.64 points in life/safety/code.

While this single example doesn't stand as a trend or a comprehensive analysis, it does raise the question regarding the importance of reserving the top tier of emergency scoring for fire/flood if those situations will be covered by insurance proceeds. Should the other tiers be more graduated to allow for 'imminent' threat timeframes (ref. Apr 2021 discussion) – if funding in the year submitted, design and construction will not rectify a situation for two years?

District Preventive Maintenance and Facility Management

This point category was introduced in the first application version prepared under BRGR for FY97. At that time, the element was a single 20-point scoring element. For FY04, as part of a scoring update that increased the weight of maintenance scoring to the total maximum points, the category was increased to 25 points. In FY07, the shift was made to allocate up to five points to each of the maintenance areas defined in statute, again for a total of 25 points. The development of the scoring rubric om FY23 for the five-point scale in each area was to increase clarity in how the department measures the effectiveness of a district's PM&FM program for CIP.

The FY24 rubric changes assisted in increasing the average rating. However, additional review is need and potential revisions may be proposed at a future meeting or for a future CIP cycle.

Formula-Driven Scoring

Formula-driven scoring in the FY24 CIP cycle did not result in any significant issues. There continue to be a couple of legacy concerns including the *Weighted Average Age* and *Average Expenditure for Maintenance* categories. The revisions for the FY20 application regarding the determination of when a

condition survey should be required for eligibility to receive planning and design points resulted in continued solid best-practice in the *Planning & Design* scoring element. However, that effective strategy highlighted a possible similar need related to consultant selection. Finally, the three formula-driven scoring elements first rated in the FY21 cycle, *Use of Prior School Design* or *Use of Building System Design Standard*, and *Energy Consumption Reports* were easy to administer but may have latent issues.

Weighted Average Age

Recommended for adjustment in a future CIP cycle is the matter of renovated buildings in the weighted average age calculation. As an original or addition gets substantially renovated, the functional age of the building is not necessarily its original construction age. This shows up quite often in component replacement applications where the facility is much older than the component (i.e. flooring, lighting, boilers). One example of this issue is the West High School Roof Replacement (priority 5 from the FY23 major maintenance list). The sections of the building being re-roofed were built in 1953 and 1966. This gave the average weighted score the maximum 30 points. However, the last time these areas were re-roofed were in 1987 and 1997. The weighted average, based on component age would be between 8.00 and 19.50. The department needs to do some analysis of this challenge, and if it can be demonstrated to be material, propose a scoring change to the committee. Another possible change, since the LS matrix already includes points based on component and system age, would be to remove the Weighted Average Age from scoring. [Note: this scoring element is not specified in AS 14.11.013(b).]

In a future year this scoring category could be shifted to score weighted system ages utilizing data from the department's capital needs forecast database that is under development. This database will be driven by building system renewal and replacement schedules.

Unhoused Students

An scoring alternative for future unhoused students caused by certain environmental factors (e.g. erosion) was first adopted in the FY23 application. No applications submitted alternative ADM projections for evaluation nor did the department did evaluate any project with the standard and alternative projection options.

The application requesting school space in support of a district correspondence program had a stated enrollment of 2,400 students, with blended in-person classes and meetings, etc. occurring in space with a lease due to term. Although the application instructions allow for charter school enrollments in facilities with leases set to term within two years to count towards unhoused projections, regulation excludes correspondence study enrollment from gross square footage calculations. This resulted in zero points being awarded for unhoused students.

Use of Prior School Design; Use of Building System Design Standard

This was the third year for these scoring elements. One school construction application requested evaluation of use of prior design points, but did not provide any support documentation, and five major maintenance applications requested evaluation of district standards. Submittals provided during this application cycle continued to be either bid document specifications, an example that the same specification was used in a prior project, or similar.

Average Expenditure for Maintenance

This scoring category is based on the amount of money spent on maintenance as a percentage of the replacement value of facilities. The replacement value is gathered from the insurance

certificates that are submitted annually by each district. If the replacement value is understated that would raise the percentage and the score. In fact, two of our largest districts appear to be understating the replacement value. An example is that Lathrop High School in Fairbanks to have a replacement value of $250.00 per square foot. This appears to be slightly low. Other districts have "negotiated" values of ancillary facilities that are used for educational purposes that are far less than the elementary and secondary schools. AS 14.11.011 (b)(2) states in order to be eligible for CIP grants must show:

> evidence that the district has secured and will maintain adequate property loss insurance for the replacement cost of all facilities for which state funds are available under AS 14.11.005 or 14.11.007 or has a program of insurance acceptable to the department

The committee may need to visit this subject and possibly require some trueing of the replacement values or assign a value based on the cost model for the district.

Energy Consumption Reports

This was the third year for this scoring element. Twenty-seven districts were evaluated, of those, 21 met the requirements to receive the 5 points. This is an improvement from the first year when 23 districts were evaluated and only 12 had met the requirements for points. For those that did not, the most common issues continued to be not providing energy data for the full five years, not providing data on all school sites, or providing fuel delivery data instead of consumption data.

Costs & Adjustments

In the FY24 CIP cycle, forty-eight applications received a cost adjustment under AS 14.11.013 and 4 AAC 31.022(e). The department continued use of its Cost Adjustment Worksheet to provide transparency regarding the adjustments. Adjustments occurred in all typical areas including: excessive costs in both construction and project adders, maintenance work, duplicated costs, project mark-ups, etc.

Two districts, Yupiit and Kuspuk, submitted projects that included a component of federal funding. This is not particularly unusual (other districts have submitted projects with elements of funding from Federal Impact Aid) however, this was the first instance of federal funding from COVID-19 relief. Prior department guidance to districts had indicated that AS 14.11 funds would not "reimburse" on these funds.

Yupiit School District – ESSER II Funds

For their Tuluksak K-12 School Generator Replacement project, the district submitted an application totaling $597,214 with $558,114 in Construction. Though it did not list a specific amount, the application narrative indicated that a portion of the work was receiving funds from the US Department of Education's ESSER II funding. Research within the department's federal programs section identified approved ESSER II funds in the amount of $309,040 to provide a connex-based enclosure with fuel day-tank and switchgear. The department applied a reduction to the project for this yet-to-be-issued, but approved, funding. In addition to some reductions for temporary work and O&M work, the department's recommended amount totaled $152,005.

Kuspuk School District – Impact Aid Discretionary Grant Funds

For their Jack Egnaty Sr. K-12 School Roof Replacement project, the district submitted an application totaling $742,538 with $584,675 in Construction. The district's application documented a recent award from the US Department of Education of $871,890 in response to an Impact Aid application titled *Sleetmute Wildcats Emergency Roof Replacement and Foundation Repairs.* The proposed scope of the state CIP application focused on the roof portion of the

project. In review, the department determined that the project was both significantly underfunded and that the roof and foundation/structural issues would be better handled as an integrated project. The department revised to project to include all defined work and established a probable cost for the entire project at a DEED eligible amount of $2,385,950. The department then applied a reduction to the project for Federal Impact Aid funding to arrive at a DEED recommended amount of $1,513,970.

Project Category Evaluation

In the FY24 CIP, there were eight projects that had a category change that resulted in a list change between major maintenance and school construction. This number was up from one project in FY23 and four projects in FY22. (Note: there were other category changes that did not result in a change of lists, however, these changes are not normally 'contested' changes.) Below is a list of the eight projects with their requested and DEED-assigned categories:

District	Project	Requested Category	Assigned Category
Anchorage	Secure Vestibules, Group 1, 3 Sites	C	F
Anchorage	Secure Vestibules, Group 2, 3 Sites	C	F
Anchorage	Secure Vestibules, Group 3, 5 Sites	C	F
Kenai Peninsula Boro.	Kenai Middle School Security Remodel	C	F
Ketchikan Borough	Valley Park Complex Upgrades	C	F
Ketchikan Borough	Districtwide Playground Equipment and Surface Upgrades	C	F
Lower Kuskokwim	Water Storage and Treatment, Kongiganak	D	A
Mat-Su Borough	District Athletic Field Upgrades	C	F

Broadly, the changes can be attributed to the department's handling of security projects, playground projects, and other site improvement projects. In a determination established by a prior School Finance & Facilities Director, but reinforced by decisions and personnel since then, these 'categories' of projects were deemed to fall into Category F (Improve Instructional Program). While it can be held that such projects are difficult to place in Category C (Protection of Structure), Category D (Building Code Deficiencies), or Category E (Achieve Operating Cost Savings)—any of which would classify the project as Major Maintenance—it may also be held that Category F is sometimes an equally tenuous connection. Playgrounds in particular, now that we have a designated scoring element for them on the Life Safety/Code & Protection of Structure Matrix, may be ripe for some 'redefinition' of category assignment parameters. Likewise, if the application were ever to introduce an LS/Code element for security deficiencies, certain projects related to school security might fall under a Category D designation. Of course no decisions on these seemingly more trivial determinations can be taken lightly or changed at whim. Eligible projects categories are stated and defined in statute (AS 14.11.013(a)(1)).

Total Points Balance Review

Periodically over the past two years, Committee members and others participating in the Committee's work have begun to see a need for a complete review of the points assigned to the 10 Formula-Driven and 8 Evaluative scoring elements for the purpose of rebalancing. One advocate for this was the late Don Hiley. The following paragraph provides some background of similar efforts that have occurred in the past.

The BRGR approved its first CIP application for DEED in June 1994 for the FY96 cycle. This application used criteria introduced in SLA 93 in the same legislation that created the Committee. Following that there were a couple of 'bridging' years during which additional parameters for the 'new' application were also codified in regulation (Register 127). By the FY98, the application form, elements,

and scoring criteria had become substantially similar to the application in current use. However, since its codification in 1996 (FY98), the Committee and the department have periodically conducted a wholistic review of the application to assess whether its scoring elements and point assignments were functioning well to properly prioritize school capital needs statewide. The first occurred in 1999 (FY01) centered around the addition of maintenance criteria that were introduced in SLA 99, Another occurred in 2005 (FY07), again mainly centered around to total value of scoring related to maintenance elements. (Note: they were raised from 7.8% of total value to 13% of total value.) In 2012 (FY14) following a small crisis of confidence in which the department's Commissioner received a letter of concern signed by the largest school districts in the state, the department sought legal review regarding all elements the application and for the FY14 cycle made several changes, including dropping the Adequacy of Documentation scoring element. The ripple effects of the letter continued to impact the application through the FY17 cycle when a revised application and a significantly updated rater's guideline were introduced. In 2019 (FY21), three scoring categories totaling 25 points were added to the objective scoring criteria. One of these was intended to encourage energy management, the other two were in response to statutory requirements to encourage reuse of school plans and building systems when appropriate.

Department staff is supportive of work in this area should the Committee believe it is appropriate.

Subcommittee Report: Design Ratios

The subcommittee report for the Design Ratios Subcommittee will be issued as supplemental material prior to the meeting.

State of Alaska **Department of Education & Early Development**
Bond Reimbursement & Grant Review Committee

Model School

S U B C O M M I T T E E R E P O R T

December 1, 2022

Mission Statement

To identify elements of a model Alaskan school to assist in more consistent project development and costing.

Current Members

Kevin Lyon, Chair
Jim Estes
Dale Smythe
Randy Williams
Brandon Anania
Dana Menendez, ASD
Scott Worthington, BDS
Adam Wilson, RSA
Jeremy Maxie, RSA
David Moore, AAK
Tim Mearig, DEED
Sharol Roys, DEED

Status Update

No action since last BRGR meetings. Subcommittee has completed its purpose. Annual review of the Cost Model's Escalation Model School can be accomplished by the full BRGR Committee.

Recommendation from Chair that BRGR Committee disband the Model School Subcommittee.

Schedule

None.

Subcommittee Report: School Space

The subcommittee report for the School Space Subcommittee will be issued as supplemental material prior to the meeting.

Publication: Professional Services for School Capital Projects

The *Professional Services for School Capital Projects* cover memo and draft publication will be issued as supplemental material prior to the meeting.

State of Alaska **Department of Education & Early Development**
Bond Reimbursement & Grant Review Committee

Alaska School Facilities Preventive Maintenance & Facility Management Handbook

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

December 1, 2022

Issue

The department seeks committee approval to finalize and publish the 3rd Edition of the *Alaskan Schools Preventive Maintenance &Facility Management Handbook*.

Background

Last Updated/Current Edition
Publication last updated in 1999. Current edition available on the department's website: education.alaska.gov/facilities/publications/PreventiveMaintenance.pdf.

Public Comment
The department issued the publication for public comment from October 4 –November 3, 2022. No public comments were received.

Summary of Proposed Changes
Proposed draft is a major update of the 1999 version. The original document only provided information on developing and implementing a preventive maintenance program; the current proposed edition expands to include all five major required areas: maintenance management, energy management, custodial program, training, and capital planning. The document divides each of these areas into three levels: developing, implementing and sustaining. It also provides additional supplemental information as content in the body of the document as well as in in several appendices. The proposed revision has been a larger undertaking than anticipated. As such, while the original vision for this document provided for additional supplementary information and resources, many of those placeholders have been postponed to future versions in order to complete this edition and publish it for use by districts.

Version Summary & BRGR Review
Drafts of the publication were presented to the committee at the following meetings:

March 15, 2018	December 2, 2020	December 9, 2021
May 8, 2018	February 25, 2021	April 20, 2022
December 12, 2018	March 17, 2021	September 1, 2022
September 8, 2020	July 20, 2021	December 1, 2022

BRGR Input and Discussion Items

No department proposals.

Options

Approve final publication for issuance and use by the department.
Amend final publication and approve for issuance and use by the department.
Seek additional information.

Suggested Motion

"I move that the Bond Reimbursement and Grant Review Committee approve the final draft of the *Alaska School Facilities Preventive Maintenance & Facility Management Handbook* for use by the department."

Alaska School Facilities Preventive Maintenance & Facility Management Handbook

State of Alaska - Department of Education & Early Development
Finance & Support Services / Facilities

3rd Edition
September 2022

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ACKNOWLEDGEMENTS

Thanks to the Bond Reimbursement and Grant Review Committee members and to school facility personnel across the state who reviewed this publication in its earlier editions and responded to the Department of Education & Early Development with comments for this 3rd Edition.

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Background

The primary focus of the original (1997) and second edition (1999) of the *Alaska School Facilities Preventive Maintenance Handbook* was to present school districts with a basic outline on how to develop and implement a preventive maintenance program. At that point in history, the Department of Education and Early Development (DEED) realized that many of the school facilities built following the oil boom of the late 1970s were in poor condition and several were already in dire need of major repairs a mere couple decades after original commissioning. In some cases, it was found that the operational systems for many of these schools were having their life-expectancy curtailed mainly because of maintenance staffing levels, training, and management practices. Even though preventive maintenance was present in some of our school districts, other school districts appeared to be unaware of its existence, or simply did not know how to go about managing their schools with adequate maintenance in a manner which would benefit each school while keeping operational and maintenance costs under control.

As a proposal to address these issues, and as a means to better streamline accountability and efforts in all school districts across the state, state officials focused their attention to ensure school districts had at least minimum standards for preventive maintenance and facility management program. In 1998, new legislation was passed and in 2000 regulations were promulgated to implement minimum criteria for maintenance and facility management if school districts wished to remain eligible for state-aid for school capital projects.

The prime objective of these new standards was to empower school districts to develop functioning preventive maintenance and facility care programs; as a reward for their efforts and demonstrated achievements, the department would then enable eligible school districts to apply for future grants.

This narrative summarizes the genesis of the preventive maintenance program at DEED and the main factors which came about to justify its existence. It was imperative then, and continues today, that the department and districts collaborate to move all districts beyond a point—real or perceived—of perpetual "breakdown maintenance" and "fix-it" capital expenditure. We must jointly move to integrated, sustainable, best-practice facility care and management. This type of maintenance and facility management is beneficial to the taxpayer, to maintenance personnel, and to the students and staff in our schools.

Statutory Authority

Alaska Statutes (AS)

- Assign responsibility for preventive maintenance, custodial services and routine maintenance (AS 14.14.090, AS 14.08.111, AS 14.14.060)

> AS 14.14.090. In addition to other duties, a school board shall . . .
> (10) provide for the development and implementation of a preventive maintenance program for school facilities . . .
>
> AS 14.08.111. A regional school board shall . . .
> (8) provide custodial services and routine maintenance of school buildings and facilities;
>
> AS 14.14.060
> (f) The borough school board shall provide custodial services and routine maintenance for school buildings and shall appoint, compensate and otherwise control personnel for these purposes. The borough assembly through the borough administrator, shall provide for all major rehabilitation, all construction and major repair of school buildings. The recommendations of the school board shall be considered in carrying out the provisions of this section.

- Define preventive maintenance (AS 14.14.090); and,

> AS 14.14.090
> (10) . . . in this paragraph, "preventive maintenance" means scheduled maintenance actions that prevent the premature failure or extend the useful life of a facility, or a facility's systems and components, and that are cost-effective on a life-cycle basis.

- Establish the requirements of a preventive maintenance plan (AS 14.11.011, AS 14.11.100).

> AS 14.11.011
> (b) For a municipality that is a school district or a regional educational attendance area to be eligible for a grant under this chapter, the district shall submit . . .
> (4) evidence acceptable to the department that the district
> (A) has a preventive maintenance plan that
> (i) includes a computerized maintenance management program, cardex system, or other formal systematic means of tracking the timing and costs associated with planned and completed maintenance activities, including scheduled preventive maintenance;
> (ii) addresses energy management for buildings owned or operated by the district;
> (iii) includes a regular custodial care program for buildings owned or operated by the district;
> (iv) includes preventive maintenance training for facility managers and maintenance employees;

Statutory Authority

(v) includes renewal and replacement schedules for electrical, mechanical, structural, and other components of facilities owned or operated by the district; and

(B) is adequately adhering to the preventive maintenance plan.

AS 14.11.100

(j) Except as provided in (l) of this section, the state may not allocate money to a municipality for a school construction project under (a)(5), (6), or (7) of this section unless the municipality complies with the requirements of (1) - (5) of this subsection . . . . In approving a project under this subsection, and to the extent required under (a)(8) - (17) of this section, the commissioner shall require . . .

(5) evidence acceptable to the department that the district

(A) has a preventive maintenance plan that

(i) includes a computerized maintenance management program, cardex system, or other formal systematic means of tracking the timing and costs associated with planned and completed maintenance activities, including scheduled preventive maintenance;

(ii) addresses energy management for buildings owned or operated by the district;

(iii) includes a regular custodial care program for buildings owned or operated by the district;

(iv) includes preventive maintenance training for facility managers and maintenance employees; and

(v) includes renewal and replacement schedules for electrical, mechanical, structural, and other components of facilities owned or operated by the district; and

(B) is adequately following the preventive maintenance plan.

Read in their entirety, these statutes establish that preventive maintenance of Alaska schools is solely the responsibility of school districts, and that funding for such must be included within the district's operating budget. Some school districts share the duties of maintenance with another agency within the city or borough. The statutes in no way prohibit school districts from acting in conjunction with these associated agencies to affect all or a part of their maintenance program. However, doing so does not relieve the school board of its obligations in the areas of preventive maintenance.

Also, based on this statutory authority, the department's capital improvement project (CIP) application does not allow capital funding for the accomplishment of preventive maintenance. A district requesting capital funding for both school construction and major maintenance projects must provide "evidence that the proposed project should be a capital improvement project and not part of a preventive maintenance program, or regular custodial care program." (AS 14.11.011(b)(3))

Regulatory Requirements

Alaska Administrative Code (AAC)

- Provides direction in regulation for development of a school district Preventive Maintenance and Facility Management program and for periodic review by the department that districts are adhering to the plan.

4 AAC 31.013. Preventive maintenance and facility management

(a) For a district to be eligible for state aid under AS 14.11.011 or AS 14.11.100, the district must have a facility management program that addresses the following five elements of facility and maintenance management:

(1) a formal maintenance management program that records maintenance activities on a work order basis, and tracks the timing and cost, including labor and materials, of maintenance activities in sufficient detail to produce reports of planned and completed work;

(2) an energy management plan that includes

(A) the recording of energy consumption for all utilities on a monthly basis for each building; for facilities constructed before 12/15/2004, a district my record energy consumption for utilities on a monthly basis when multiple buildings are served by one utility plant; and

(B) regular evaluation of the effectiveness of and need for commissioning existing buildings;

(3) a custodial program that includes a schedule of custodial activities for each building based on type of work and scope of effort;

(4) a maintenance training program that specifies training for custodial and maintenance staff and records training received by each person; and

(5) a renewal and replacement schedule that, for each school facility of permanent construction over 1,000 gross square feet, identifies the construction cost of major building systems, including electrical, mechanical, structural and other components; evaluates and establishes the life-expectancy of those systems; compares life-expectancy to the age and condition of the systems; and uses the data to forecast a renewal and replacement year and cost for each system.

(b) Repealed 12/15/2004.

(c) At the request of a chief school administrator, the department will assist a district in implementing a qualifying preventive maintenance program through consultation, on-site reviews, and training.

(d) Repealed 12/15/2004.

(e) The department will make a determination of a district's compliance with each element required in (a) of this section, based on evidence of a program acquired by the department, including information gathered by the department during an on-site visit conducted under (f) of this section. The department may change a determination at any time during the year based on new evidence. For purposes of eligibility for an application submitted under AS 14.11.011, on or before June 1, the department will provide preliminary notice of its determination. Districts that are not in full compliance must provide evidence of compliance to

the department by August 1. On or before August 15, the department will notify districts of its final determination regarding compliance. The department will deny a grant application submitted under AS 14.11.011 by a district that has received a final determination from the department that the district is out of compliance with this section.

(f) The department will conduct an on-site inspection of school district preventive maintenance and facility management program at least once every five years; however, if the department issues a finding of noncompliance under (e) of this section and the district does not provide adequate evidence of compliance, the department may postpone an onsite visit beyond the five-year period. The department may make additional inspections as it deems necessary. The department may change its determination of compliance based on information obtained during an on-site inspection.

(g) In this section

(1) "district" has the meaning given in AS 14.11.135 ;

(2) "maintenance activities" means all work performed by district staff or contractors on building systems, components, utilities, and site improvements.

(h) Notwithstanding (e) and (f) of this section, the department may make a determination of provisional compliance for a district that provides evidence of a plan that meets all required elements identified in (a) of this section but does not provide documentation of adherence to that plan. A determination of provisional compliance will allow a district to be eligible for state aid until a final determination of compliance or non-compliance is provided.

Facility Management Overview

Facility Management as a Strategy

Overview

The preceding Background section summarized the beginnings of department-generated preventive maintenance guidance, and the following legislation-driven expansion of that narrow facilities care element into a more comprehensive maintenance and facility management requirement. Since its inception, nearly 100% of Alaska's school districts have achieved compliance in meeting minimum standards. In fact, only a single district out of 53 has not met the state's minimum standards for maintenance and facility management of school facilities at some point. In August 2002, only six districts met minimum standards. By August 2003, the number was 22. It peaked at 52 school districts in 2008. Disturbingly, since the peak in 2008, and through the date of this edition, multiple school districts lost certification (some have regained it) and nearly 15 school districts have experienced a year or more of provisional compliance where minimum standards are achieved but for which there is not at least 12 months of data demonstrating adherence to the standard. In each of these lapses, it was clear that the measured maintenance, operations, and capital planning areas were not sufficiently integrated into a facility management program so as to remain sustainable through personnel changes or economic shifts in the school district. On a brighter note, some of Alaska's school districts have exceeded the minimum requirements and are operating closer to the forefront of facilities management. Practices and processes such as predictive maintenance to forecast equipment failure, equipment upgrades based on lower life-cycle costs, and managing demand for space are beginning to appear in the department's assessment visits. The Department believes these kinds of results are achievable in every school district, at every level of resource availability, through integration and district-level ownership.

Purpose

The purpose for this document is three-fold:

1. To expand department guidance to reflect the full breadth of maintenance and facility management addressed in statute and regulation,
2. To foster greater consistency and sustainability in meeting department requirements by focusing on the integration of operations, maintenance, and capital planning under a Facility Management paradigm, and
3. To offer best-practice insights and meaningful tools to help create facility management programs that exceed minimum requirements.

The structure of this document supports these purposes by addressing each of the five components of maintenance and facility management in three areas: developing, implementing, and sustaining. In addition, where general facility management topics cross one or more of the five mandatory components, these topics are addressed in this Overview section rather than repeatedly in each category. Finally, specific tools and resources are provided as appendices following the narrative documentation.

With limited availability of capital funding, and community pressure on local funding for public works, it is vitally important for school districts to fully integrate overall facility management

into district operations. Facility management is not just a matter of fixing things when they break; it is a comprehensive program of operating, maintaining, repairing, and replacing components and systems for optimal results. Such a process addresses facility issues before they have a chance to create a crisis or emergency in a school district facility. With a comprehensive facility management program, a school district has tools that will extend the effectiveness of each maintenance and operations dollar so that the maximum amount of funding is made available for the students in the classroom. Processes for implementing a comprehensive facility management program are heavily dependent on actionable data and include:

- tracking tools such as work-orders,
- planning tools such as reports, and
- other tools such as active inventory control for custodial and classroom supplies.

Facility Management Integration

Whole-building preventive maintenance was the threshold step for Alaska's school districts on the path toward life-cycle, cradle-to-cradle, sustainable facility management. That was soon followed with requirements that covered operations (custodial, energy management), maintenance (maintenance management, maintenance training), and construction (capital planning). While each of these functional areas can be built up and managed independently, it is their integration that is most likely to ensure sustainability. In the effort to achieve the most value for the facility dollar contributed from all sources—local, state, and federal—operations, maintenance, and construction programs need to be coordinated through an effective facility management program. They all work hand in hand to extend the life of, and renew, existing facilities. State law identifies the basic building blocks for school districts to get the most out of their facilities. Some school districts have exceeded the minimum requirements and are functioning at the forefront of facilities management, integrating processes, practices, and data between functional areas. They are sustaining momentum by using strategic and tactical measures to extend the service life, lower life-cycle costs, and lower occupancy costs.

Building Systems and Components Inventory

An accurate inventory of the systems and components in a facility is core knowledge for facility management. The school district's maintenance management program, custodial program, and capital planning program all depend on this essential data. Energy management programs and maintenance training programs also draw from this information.

Facility Audits and Annual Inspections

The implementation phase of both maintenance management and capital planning should establish the practice of regular assessments of facility conditions as part of their programs. Integrating condition data between these two elements of facility management will also assist school districts in sustaining these two programs long-term. One practical integration is making the measurement of performance indicators in each area dependent on data gathered and updated under the other program.

Facilities Budgeting and Funding

Budgeting and funding for school facilities includes all elements of facility management—operations, maintenance, and construction. The interface between maintenance management,

custodial programs, energy management, and capital planning (renewal) is especially important when considering the costs associated with school facilities.

Data for Informed Decision Making

> "Timely access to relevant facilities data is essential to both effective management of school facilities by district officials and appropriate oversight of public investments by a community. Providing the needed information to the public and other decision makers involves:
>
> - the development or maintenance of a facilities information system capable of collecting, organizing, storing, analyzing, and reporting relevant, timely, comparable, and accurate facilities data [];
> - the meaningful analysis of available data, including the use of appropriate indicators, indices, measures, and benchmarks [];
> - the collection and frequent updating of a host of clearly defined, comparable data elements that describe school facilities and their funding, operations, maintenance, and use [];
> - the maintenance of data definitions, data standards, quality controls, and operational protocols affecting the collection, analysis, and use of data;[1]
> - the presentation of those data into formats that are reasonably usable by the various stakeholder audiences;[2] and
> - timely access to the data in printed public reports or via public websites.[3]
>
> School districts and states throughout the country continue to increase their use of facilities data to inform decision making: to manage day-to-day operations, maintenance, and repairs, as well as short-term operational planning, long-term capital planning, and master facilities planning. High-quality facilities data are used to create efficiencies, save money, preserve the life of capital resources, and help decision makers become more transparent and accountable to education stakeholders."[4]

Key performance indicators (KPIs) and metrics include:

a. Maintenance labor reports.
b. Maintenance expenditures, 5-year average.
c. Number of unscheduled repairs.
d. Ratio of preventive maintenance to unscheduled repair efforts.
e. Ratio of maintenance costs to asset value.

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[1] For more information about ensuring data quality and appropriate data use, see the *Forum Guide to Building a Culture of Quality Data: A School and District Resource* (https://nces.ed.gov/forum/pub_2005801.asp) and the *Forum Guide to Taking Action with Education Data* (https://nces.ed.gov/forum/pub_2013801.asp).

[2] For more information about data presentation, see the *Forum Guide to Data Visualization: A Resource for Education Agencies* (https://nces.ed.gov/forum/pub_2017016.asp).

[3] For more information about improving access to education websites, see the *Forum Guide to Ensuring Access to Education Websites* (https://nces.ed.gov/forum/pub_2013801.asp).

[4] *Forum Guide to Facility Information Management: A Resource for State and Local Education Agencies*, 2018, p.15.

f. Ratio of budgeted labor-hours to actual.
g. Instances of callbacks to address the same condition.
h. Customer satisfaction surveys.
i. Backlog of work orders.
j. Custodial cost per square foot is the total custodial expenditures (labor, benefits, supplies, etc.) divided by total district square footage. Includes cost of labor, supplies and other materials, and scope of custodial duties.
k. Custodial workload is the total district square footage divided by available custodial labor-hours. Includes assigned duties for custodians, management effectiveness, effects of labor agreements, and district budget.
l. Energy Use Index (EUI) for previous five years for each main school facility.
m. Energy consumption reports.
n. Training types and schedule.
o. Facility cost index for scheduled repairs.
p. Facility Condition Index (FCI) for all facilities.
q. Renewal/Replacement schedules.

Commissioning: A Special Type of Facility Audit

Introduction

Smart buildings are complex buildings. Many of the leading-edge practices in facility management are dependent on the technology of automated systems. Predictive maintenance is often based on digital sensor technology. Energy management depends on sensors, measurements, and electronically controlled mechanical and electrical equipment. Building complexity takes maintenance training requirements to new levels. In response to building complexity, commissioning has evolved from a subtask of other professions and trades to a position of prominence—many would argue its own discipline.

Initial Commissioning

Initial commissioning (often abbreviated Cx) occurs as part of the construction project close-out and the handover of an education facility to the owner—be that the city/borough or the school district. "Commissioning ensures that the new building operates as the owner intended and that building staff are prepared to operate and maintain its systems and equipment."[5] [3] The scope of work included in commissioning, along with the entities involved, is a matter of contractual agreement and can vary from project to project. A key feature of any commissioning agreement should be the involvement of those who will be operating and maintaining the facility.

The department recognizes the need for commissioning within the following building systems: mechanical, electrical, controls, bulk fuel, and building envelope. Much of the commissioning effort will be to optimize the inter-relation of components within these systems but there will also be cross-system coordination which is needed such as when occupancy sensors might control both lighting and ventilation systems. Because of this cross-discipline need, utilizing a

[5] *A Retrocommissioning Guide for Building Owners*; Portland Energy Conservation, Inc.; U.S. Environmental Protection Agency, 2007, p. 2.

certified commissioning agent is required on certain school capital projects with state-aid. A list of approved commissioning agent certifications is maintained on the department's Publications & Resources webpage under Project Planning and Design.

Retro-Commissioning

Retro-commissioning (RCx), also known as existing building commissioning (EBCx) can generally be expected to yield a positive payback after approximately five years of building operations. It may also be appropriate to conduct retro-commissioning at any time on a building which never received initial commissioning. Most energy service companies (ESCOs) make it a practice to include a retro-commissioning piece in their energy savings performance contracts. The basis for this is the relatively safe assumption that most, if not all, existing buildings are not performing optimally with respect to their energy performance.

During the portions of the building life-cycle that follow project delivery (i.e., operations, capital asset management) buildings, and building uses, change. Equipment is added, school populations grow and shrink, and space utilization is altered. These and other changes can render previous systems and settings ineffective. For good cause, and often for inappropriate reasons, building control systems are bypassed or overridden by maintenance personnel. Reasons for temporary overrides can be forgotten, resulting in systems operating outside of the original parameters. Retro-commissioning, done well, can account for these building changes and can recalibrate building performance.

Example/Vignette

Initial Commissioning: The School District of Greenville County, South Carolina, decided to undertake a massive building program to replace or renovate over sixty schools district wide. Due to the size of the program, limited maintenance resources within the district, and a long history of taking ownership of new buildings that didn't work, the school district and the program manager decided to fully commission the MEP systems on all of the projects.

An experienced commissioning agent (CxA) was selected to provide the commissioning services. The first task was to help the district achieve consistency in design and ensure conformance with the design guidelines through design reviews at the schematic, design development and construction document phases. Monthly commissioning visits were made to each job site during construction to review the work in progress and to monitor compliance with the contract documents.

The commissioning teams prepared pre-commissioning checklists and functional performance tests for all of the installed equipment. Prior to functional testing the systems were balanced and the test and balance reports were validated through random sampling techniques. After conducting all of the functional testing, the commissioning agents organized all of the owner training which was videotaped for future reference by the District. The final reports were scanned to CDs along with drawings, O&M manuals, T&B reports and shop drawings. The files are loaded on the school district servers so the maintenance data can be accessed by computer from anywhere in the district.

The school district is following this effort up with a performance review designed to yield a repository of lessons learned.

Retro-commissioning: DBR Engineering Consultants was hired to perform retro-commissioning for a public school district in Texas. The project was a 396,000 sf high school that was constructed 15 years prior to the project. The scope was limited to the HVAC system and associated controls. The process lasted for five months and included functional testing over a six week period which identified 155 issues in 17 categories. The estimated energy savings that could be realized by implementing the identified energy conservation measures was 41%. All this, even though the school was less than 15 years old and had received good maintenance over that time period.

Maintenance Management

Developing a Maintenance Management Program

Introduction

Department regulations for maintenance management require:

> *(1) a formal maintenance management program that records maintenance activities on a work order basis, and tracks the timing and cost, including labor and materials, of maintenance activities in sufficient detail to produce reports of planned and completed work;*

This brief paragraph results in a series of eight documents—seven reports plus samples of varying work orders—that are intended to provide solid evidence of a minimally compliant maintenance management program. School district maintenance managers may be able to develop this level of maintenance plan on an ad-hoc basis with rules of thumb and the knowledge of experienced maintenance technicians. This is especially true for small facilities with a minimal range of components and systems. However, as school facility complexity increases, maintenance management plans are best built from a component-based inventory.

The most common deficiency noted during the department's certification process, is that maintenance management programs do not track materials associated with maintenance work. All school districts have systems that track labor, but materials tracking, by work order, is often lacking. This does not meet minimum criteria. While there is no question that a well-developed maintenance management program must track labor efforts, materials can be a significant component of maintenance and tracking them by work order is important for measuring the impact of repeated maintenance, or trends on systems.

Compliance with this regulation is demonstrated by providing:

- copies of work orders in various states of completion;
- report total maintenance labor hours collected on work orders by type of work (e.g., scheduled, corrective, operations support, etc.) vs. labor hours available by month for the previous 12 months;
- report scheduled and completed work orders by month for previous 12 months;
- report number of incomplete work orders sorted by age (e.g., 30 days, 60 days, and 90 days, etc.) and status for the previous 12 months (e.g., deferred, awaiting materials, scheduled, etc.);
- report comparison of scheduled maintenance work order hours to unscheduled maintenance work order hours by month for the previous 12 months;
- report monthly trend data for unscheduled work orders showing both hours and numbers of work orders by month for the previous 12 months;
- report planned maintenance activity for the following quarter;
- report completed maintenance activity for previous three months including labor and material costs; and

- report preventive maintenance components by building system.

School district officials should use these reports to better understand their maintenance management program and to track the results generated by the program.

Maintenance Data Information

In order to have an effective maintenance management program, the first step is to develop a mechanism for collecting information on facility components and systems that will be the subject of the maintenance management program. There is a plethora of computer programs on the market that are specifically designed for such purpose; these are known as Computerized Maintenance Management Systems (CMMS). For all intent and purpose, the basic key to any of these programs is the capability to store, retrieve and analyze the information collected on facilities, their maintenance needs, and the organization's maintenance practices.

Early generations of CMMS consisted of software which was locally installed and hosted on district computers. Data storage was also local. Some of these systems were network compatible, making them useful for organizations where access to the system could not be centralized at one location or functional area. With the advent of 'cloud computing', many CMMS service providers developed business models which involved hosting customer facility and maintenance data on their own servers and providing a web-based user interface. Both of these delivery models remain available to organizations with the hosted-data model being prevalent in most Alaska districts. For a peek into history, see the pop-out for how CMMS worked in the 'good old days'.

Historical Management Systems

Modern CMMS have evolved following the use of 3" X 5" index cards and twelve manila folders (one for each month). One side of the index card contained information about the facility components and systems as well as the services that needed to be performed. The back side of the card was used to record the date on which the service was performed, the name of the maintenance or custodial staff, and the cost of materials. Upon task completion, the card was placed in the manila folder assigned to the future month when the task was due. Although this method now seems crude, it could possibly still meet minimum requirements of the department for a small school district. The analogy is similar to having accountants using pencils, ledgers, and ten-key adding machines. However, the value of a CMMS—especially one specifically designed for school districts—is measurable and all but mandatory.

With the rise and almost universal market penetration of the software-as-service business model, most CMMS include an initial purchase fee (which can include software, hardware, installation, and set-up costs) and an annual service or maintenance fee. While selecting a suitable CMMS to meet the needs of their school district, school officials should be aware there are many options. Most vendors offer modules targeted at specific functions such as space management, fleet management, and inventory management, many of which are not required by statute or

regulation nor are they useful to the school district. Marketing personnel within CMMS vendors excel at selling their products, but some companies have hidden fees that are charged after the program is instituted, where school districts find themselves forced to pay extra in order to achieve adequate results. Other companies, after a successful marketing push, offer poor customer service, which quickly becomes problematic during initial setup. Most of these programs are web-based and consume a good portion of bandwidth during usage. CMMS software should be user-friendly so that it can be implemented with minimal training for all maintenance and custodial personnel as well as school educators. The bottom line is to ask around to other school districts and see what will work best for your organization in order to make an informed decision. The department's PM State of the State, published annually by June 1 and finalized not later than August 15, includes data on each school district's CMMS tool.

Identification of Facilities, Systems, and Components

The second step in developing an effective maintenance management program is to get the information entered into the system.

In order to do so, someone will need to inventory and categorize systems and components maintained by the school district in each of the school facilities that the school district maintains. Vendors and a variety of consultants are willing to perform this task if district personnel are unable to. During the inventory, information such as quantity, type, size, age, condition, manufacturer, model, material specification, location, key parts, part numbers, specialized upkeep requirements (e.g., oil and filter types), and other item-specific data need to be documented. The data collection is time consuming and requires a significant amount of data entry. Part of this data entry will be development of an asset naming convention (see pop-out).

Asset Naming & Equipment IDs

"A little forethought at the start can save a lot of time in the future"

Creating an asset naming convention within your CMMS normally involves both an asset name and an asset ID. Asset names can usually be normal, descriptive text titles (e.g., Generator, Diesel Standby 200KVA Cummins). The problem comes when there are multiple instances of that same asset within the universe of assets managed within the CMMS. An asset ID, on the other hand, is a unique identifier—only one asset has that specific ID. Asset ID's, or equipment tags, are often cryptic combinations of text and numbers that include indicators tying the asset to industry classification systems and types, to particular facilities, to locations within that facility and to the quantity of that particular asset. Asset naming doesn't have to be complex but it must always be consistent and logical. Standardized naming conventions also aid in data reporting and analysis. Come up with a useful naming convention before you go live with your CMMS system because it can be difficult to change later.

The data collection will reveal systems and components that apply to each of the facilities. School district personnel may add items as necessary to create a complete plan. Many facilities

may have multiple system types within a particular category (e.g., roofing, package unit heaters, etc.) as well as multiple components of the same type (e.g., circulating pumps, water closets, toilet partitions, etc.). For each item, and wherever appropriate, a specific preventive maintenance task should be developed. In large school districts, the data collection will reveal similarities amongst systems and components; following these observations, some school districts may elect to standardize as many of their systems and components as possible (e.g., same fire alarm panel, light fixtures, etc.), thereby reducing spare parts inventory and training costs, which in turn creates increased productivity and quality of work. Note that standardization may in some cases only be possible during remodel projects or new construction (e.g., boiler replacement / installation, unit heater replacement / installation, etc.); however, simple part replacements may also enable standardization (e.g., energy efficient bulbs, low-consumption water closet flushometers, etc.) and save on utility costs.

To assist the school district with executing this task, the department has established a baseline by identifying facility systems and components that should be included in the CMMS. A list of these components is included as Appendix A and should clarify the tasks needing to be done in this section. While thorough, the list is not intended to be exhaustive of every possible component. The list is designed to dovetail with other useful assessment devices such as the Association for Learning Environments International (A4LE) *Alaska School Facility Appraisal* and the department's *Guide for School Facility Condition Surveys*, as well as other professional facility audit organizations. The list also gives its users a better understanding on how to update Renewal and Replacement (R&R) schedules, a topic which will be discussed later in this guide. A sample of an R&R schedule is included as Appendix B.

Determining Present Conditions

While developing the inventory of systems and components described previously, the school district will need to complete an inspection of the components in order to establish their current condition. Following the identification of systems and components in each facility, a detailed inventory is needed to quantify the building components and to establish their current condition. This step includes both an objective process of fact-gathering and a subjective assessment of the current condition. Information such as quantity, type, size, manufacturer, model, material specification, location, key parts, part numbers, and other item-specific data will be documented. A qualified technician or professional will need to make the assessment of current condition. The condition assessment is used to determine both the immediate and future levels of preventive maintenance for the system or component and its end-of-service-life replacement date.

Establishing Appropriate Levels of Maintenance

Preventive maintenance efforts range from visual inspections only to performance testing and analysis; from minor adjustment, cleaning and/or lubrication to complete overhauls; from reconditioning to component replacement. [6]

[6] Applied Management Engineering, PC, Kaiser, Harvey H.; *Maintenance Management Audit: A Step By Step Workbook to Better Your Facility's Bottom Line*; Kingston, MA; R.S. Means Company, Inc., 1991. p.83.

School districts that are accredited by the Northwest Association of Schools and Colleges will recall that the accreditation standards include the following:

> Standard III - School Plant and Equipment
> "13. Inspection(s) of the school plant and equipment **shall** be made each school year by a qualified official and any deficiencies addressed." [7]

This type of standard is an example of a preventive maintenance requirement at the visual inspection level.

In establishing levels of maintenance, two determinations are needed. The first is to establish a basic life-span for the system or component (e.g., asphalt shingle roofing - 20yrs, oil-fired boiler, 15yrs, drive belt – 3yrs, etc.). The second determination is, "What maintenance activities are needed to ensure that this particular system/component meets or exceeds its life expectancy?"

Answers to the above queries can oftentimes be found in the Operations and Maintenance (O&M) manuals. These manuals are usually turned in shortly after facilities commissioning or major project completion. Manufacturers' literature, practical experience, test results, and industry averages are some ways to determine both acceptable life cycles and what preventive maintenance work would result in achieving those life expectancies in the most efficient manner; as mentioned previously (i.e., the lowest total life-cycle cost). Alaska presents formidable environmental challenges to our facilities, and the life expectancy of certain systems / components may vary greatly from one region to another, so an informed analysis is necessary.

Preparing the Work Items Plan

Once your levels of maintenance have been established, setting the tasks into a workplan is the next step. According to Basil Castaldi, a recognized expert, and author, in the field of facility planning, four elements make up any preventive maintenance work item.

> "In any prescribed maintenance program, the list of tasks to be performed is described in detail. The frequency and nature of the work are clearly stated. The materials to be used are specified in considerable depth and the manner in which the work is to be accomplished is expressed in simple language." [8]

Consider this further detail of these tasks:

I. The list of tasks to be performed is described in detail.

The detail that accompanies this step is critical and should be as comprehensive as the efforts that were placed in the previous step while identifying facilities, systems, and components. Any maintenance individual who is assigned any of the tasks should be able to determine the location of the equipment, what replacement parts, if any, are needed, what the work entails (e.g. replace air filters), tools and manuals required, estimated time of completion, what Personal Protective

[7] *Standards for Accreditation*; Northwest Association Schools and Colleges, 1995, p. 11

[8] Castaldi, Basil; *Educational Facilities: Planning, Modernization, and Management*; Allyn and Bacon, 1982, rev. 1994, p. 421.

Equipment (PPE) should be worn, if any, etc. This is particularly useful when a new maintenance employee takes over a particular school without having the possibility of shadowing an existing employee.

II. The frequency and nature of the work are clearly stated.

This task is self-explanatory. For instance, a school district may elect to conduct a 30-minute load test for its entire generator fleet at the beginning of each month, with exception to June and July when affected schools are in seasonal shut down. The test will include monitoring and recording all gauges. Another example may be the changing of air handlers filters twice a year, at the beginning of August, and then again at the beginning of February.

III. The materials to be used are specified in considerable depth.

This is another important task, because it avoids the plausibility of maintenance personnel switching various components of a system to a point where functionality and performance are diminished costing the district several operating dollars. For instance, clearly defining a specified nozzle for a fuel burner may enable boilers to maintain peak performance (e.g., hollow, 3.0 gallon per hour, 60-degree angle). Another example could be the adherence to specified air filters, where low-cost air filters may compromise the occupants' environmental safety and well-being (e.g., high-capacity pleated filter, MERV 8, Moisture Resistant Die Cut Chipboard, Nominal Height 24 inches, nominal width 24 inches, nominal depth 2 inches).

IV. The manner in which the work is to be accomplished is expressed in simple language.

The tasks needing attention will be addressed by custodial and maintenance individuals with various educational backgrounds. The best means to ensure understandability across the board is to keep the language simple and direct.

Implementing a Maintenance Management Program

Introduction

Where the first school board responsibility was to *develop* a preventive maintenance program, the second responsibility is to *implement* a preventive maintenance program. This section offers guidance on carrying out the developed preventive maintenance work plan and establishes the importance of having management reports and a system of feedback from the field in order to implement an effective program.

The basic task of preventive maintenance implementation is to match needs with resources. However, both needs and resources are variables in the facilities management effort. As a result, implementation efforts may occur once to initiate a preventive maintenance program but will also require continuous monitoring of needs and resources to accommodate changes in these variables. For example, the work items assessment of a circulating pump may have indicated an anticipated failure in three years. At the three-year point, a stress test of the pump may indicate no appreciable degradation has occurred. This information may necessitate a revision to the preventive maintenance plan initially implemented.

The Need for Sustainability

Revisions to the maintenance plan must occur over the life-cycle of the facility. Other examples driving this change include the impact of new technologies, improvements to building systems or new tools that reduce repair times. These examples of variables in needs and resources all support the conclusion that implementation requires both an initial and an on-going effort. For additional discussion on Sustaining a Maintenance Management Program, see page 23.

Moving from the planning and development phase to implementation and operation almost always involves funding, regardless of the endeavor. Preventive maintenance is no exception. As evidence of the importance of funding in this transition, the portion of the Encyclopedia of Architecture devoted to implementation of a preventive maintenance program is largely a discussion of funding.[9] Because funding is so critical to the transition, some findings from research concerning maintenance funding and resources are included in the following paragraphs.

Determining Necessary Resources

As previously mentioned, most of the resource requirements result in a need for funds. Determining the level of funding needed for preventive maintenance at a detailed level requires estimating literally thousands of labor and material line items. This method is very time consuming. Other approaches to budgeting for preventive maintenance include establishing a

[9] *Encyclopedia of Architecture*, John Wiley and Sons, Inc. p.70.

formula based on a percentage of the operating budget or a percentage of building replacement value(s). In California, research showed that:

> "If a planned maintenance program is followed, about 5 percent of a district's operating budget will be required to provide an adequate maintenance program.
>
> In addition to the 5 percent expenditure for the district's maintenance program, a reserve fund is needed for unanticipated and emergency maintenance expenditures. Another criterion for determining budget requirements is to calculate 2.9 percent of the current net building replacement cost or a projected cost based on the square footage of property to be maintained." [10]

In another budgeting formula, the *Encyclopedia of Architecture* indicated:

> "The cost of preventive maintenance ranges according to the intent of the *plans developed.* To set a budget for this type of work, one may estimate 5% of the present value of the building for preventive maintenance activity. Perhaps 1.5% of the value of the building may be estimated for simpler structures or systems."[11]

The department's capital improvement project (CIP) application scoring criteria assigns increased points to school districts based on the percentage of total maintenance expenditures relative to the building replacement value(s). Maximum points are achieved when the percentage is five percent or greater.

One effective strategy for determining the necessary resources is to identify the smallest detailed increments of the preventive maintenance plan and combine them for the aggregate picture. Take each well-developed preventive maintenance work item and ask, "What skills (trained personnel), tools, materials (parts etc.), and time are needed to complete this work item?" Once these factors are tabulated and the resource needs are clear, the supporting issues of space for shops, material staging and transportation requirements can be addressed.

While starting with the most detailed information and building up yields a comprehensive assessment of necessary resources, broad and systematic thinking is required to arrive at the necessary organizational structure with which to accomplish the preventive maintenance program.

Determining Organizational Structure

The structure and organization of the preventive maintenance program must be in place before effective scheduling of work can occur. Some operations and maintenance organizations establish a cross-disciplined preventive maintenance work center whose main task is to inspect various systems and components (usually dynamic equipment) and write maintenance work orders. Following the inspection, more traditional work centers such as plumbing, sheet metal,

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[10] School Facilities and Transportation Division; *Administration of Maintenance and Operations in California School Districts: A Handbook for School Administrators and Governing Boards*; California State Department of Education, 1986, p. 33.

[11] *Encyclopedia of Architecture*, John Wiley and Sons, Inc. p.70.

etc. are assigned the actual work tasks. Other maintenance organizations are oriented almost completely to preventive maintenance tasks with major crafts taking responsibility for components and systems within their respective areas. In this model, a small multi-disciplined work center handles routine maintenance and emergency repairs and, in some cases, minor improvement work. These organizational structures are variations on how best to accomplish the work that is identified in the component needs-based maintenance assessment. This approach to organizational structure—one that examines the necessary maintenance work and builds an organization structure to match—is often overlooked.

Another driver for determining organizational structure is management. This strategy asks the question, "How can the maintenance resources best be managed?" The expectation is that from good management will follow good maintenance. Most of the management approach structures can be distilled to supporting, or describing, three approaches: centralized, decentralized (or zone maintenance), and hybrid.

Taken together, the combination of organizing personnel to accomplish necessary tasks, and organizing personnel for effective management is most likely to yield a comprehensive maintenance management implementation. There are many resources which can assist a district in implementing an organizational structure. Textbooks have been written and many trade periodicals run at least one if not multiple articles in any calendar year dealing with maintenance organization.

Scheduling and Assigning Work

The heart of any maintenance management program is scheduling and assigning specific maintenance tasks, and tracking the completion of those tasks. In addition, it is best practice to be able to account for all available maintenance hours and to measure time on task and other productivity and utilization metrics. This element of the maintenance management program takes the work items developed for each component and assigns them to the appropriate maintenance craftsperson or team according to the established structure and schedule.

This is accomplished through the CMMS. Once pertinent data is entered into the database system, work orders detailing the scheduled maintenance requirements can be generated and tracked along with all unscheduled work and categories of ancillary work such as training, education support, mail runs, etc. More advanced CMMS programs have an integral query feature which prompts maintenance managers for necessary input and provides industry standards for certain maintenance tasks. It is estimated that there are more than fifty suppliers of maintenance software packages with price variations based on need and capacity. Maintenance magazines and the world-wide-web are good locations to look for these products.

Intentional & Directed

In a roundtable of school maintenance directors, one mentioned an increased awareness of the need to be intentional in the scheduling and management of maintenance efforts. For this district, it appeared that the more workable way to achieve that goal was to bring maintenance scheduling to a more centralized location. For others, site-based management of maintenance is the norm and allows local flexibility in scheduling work. In a site-based organization, the site administrator, or principal, needs to understand the level of importance to be given to scheduled, preventive maintenance.

Most routine maintenance and some preventive and corrective maintenance can be accomplished with very little planning. Often the only planning needed for these is the creation of a work order and assigning/scheduling the work. However, more complex PMs and most corrective maintenance work requires intentional planning—especially when tools or materials are needed that can't be drawn from common stock. There are also labor considerations. Large corrective maintenance efforts, which can involve component or partial system replacements, often require more than one trade or maintenance skill-set. Understanding these needs and taking action to meet them is the activity of maintenance planning. Large maintenance organizations may find it necessary to establish dedicated planning positions. Where that isn't the case, it's common for a maintenance supervisor or manager to assume that role—sometimes to the detriment of the organization when priorities for time clash.

Planning for complex maintenance work is best approached as a shared task. If there is a need for planning, it's because multiple skills and specialized materials are needed. Even the dedicated planner mentioned earlier isn't a solo performer. That person gathers information from others on factors such as labor projections and material needs in order to develop the plan. In the absence of a dedicated planning function, set up a planning meeting and let the key players share in the task of creating the plan. Reach outside of maintenance to include procurement and business office personnel when materials purchases and logistics are involved. Identify a lead entity to track the plan if it looks like multiple meetings will be needed to develop a successful plan.

Reporting Systems and Feedback

In addition to automating the list of items needing scheduled maintenance, most maintenance management software programs also provide the capability for a computerized building data file. This database of facility requirements can be used to generate a wide variety of accurate reports on matters related to building maintenance and operations and the associated costs. To a certain extent, an integrated maintenance system that incorporates both daily maintenance tasks and long-range planning depends on an automated database of facility information. Effective preventive maintenance programs depend on feedback from maintenance personnel and a reporting/tracking system of costs associated with the preventive maintenance effort. This information is used to maintain the proper balance between preventive maintenance and renewal and replacement efforts (i.e., determining when costs have increased to the extent that preventive maintenance on a system is no longer effective on life-cycle basis).

Maintenance Management

Through a combination of informal evaluations and formal audits, a reporting system should be established to analyze a district's maintenance system to achieve the most cost-effective maintenance program. In addition to general feedback and reporting, district maintenance programs should undergo periodic evaluations of their effectiveness. This can occur both at the worker's task level and at the maintenance management level. Evaluations can be done either internally or through the use of an outside evaluation team. Maintenance management audits examine the functional program and generally consider the following four factors:

Productivity - the portion of a worker's time that is directly productive.
Performance - how well the individual is working, e.g., is work being completed as planned?
Work Quality - is the individual producing a satisfactory work product?
Priority - effective allocation of available time to the most important tasks.[12]

Though maintenance management audits may look at symptoms of ineffective maintenance at the worker/task level (e.g. number of callbacks, work completed on schedule, etc.), a management audit's focus, as the name implies, is on improvements through better management.

[12] Applied Management Engineering, PC, Kaiser, Harvey H.; *Maintenance Management Audit: A Step By Step Workbook to Better Your Facility's Bottom Line*; Kingston, MA; R.S. Means Company, Inc., 1991. p.9-10.

Sustaining a Maintenance Management Program

Introduction

Why do maintenance management programs falter, and even fail, over time in Alaska's school districts? The answers to this question may be many and complex, but one over-arching response may be able to encompass the myriad of reasons. Here it is: Maintenance management practices are not sufficiently integrated in, and indispensable to the district's core operations. This section of the handbook describes some key elements in the building lifecycle, which district leadership should use to weave maintenance management into the essential fabric of the district's operations. They include: performance metrics, financial tracking, software upgrades/updates, and evaluations and inspections.

Performance Metrics

While measuring and tracking maintenance management metrics is important for the district's facilities team, being responsible to share, and to explain, those metrics to district leadership at regular intervals is critical to sustaining the program. School boards—you should require performance metric reporting at each regularly scheduled board meeting. Superintendents—make maintenance performance metrics part of your monthly, if not weekly, 'dashboard' of district performance measures. Facilities directors—don't stop until you have the received the tasking to tell the maintenance management story to district leadership on a regular basis. Select from the following list, develop accurate data collection processes, and let your performance be know—whether you're struggling or exceling:

DEED Identified KPIs (see also Appendix D)

- Work Order Maintenance Hours by Type to Total Maintenance Hours Available
- Work Orders Scheduled and Completed
- Incomplete Work Orders by Age and Status
- Scheduled Work Order Hours to Unscheduled Work Order Hours
- Trend Data for Unscheduled Work Orders, Hours and Count
- Planned Maintenance Activity (Labor & Materials)
- Completed Maintenance Activity (Labor & Materials)

Other Industry KIPs

- Deferred Maintenance Backlog
- Preventive Maintenance Compliance
- Average Time to Completion
- Corrective Repair Response Time
- Employee Satisfaction Rate
- Customer Satisfaction Rate

Financial Tracking

The related resources of financial and human capital, of dollars and people, are also critical areas of focus in order to sustain a maintenance management program. In an article published in

Correctional New Magazine, the author identified budget and staffing as two of the three essential elements, along with maintenance tasks, of the maintenance management triangle.

Budgeting goes hand in hand with expenditure tracking. One of the most basic budgeting strategies is to forecast based on past expenditures. Consider this simple question, "How much do you spend on facility maintenance?" Most school district maintenance directors are not aware of the answer to this question. This is not because the information is non-existent. Every district keeps a detailed chart of accounts for expenditures that includes those related to facilities. However, the cost is often allocated in several different line items within the financial structure. For instance, although maintenance and operations costs fall in Function 600, staff costs may accrue under a separate Object code (325) than utility services (430). In addition, separating maintenance staff from other non-certificated staff is optional versus required. Just as the reporting of maintenance performance indicators can substantially increase the likelihood of a sustained maintenance program, so will the regular review of financial data by the Facilities or Maintenance Director. To better sustain a maintenance management program, arrange for and regularly review financial reports related to operations and maintenance. Select one or more from the following list, and work with the district's business office to start producing these for regular review:

- Monthly Cost of Maintenance Personnel (Districtwide 3-5 year trend)
- Monthly Cost of Materials and Supplies (Districtwide 3-5 year trend)
- Routine Maintenance – Cost per Square Foot
- Routine Maintenance – Cost per Work Order [13]

Software Upgrades/Updates

Ignoring software updates, consciously bypassing updates to save money, and being unaware of improvements in the CMMS arena can contribute to stagnation, inflexibility, and missed opportunities when sustaining a maintenance management program. The 'cloud' and 'software as a service' (SAAS) have done much to alleviate this common pitfall but are not a complete panacea. Districts that have installed maintenance management systems on-site must be diligent about receiving and installing software updates. For those using hosted platforms, the challenge is to ensure that the district remains aware of the updates that are being pushed out. Your provider should be sending notices of these changes in a way that can helps to understand what, if any, impact they may have on your use of the platform.

Less common, but no less disruptive to sustaining maintenance management, is the reverse of the previous issue. Instead of you as the customer being out of the loop, it can be your vendor that 'falls asleep'. Businesses, and the people that run them, change. Occasionally, some fail. While the success of your CMMS provider is beyond your immediate control, the decision to stay with them, or to move on is always in your hands. Here are three signs to look out for regarding the performance of your CMMS provider:

[13] These two "Routine Maintenance" items are recommended by the *Council of Great City Schools* KPI Metrics for Maintenance & Operations.

1) Mergers and/or changes of ownership—especially if these become multiple events within a short period.
2) Out-of-scale increases in either the cost of an upgrade or the cost of an annual subscription.
3) Silence (i.e., no upgrades being pushed, no communications about new feature sets).

Staying current with your CMMS also means staying current with training that might be offered by your provider both as they roll out updates and in viewing normal tutorials. Many providers have this training in the form of short 8–12-minute videos on their web site. Others might have a YouTube channel exclusively for this content. Including such offerings in your annual training plan helps to ensure maintenance management is sustained.

Evaluations & Inspections

Even the best maintenance organizations can fall prey to the 'rut' or 'blinders' paradigm. That can occur when you are so focused on your work, so used to following routines and established courses of best practice, that peripheral issues that may arise are invisible. Using some of the techniques already mentioned in this Sustaining a Maintenance Management Program section such as tracking performance metrics, and regular reporting to executive leadership, there is one other tool on which top-performing organizations rely. That tool is the independent audit or inspection.

Case Study:
In 2004, the Lower Kuskokwim School District determined it would retain an outside expert to measure the quality of the district's maintenance program. In January 2005, the district brought in one of the premier national assessment organizations, MGT America, to evaluate the Plant Facilities Department (along with the business office and special education). The executive summary identified 10 commendations for exemplary practices. Of those, four were noted for the district's maintenance and facilities management operation. Specific to maintenance management, the district was found to have implemented "a high-quality preventive maintenance program" and was further commended for "utilizing an effective, cost-efficient computerized maintenance management system." In spite of these accolades, the report identified no fewer than 20 recommendations for improvement within the Plant Facilities and Capital Projects sections such as: 1) "Develop a system to provide on-site and off-site computer data backups," and 2) "Develop a user's manual for the computerized maintenance management system."

The preceding case study identifies a top-level effort for an evaluation of a district's maintenance management program. Estimated costs for this type of independent analysis are $0.02-$0.50/sf of maintained facilities with lower number corresponding to large districts and the high amount corresponding to smaller districts. Between this level and a 'free' internal review, there exists a range of other options.

For maximum impact on sustaining a maintenance management program, plan for at least some level of independent review on a 5-7 year interval.

Energy Management

Developing an Energy Management Program

Introduction

Department regulations for energy management require:

> *(2) an energy management plan that includes*
>
> *(A) the recording of energy consumption for all utilities on a monthly basis for each building; for facilities constructed before December 15, 2004, a district may record energy consumption for utilities on a monthly basis when multiple buildings are served by one utility plant; and*
>
> *(B) regular evaluation of the effectiveness of and need for commissioning existing buildings;*

The baseline requirement in *(2)(A)*—the recording of energy consumption—is deceptively simple. However, because the two categorical requirements—all utilities and all buildings—are comprehensive in nature, the complexity of record keeping multiplies quickly. Not only does the math of buildings x utilities result in many data points, the variety of utilities used varies from building to building as does the variety of delivery methods for those utilities. School district energy program managers will be challenged if they attempt to develop this level of energy plan on an ad-hoc basis without data tracking tools. However, as school facility complexity increases, energy plans, like maintenance programs, must be built from a facility-specific inventory.

Energy Management Plan vs. Policy

An energy management plan is a comprehensive document that " . . . maps out internal maintenance schedules, equipment logs, and keeps equipment manuals and buildings drawings on hand for reference. Unlike an energy policy, the energy management plan is regularly updated, typically on an annual basis. It is used to document recent achievements, changes in performance, and shifting priorities." (AHFC White Paper, p.8).

The most common deficiency noted during the department's certification process is that energy programs are not tracking all types of utilities used or are not doing tracking using a monthly metric. This does not meet minimum criteria. While there is no question that a well-developed energy management program should include districtwide information (e.g., goals, standards, roles and responsibilities, etc.), the energy consumption records are specific, and unique to each building. As defined in the regulation, the energy plan needs to include recording energy consumption on a monthly basis for each building. Energy consumption recording must comprise all school district energy utilities such as heating fuel, steam, natural gas, liquid propane (LP) gas, recovered (waste) heat, electricity, wood, and coal. Non-energy utilities such as potable water, wastewater, refuse, etc. can be equally important to track in school districts but are not required under the regulation.

As noted, the regulation makes exception for buildings built before December 15, 2004. In such case, for instance, if a large fuel tank supplying multiple facilities was built prior to this date (e.g., school, teacher housings, and generator shed all feeding off one main fuel line), it is permissible to record the monthly utility readings for the entire distribution system. The same goes for electrical meters. However, any school built after this date must have individualized means to record each of its utilities (e.g., oil meter, waste heat meter, electric meter, etc.); the daisy-chaining of numerous buildings off one utility meter is no longer permitted.

The utility consumption records only provide the core data for energy management in a school district. This data needs to be monitored and used to guide energy management processes and to achieve energy use goals. In recognition of this need, subsection *(2)(B)* was added to the minimum requirements for a qualifying energy management program in 2020. This subsection begins to address the additional factors that are needed to develop a more complete, effective energy management program. Such factors include purposes, objectives, goals, procedures, strategies, standards, benchmarks, assessments, education, incentives, and staffing These factors can be grouped into the major categories of: policy, data, objectives, strategies, and measurement.

Energy Policy

A policy or purpose statement regarding a school district's energy management program can be an effective anchor for the program, an important point of reference and statement of commitment. In its informative booklet, *Introduction to Energy Efficiency – A Guide to Managing Energy use in Public and Commercial Facilities*, the Alaska Housing Finance Corporation provides a well-developed framework for crafting an Energy Policy,

> **Energy Policy**
>
> An internal energy policy should state why the organization is committed to conserving energy and/or using it efficiently. Usually in the form of a paragraph, this piece outlines the purpose of the document such as conserving energy in the workplace, using energy more efficiently, reducing costs, reducing emissions, or showing environmental stewardship. Typically, this section also articulates areas of concern such as high and increasing energy costs, community sustainability, etc. (AHFC *Introduction to Energy Efficiency*, p.11).

A school district's energy policy should start at the school board level. The Alaska Association of School Boards (AASB) has developed the following recommended board policy, which can be edited to meet district needs:

BP 3511 ENERGY CONSERVATION

The School Board desires to reduce energy use in the district in order to help conserve natural resources and save money to support other district needs.

The Superintendent or designee shall establish energy use reduction goals, monitor energy consumption and encourage employees and students to conserve resources. The Superintendent or designee shall regularly inspect district facilities and operations and make

> recommendations for maintenance and capital expenditures which may help the district reach its energy consumption goals.
>
> The Superintendent or designee shall establish an energy management program sufficient to meet, at a minimum, the standards needed in order to qualify for state-aid for school capital projects under AS14.11.

An energy policy should answer the 'why' question regarding energy conservation but can also address 'what' and 'how' elements in broad direction-setting statements. In the AASB sample, the initial sentence sets out the purpose of an energy management program while the following paragraphs establish a few key provisions on what kinds of steps will need to be taken to achieve that purpose. These provisions are further developed in the Objectives and Strategies sections of the energy management program.

Energy Data & Information

Information and reliable data is the foundation of an energy management program. Good data provides proof that plan goals are being achieved and draws attention to areas that are lacking. Expanding out from the core information of energy consumption, additional elements and layers of data become important in the process of managing energy. Basic data like overall energy use by month for each building is required to evaluate overall performance, but tracking plan goals is made easier by including more detailed energy use. For example, consider tracking fuel use at each boiler or water heater separate from generators and from other facilities; tracking lighting separate from plug loads and separate from HVAC systems. Other examples are tracking unique features like alternate energy systems separately and measuring hot water flow in addition to total water usage. This level of detail allows setting goals such as reducing lighting energy by 10%, or improving boiler firing sequences, where a single building meter would not provide enough feedback.

Information about the building systems is equally important. Keeping good records of original designs, as-built conditions, and modifications to equipment and control systems is crucial to keep costs down in future renovations or troubleshooting high energy use. Future designers will spend less time figuring out what is there and what the systems are doing if they have access to good records of previous work. Similarly, re-commissioning or retro-commissioning is more cost effective if the commissioning agent does not have to reconstruct the original design intent by reverse-engineering the systems.

Building Automation Systems (BAS) make collection of large amounts of useful data fast and easy. Engineers and researchers prefer too much data over too little; tracking as much as practical is generally recommended. However, even handwritten logs of meter readings or redline markups of original drawings can have great value to the energy management program.

Energy Objectives

The objectives of an energy management program should flow out of the school district's energy policy. When developing these objectives, consider the primary influences on energy use such as building use by various occupants, energy production and transmission, building equipment and systems, and maintenance or custodial activities. While energy management objectives should cover the full spectrum of these, and other energy use factors, it's helpful to try and group similar

objectives together so that the resulting list of core objectives is in the six to ten range. To help with this, try not to include specific activities such as "enter monthly bills into the energy tracking spreadsheet." That and similar elements will be developed as strategies and actions needed to support the energy objectives.

Here are examples of energy objectives, grouped by overall category, developed by various school districts in their effort to achieve their stated energy policy:

Building Occupants and Users

- Create a sense of responsibility among students, teachers, staff, administrators, parents, and community members.
- Include all building users as part of the energy conservation process.

Data Gathering and Management

- Monitor all energy consumption.
- Track, monitor and report district progress, and identify trends and opportunities for savings.

Operations and Maintenance

- Operate at optimal efficiency and avoid unnecessary costs associated with reactive maintenance practices and procedures.
- Reduce our district's overall environmental impact and provide a healthier and safer educational environment.
- To reduce energy costs by evaluating and choosing appliances and equipment that are more energy efficient.

Existing Building Assessments

- Understand energy use and opportunities for improvements to energy efficiency at all facilities.

New Construction

- Reduce future energy costs in new facility construction and renovation whenever feasible.

Energy Strategies & Actions

Energy objectives can best be attained by developing clear and actionable strategies and identifying specific supporting actions. It's often at this point in the program development that roles and responsibilities are established, and personnel assignments made. That work will be addressed in the following section **Implementing an Energy Management Program**.

Here are examples of measures taken by various school districts in their effort to mitigate energy consumption:

- Energy monitoring via automated remote reporting;
- Turn off electrical appliances at the end of each day (e.g., lights, smart boards, computers, monitors, speakers, televisions, stereos, copy machines, kitchen hoods, etc.);
- Utilize minimal corridor night lighting during non-occupancy;

- Report all utility malfunctions immediately to maintenance personnel (e.g., oil / gas/ water leaks, lights no longer shutting off automatically, etc.);
- Shut down boilers, refrigerators, and freezers during summer;
- Turn down the heat during non-occupancy periods (also known as night setback), including holiday breaks;
- Install occupant sensor lighting;
- Install low-flow flushometers for water closets / urinals;
- Shut down the school at 5:00 p.m. one night a week;
- Optimize Heating Ventilation and Air Conditioning (HVAC) systems (e.g. replace air filters, tune-up boilers twice a year, ensure fans are not continuously running in manual override mode, ensure air louvers are operational, etc.);
- Replace antiquated lighting systems with more efficient ones (e.g. replace T-12 fixtures with T-8; replace Tungsten filament bulbs with high efficiency Light-Emitting Diode (LED) bulbs);
- Install provisional arctic porticos during cold season;
- Reward schools that decrease energy use (e.g., free movie night at the gym);
- Enlist/appoint an 'energy champion' and ensure someone is comparing and using the information;
- Enter monthly utility records in a software program which is customized to monitor monthly energy usage. (Note: This is a collaborative process which will require close contact between administrative personnel (e.g. personnel processing utility bills), maintenance personnel (e.g. personnel monitoring fuel consumption), and personnel responsible for the energy management program;
- Determine a benchmark year as the starting point for evaluating the school district's energy management efforts;
- Establish projected consumption and cost data. Projected consumption and cost data will be used to determine future energy upgrades and for budgeting purposes;
- Conduct annual rate review and utility bill analysis;
- Analyze monthly consumption data; track, monitor and review monthly utility bills and investigate and write work orders when consumption is outside of set parameters; and
- Obtain and analyze load profiles including the power demand patterns of the highest energy-consuming schools in our district and look for load-shedding and/or load shifting opportunities.

Benchmarks and Measurement

No energy management program is complete without some type of feedback loop regarding effectiveness. Ideally, each energy strategy identified in support of the program's energy objectives would be measurable in some way. This need to measure returns us full-circle to the foundation of a good energy management program—information and data.

Following is an example of a specific energy strategy and its corresponding actions and measurement metrics:

Strategy: Implement water heating set points and guidelines for management.

Actions:

1. Perform PM inspections to identify leaks and check burners, gauges and pumps.
   Standard: 100% of hot water generators/heaters inspected annually; verify with CMMS report.
2. Annually flush water heaters to remove sediment from the system and increase heat transfer efficiency.
   Standard: 100% of water heaters flushed annually; verify with CMMS report.
3. Program water heaters for vacation shut-down to reduce unnecessary heating of water during extended vacation periods.
   Standard: 100% of water heaters programmed; perform annual PM check to ensure no changes occurred.

Measuring effectiveness can build support at all levels for continued implementation and prioritization of energy management programs. The following sample narrative, which was included in a energy program report, would not have been possible without measurement protocols:

> *Two recent school renewal projects at ABC and XYZ Elementary Schools have been very successful at reducing the utility usage. Both schools have seen a 60% reduction in electrical and natural gas usage/sq.ft. after renovations were completed. The cost/sq.ft. for gas and electric at XYZ decreased from $2.17/sq.ft. to $.69/sq.ft. ABC decreased utilities $2.08 to $.64/sq.ft. We are looking forward to seeing successful reduction comparisons for QRS Elementary School and Student Nutrition for the recent building envelope and heating system upgrades.*

Benchmark and measurement elements of the energy management program also become essential elements in sustaining a program over time. This will be discussed in additional detail in the following section **Sustaining an Energy Management Program.**

As described above, there is overlap between the energy management plan and the preventive maintenance management program in regard to maintenance schedules. Although maintenance personnel involvement is critical, a successful energy management plan also necessitates everyone's participation, from school board members to students. The energy plan should incorporate what measures are selected to optimize resource utilization while minimizing costs and expenses. Most importantly, the plan should utilize data gathering to benchmark whether or not efforts are paying dividends; to do so, many school districts set objectives (e.g., reduce fuel consumption by 15% within the next 12 months; reduce electric consumption by 10% within the next 12 months). The plan should be simple and clearly define everyone's tasks in support of the plan. School districts that have effective energy management plans usually assign its execution to a responsible individual with access to top-level administrators. In such manner, school board members can receive updates from their energy plan manager on a regular basis (e.g. monthly, quarterly, or bi-annually) and determine how well the plan is working. Officials may then review issues within the plan's objectives that could be faltering, or that may need attention.

Energy Management

Implementing an Energy Management Program

Introduction

The school board has *developed* an energy management program based on policy, objectives, and strategies; benchmarks have been established—now what? The responsibility that follows is to *implement* the energy management program. In a nutshell, implementation involves two essential steps: 1) committing resources, and 2) taking action. This section offers guidance on carrying out the developed energy management plan and establishes the importance of leadership; the key resources of knowledge, time, and funds; and, finally, executing an action plan.

Leadership

One of the more important components to implementing an energy management plan is simply to commit to the plan. Although—to a degree—energy management plan *development* can be accomplished at the school board-level by defining policy and identifying objectives, energy management implementation must be launched at multiple levels of leadership in the school district's structure. School district officials who engage their entire organization while committing to a cross-discipline team approach often reap optimal benefits. Cross-discipline leadership includes leaders in education delivery (i.e., the classroom), student leaders, leaders in facility operations and maintenance, custodial leaders, and leaders in school administration. More so than in any of the other four key areas of facilities and maintenance management, energy management program implementation only happens well when building users and building operators cooperate together in doing their part.

And finally, it is important for the leadership team to recognize all achievements made so that momentum is kept through the entire organization.

Resourcing the Plan

In multiple years of assessing school district energy management programs, the department has found that the resources needed are generally scaleable to the complexity of the district's operations. Said another way, whether a district serves a small student population and only has a few facilities that consume energy, or whether a district has thousands of students and hundreds of energy-consuming facilities, the resources of personnel, time, and funds are sufficient for a well performing energy management program. Large districts envy the simplicity of a few buildings with basic systems found in small districts, while small district crave the seemingly endless supply of resources and specialists available to large districts.

Knowledge

The cross-discipline leadership team needs to cover the energy program's necessary scope of knowledge. However, not every energy leader needs to know the number of BTU in a gallon of heating fuel or a cord of wood. Facilities and technical leaders may not need the skills to lead and inspire a room full of students, or a building full of instructional staff, on practical methods for energy conservation. A classroom instructor in an urban school may never need to know where their school's fuel tank is located much less how to measure its contents. Conversely for a teacher, who also serves as the school administrator, in a remote location, this knowledge is

indispensable. Within the *knowledge* element of resourcing are actions to provide training and raise awareness through communicating with stakeholders. When implementing the energy management program, identify the necessary elements of knowledge, and match that knowledge up with the personnel on the cross-discipline energy management team. The following bullet points will provide a good starting point for the elements of knowledge that are needed[14]:

- Management skills
  - Organizational and leadership skills
  - Change management skills
  - Contract management
- Financial and accounting skills
  - Risk management
  - Economics of energy management
  - Financing options, alternative financing
- Energy management knowledge
  - Energy fundamentals
  - Energy optimization fundamentals
- Technical knowledge
  - Mechanical and electrical engineering principles
  - Facility and industrial processes
  - Operation and maintenance practices and requirements
  - Awareness and understanding of new and existing technologies
  - Building automation and interoperability
  - Instrumentation and controls
  - Commissioning principles
  - Recommissioning
- Other knowledge and skill areas
  - Communication and interpersonal skills
  - Energy procurement
  - Performance contracting
  - Implementation costs
  - Product and service procurement

Time

There is no doubt that labor hours are needed to implement an energy management program and labor hours equals personnel. When implementing an energy management program, identify and assign needed tasks to appropriate personnel.

One way to wrap the preceding two resources together, knowledge and time, to implement an energy management program is to engage a person to serve as the district's Energy Champion. See the paragraph below for more information.

[14] *Source: Global Superior Energy Performance Partnership Report – 2013*

Funds

The final element that must be brought to the implementation step is funding. Primarily this will be tied to securing the necessary knowledge and personnel required to execute the program, to manage its daily, weekly, monthly, and annual cycles.

Executing the Plan

The development of the energy management program will inform the elements of the action plan. The creation of an action plan is a necessary tool which will act as a blueprint to guide and monitor the systematic approach to improved environmental performance. The action plan needs to focus on the scope and scale of goals, targets, roles, and resources. To promote success, the plan should be accepted by all areas of the facility that it addresses.

At this point in time, the next step is to implement the action plan. This step begins by raising awareness, building capacity, motivating staff, and tracking and monitoring progress. Continual feedback on successes achieved can help motivate stakeholders to continually improve.

There also needs to be a means to assess the plan's performance. Regular evaluations of baseline objectives based on gathered data collection will reveal new opportunities to improve performance.

Goals need to be set to improve performance. The overall objectives should aim to reduce energy usage while maintaining adequate environmental controls. The development of effective goals will help govern possible future improvements.

A periodic progress evaluation of the energy management program will keep everyone informed on improvements made toward goal objectives. This is also a great time to review the action plan itself and to identify any efficiency measures that should be modified or added.

An Energy Champion

The responsibility of an energy champion is to advocate energy efficiency throughout a school district and encourage co-workers to adopt 'efficient' practices in both the workplace and in their everyday lives.

Typical characteristics of an energy champion include:

- The ability to create, drive, and promote internal awareness campaigns.
- Be knowledgeable and up to date on the latest environmental policies and regulations.
- Demonstrating a willingness to challenge others on their behavior.
- Displaying a passion for the environment.
- Leading by example within the workplace.

School districts with dedicated energy champions experience more robust performances in the implementation of their energy management program and in the execution of their energy management plan.

Incentives

Incentives can also play an important role as part of the energy management plan. Incentives can vary from tax credits, rebates, savings programs, etc. In some districts, energy savings are given back to stakeholders to help pay for student activities, etc.

Reporting & Feedback

The reporting of energy consumption is one of the primary tools that can help evaluate the overall performance of the energy management plan. Accurate and consistent data collection is a necessity. There's an expression that "people who don't value energy efficiency keep forgetting the numbers."

Notwithstanding the importance of energy consumption, the need to provide stakeholders with regular feedback on the performance of the district's energy management program can prove just as critical. Our most successful organizations keep all their stakeholders well informed as a key component to the overall success of the energy programs execution. This goes back to the team approach discussed previously.

Energy Management

Sustaining an Energy Management Plan

Introduction

Historically, school district energy management programs have existed at the opposite extremes of sustainment. By far, failure to meet the provisions of a certified energy management program is the leading cause of school district non-certification for Preventive Maintenance and Facility Management. At the same time, the department regularly encounters school districts that have a laser-like focus on managing energy cost and consumption—districts that initiate and sustain these programs without any encouragement from external sources. With the possible exception of custodial programs—whose results are regularly on display for all to see and critique—energy management programs offer the most intrinsic value to districts, and increasingly one of the most immediate returns on investment.

This section examines this somewhat confounding dichotomy by uncovering the most common pitfalls to a sustainable program and offers a focused solution, though one with many layers.

Common Pitfalls

Personnel Changes

Measuring energy consumption at any one site/school doesn't take a team, rarely is more than one person involved. It is most often a one-person job. This makes the core element in an energy management program—measuring consumption—susceptible to failure when that person changes jobs or is otherwise out of commission for a period of time. Also, through fairly simple once procedures are learned, the exact process of measuring monthly consumption, especially for heating fuel, is not immediately intuitive. It's calculation often relies on having access to prior information. Passing on both the know-how and the data during personnel changes can be easily missed.

Program is Not Internalized

There is a strong correlation between districts that struggle sustaining a basic energy management program and those districts who have express the belief, either expressly or anecdotally, that they are collecting and recording energy consumption data for someone else other than the district itself. Most often the erroneous perspective is that they are doing it for DEED. This is evidence that the energy management program is not internalized. When the program becomes internalized, when it is clear that the knowledge and the data are useful to the district's operation and support of its education mission, the program become highly sustainable.

Lack of Clarity on Requirements

Sometimes districts miss achieving compliance in the energy management program by a very small margin. Ninety percent of the required elements are there but a small portion remain unattended—sometimes just one item. This often the result from misunderstanding the requirements set out in DEED regulations. The baseline is each building and all energy sources for that building. While simple in concept, this standard can be challenging in reality when multiple buildings are fed by a single energy source (e.g., a central boiler) or when there are energy utilities being consumed that don't have direct monetary allocation such as recovered

heat. In addition, unlike other certification criteria, an additional requirement was added in 2020 for a qualifying energy management program. Fortunately, the resolution to any lack of clarity is simple. Ask the Facilities staff at DEED.

Lack of Organizational Commitment

A fundamental aspect of an organization's energy management effectiveness is their commitment. While bottom-up support may influence executive management for a time as evidenced by demands for employee parking, break and office appointments, employee-driven calls for improved energy management are not effective. Managers approve employee perks often with an eye toward maintaining or increasing productivity. Energy management has no such recognized link.

To make executive management appreciate the importance of energy, its importance to the organization must be presented. In today's business world, no organization can function without adequate energy input. Improving energy management is crucial to increased profitability, decreased dependence on non-sustainable resources and reduced environmental impact. Too often energy is treated as a crisis problem that can be fixed and forgotten while core business issues require constant attention. This is unfortunate because energy management requires constant attention to be effective. Once energy is removed from a primary focus of attention, the organization will slip back into unsound management practices.

Insufficient Resources

Energy, as any other managed area, requires a commitment of resources to be effective. Resources are required to cover the cost of command and control (oversight) as well as the cost of energy management projects. In most organizations capital resources are reserved for core functions, and energy management is relegated to secondary status. This means that not only are there no funds for energy projects, but the resources to manage energy do not exist.

To effectively manage energy resources, its importance within the organization must be made visible and demonstrated by making energy a core value and delegating manpower, capital resources, and commitment.

Narrow Focus

In most cases the responsibility for energy management is centralized in a single functional area, such as engineering or maintenance. Employing a narrow focus limits the range of opportunities identified and fails to consider how an opportunity identified in one functional area may impact a different department. While the organization's technical expertise may exist primarily in one departmental area, energy opportunities are not limited to technological improvements and can include improved purchasing, operating practices, and maintenance. Widening the focus and participation in energy management will yield measurable improvement in the results.

Shifting Priorities

Effective management requires a sustained commitment to achieve measurable results. Too often, energy management is a passing fancy. When shortages occur or prices spike unexpectedly, energy becomes the crisis de jour and receives the full attention of the

organization. Then when market conditions change, energy management is once again relegated to a minor concern. Because energy is used every day, it must be managed every day.

Employing a crisis approach to energy, or any other organizational concern, produces no sustained improvement and often results in resentment as organizational priorities are constantly changed. Effective management of energy requires a stable, committed staff to provide command and control, collect and analyze energy data, and implement energy management projects. A firm commitment to energy management must be demonstrated by providing adequate resources, and following a carefully planned strategy.

Lack of Energy Data

When the authority for energy is spread across an organization no one is responsible for its management, and no one has accurate data regarding the consumption, cost, and organizational energy efficiency. To achieve proper management, data on usage, demand, utility rates, average price, marginal price, and energy consumption per unit of output must be available and used to influence organizational decisions. Someone in the organization must be assigned responsibility to collect, analyze and report energy cost, consumption and efficiency information.

Results Not Sustained

Sustaining the effort in energy management faces the same concerns as shifting priorities described above. Too often, energy problems are handled with a crisis approach. After the perceived crisis passes or is superseded by other concerns, the effort devoted to managing energy is removed and placed elsewhere. Sustaining energy management efforts and results can only be achieved by instituting a recognized, stable management that defines a structure for managing energy within the organization.

Sustainability Solution(s)

Previously, this document established two principles for sustaining any maintenance or facility management program: 1) by integrating it with other operational practices of the organization, and 2) by making it sufficiently "visible" so that its absence will be missed. These strategies are as powerful in the area of energy management as in any other of the five core practices.

Integration

There are great opportunities in an energy management program for an intersection with district operations both within the educational process and within the education support (i.e., school facilities, business management, etc.) area. The materials developed by the National Energy Education Development (NEED) Project are a great example of how an energy management program can be integrated into classroom instruction. When teachers and students in the classroom are depending on energy consumption data from the Facilities team or Energy Champion, program sustainability follows naturally.

As mentioned earlier in the *Implementing* section, offering incentives related to energy conservation have been used successfully to integrate the energy program into the life of the school—into the processes of daily operations at the school level.

Energy Management

NEED Project

" Since its founding over 40 years ago, NEED has kept its Kids Teaching Kids philosophy as a fundamental principle of NEED programming – encouraging students to explore, experiment, engage, and encouraging teachers to embrace student leadership in the classroom. NEED trains and assists teachers in harnessing the energy of the classroom – the energy of students. "

National Energy Education Development

https://www.need.org/about-need/.

Visibility

The idea behind making the energy program widely visible is that it will enlarge the audience and thereby build both anticipation and expectation of energy information in a larger group. Here are some suggestions for increasing visibility:

- Post consumption and cost data on a school's web page using comparative charts.
- On wall space in a corridor, commons, or gymnasium, post a large chart that can be updated each month by a student group showing consumption data.
- Include energy performance data and metrics in scheduled site-council/advisory-council meetings at the school level.
- Pair schools within the district, or find a school outside of the district, and share energy consumption and costs data comparing the two locations; make it enjoyably competitive if that seems helpful.
- Include energy consumption and performance metrics in Facilities 'dashboard' at the Superintendent level.
- Include such metrics in regular presentations to the school board.

Custodial Program

Developing a Custodial Program

Introduction

Department regulations for custodial programs require:

> *(3) a custodial program that includes a schedule of custodial activities for each building based on type of work and scope of effort;*

This baseline requirement—a schedule of custodial tasks for each building based on the type of work needed (i.e., the activity needed for each surface or equipment item) and the level of effort (i.e., the frequency of care for each type of work)—represents a significant planning effort. School district custodial program managers may be able to develop this level of custodial plan on an ad-hoc basis with rules of thumb and the knowledge of experienced custodians. This is especially true for small facilities with a minimal range of surfaces and appurtenances. However, as school facility complexity increases, custodial plans, like maintenance programs, are best built from a component-based inventory.

The most common deficiency noted during the department's certification process is that custodial programs are not building-specific but rather are a one-size-fits-all program written for the entire school district. This does not meet minimum criteria. While there is no question that a well-developed custodial program should include districtwide information (e.g., goals, standards, master schedules, organizational structure, staffing, etc.), the specific schedule of custodial activities is unique to each building.

The schedule of custodial activities is just the beginning of the planning needed to develop a complete and effective custodial program. Other planning factors include: expectations/goals, staffing, procedures, equipment, safety, and supplies.

Leadership

The custodial program is a tool, unique to each school district, customized to individual school facilities, designed to guide custodial personnel in the execution of their work. ***"The first step toward establishing an effective custodial program is to determine the district's expectations of its custodial services. This requires input from both the school board (who ultimately will fund the program) and the building administration (who will live with the results of the program)."***[15] This is often developed as a vision statement. If this vision is absent, it falls to the Facility Manager to elicit it in order to make proper plans. Often, suitable statements from which to plan can be found in board policy.

[15] NCES/ALASBO. *Planning Guide for Maintaining School Facilities*, 2003, p.82

Sample Vision Statement

"It is our vision to provide the highest level of customer service satisfaction of any school district in Alaska by being innovative, flexible, and competitive with a can-do attitude."

One common, and helpful, step in establishing and communicating a vision is to provide a mission statement. These two elements, vision and mission, can serve as the basis of a custodial plan or program. The mission statement should be supported by goals and objectives. It is imperative that custodial program staff know what is expected of them. For example, will custodians do light maintenance? To whom do custodians report? Are custodians responsible for event set-up such as equipment and furniture?

Sample Mission Statement

"The mission of the XYZ School District Custodial Team is to provide an attractive, healthy, and safe, working and learning environment to facilitate greatness in our staff and students."

Custodial Activities

"Within school districts, custodial operations should reflect the needs of individual facility types, i.e., elementary schools, middle schools, high schools, technical schools, and ancillary buildings. Each type of facility requires a number of basic custodial services in support of the educational process; however, the requirements for middle and secondary/technical schools may be greatly expanded due to their size, complexity, and use patterns."[16]

As mentioned in the introduction, the most complete custodial plan is based on a component inventory, a quantification of building elements and equipment requiring custodial services. In order to streamline this effort, a good place to begin is with a list of custodial tasks. These can be developed from industry guidelines, samples from other school districts, or internal documents such as custodial job descriptions or existing checklists. Consider the following as a sample list which, on the left, covers a variety of custodial tasks pertinent to the common areas in a school:

[16] Florida Department of Education. *Maintenance and Operations Administrative Guidelines for School Districts and Community Colleges*, 2010, pg 49.

Sample Custodial Tasks	*Inventory Building Element*
Sweep/clean exterior walkways to 10ft from entries/exits	*Quantity of exterior walkways*
Vacuum entries/exits and/or wet-mop entries/exits	*Type/quantity of entry flooring*
Clean glazing (doors & sidelites) at all entry/exits, inside and out	*Quantity of glass at entries; height of glass at entries*
Vacuum all carpeted corridors	*Quantity of carpet in corridors*
Dry mop all hard surface corridors	*Quantity of hard surface in corridors*
Wet mop all hard surface corridors	*Quantity of hard surface in corridors*
Extract soiled areas on carpets	*N/A; as needed*
Remove stains and marks from hard surface floors	*N/A; as needed*
Clean all drinking fountains	*Quantity of drinking fountains*
Clean glazing at interior windows, window walls, displays	*Quantity of interior glazing*
Dust all equipment, sills, trims and hard surface furnishings	*Density of dusting surfaces per SF*

On the right side of the table are the associated building elements that would need to be inventoried in order to develop a custodial schedule for the building that was based on the type and frequency of custodial activity. An added benefit of having this component and quantity-based inventory is the ability to use industry standards to develop staffing requirements. For example, if the inventory of glass in the facility totaled 350sf, and that amount needed daily cleaning, an industry standard of 525sf/hour would yield 40 minutes of direct cleaning time for that activity. The combination of all tasks would provide data for determining custodial FTEs (full time equivalent) needed for the facility.

In developing custodial activities, don't forget the plethora of non-cleaning related duties. These might include: recycling, snow removal, events and set-ups, re-lamping, pest control, mail pickup/delivery, supplies inventory/stocking, directing visitors, record keeping, and training.

Standard of Cleanliness

When developing the custodial program based on custodial activities—and especially when developing time-based standards for the activity—the standard of cleanliness must be considered. In other words, how clean is clean? The Association of Physical Plant Administrators (APPA) has developed a widely recognized, and adopted, standard consisting of 5 levels, each with descriptive narratives. Under this standard, the target for most school spaces would be Level II "Ordinary Tidiness". A number of other industry and trade associations also have cleanliness standards that can be adopted and/or modified. Once adopted, these should be integrated into custodial program documents and schedules.

Procedures. Cleaning procedures by function (e.g., empty waste receptacle, clean chalkboard, etc.), to include scheduling (e.g., daily, weekly, etc.) in each area of the building. This description is usually relatively broad and should include location, task at hand, and frequency for all areas of the building:

Methods and procedures. This depiction should give ample details on how to get the job done effectively. For instance, marker boards may require a specific solution to clean their surfaces; mirrors may require a specific cloth. The instructions should also warn personnel as to what not to do, such as using a particular solution on a specific surface. Gymnasium floors and countertops have been ruined while using the wrong cleaning agents. The following subjects should be covered at length in the custodial program:

Safety

Personnel Safety. Custodial personnel are exposed to a variety of health hazards such as chemicals, blood-borne pathogens, toxic substances, electrical shocks, trip and falls, etc. It is important that these employees be informed and trained on how to protect themselves and to conduct their work in the safest possible environment. The custodial program should include:

- when / how to use Personal Protective Equipment (PPE);
- how to deal with Hazardous Materials (HazMat) including Sharps and bio waste; and
- awareness of location and use of Material Safety Data Sheet (MSDS) and the "Right to Know."

Equipment Needs

Care of cleaning equipment and use. The cleaning equipment must be stowed, maintained and operated properly. Custodial personnel should be well-versed and familiar on how to care for all of their equipment, including:

- buffers;
- personnel lifts;
- ladders;
- carts;
- mop buckets and presses;
- dust mops;
- wet mops;
- push brooms and corn brooms;
- vacuum cleaners;
- carpet extractors, etc.

Products

Selection and listing of school district prescribed cleaners. The list should be inclusive of all cleaners, as well as a brief description on use (e.g., spray cleaner; shower foam, etc.) and methodology (e.g., daily, on most hard surface; per manufacturer's instructions, etc.). The following are examples that could be included in the custodial program:

- all-purpose cleaner
- all-purpose degreaser
- glass cleaner;
- disinfectant;
- absorbing deodorant;

- scale and lime remover;
- mar and spray paint remover;
- gum remover aerosol;
- shower descaler;
- stainless steel cleaner;
- septic enzymes, etc.

As in the case for the Preventive Maintenance program, the custodial program will be utilized by custodial individuals with various educational backgrounds. The best means to ensure effective communication is to keep the language simple and direct. If custodial personnel do not read English, the program should be translated in order to achieve proper results.

A good custodial program should also include random inspections. A list of *Standard for Clean Classroom* can be found in Appendix G. By using the standard, strong points and weaknesses can be identified, giving custodians an appraisal of what is getting done properly, and what needs to be improved upon.

Another important tool for the developing the custodial program is the *Master Custodial Schedule* (see Appendix E). There are generally three elements considered when developing master custodial schedules: 1) service or task, 2) frequency, and 3) space use/type or location. In some master schedules, service/task and use/location are blended to help reduce duplication. Frequency of care, the element normally in the most prominent position in the schedule, is the backbone of the schedule. The most commonly used frequencies are: daily, weekly, monthly, annually, and as-needed. However, some plans may add the additional frequencies of: nightly (if a day/night operation is used), semi-weekly, quarterly, semi-annually. Selecting appropriate frequencies is a balance of simplicity and effectiveness and should be indexed to the program's adopted Standard of Cleanliness. The format or organization of any particular custodial master schedule focuses on one of the three elements discussed previously. One focused on frequency will generally list daily tasks, followed by weekly tasks, then monthly, and so on. Types of tasks (e.g., vacuuming, or restocking) and space/locations (e.g., gymnasium, restroom) will be listed adjacent to each other as long as their frequency is the same. These are often presented as a matrix. A schedule focused on use/location will organize the schedule by areas or room types and list all the necessary tasks for that area and state the frequency as a suffix to each task. These types of schedules are most often presented in a 'paragraph' style. A third type focuses on stating the essential tasks one time and then aligning those tasks to the applicable use/location in a matrix. In this last type, frequency is presented with symbols which are defined in a legend. All three structures have their positives and negatives. The sample *Master Custodial Schedule* (Appendix E) uses the space-use/location focus. The complete *Master Custodial Schedule* tool is also available on the department's Facilities web page as a spreadsheet file.

A customized schedule, one edited to include the specific needs of the facility, should be developed from the master custodial schedule. Once developed, it should be displayed in each custodian's workplace. This, and other ideas are more fully developed in the following section, **Implementing a Custodial Program**.

Implementing a Custodial Program

Introduction

At this point, the school board has *developed* a custodial management program based on policy, cleaning standards, and equipment; staffing requirements have been established—now what? The responsibility that follows is to *implement* the custodial management program. Implementation of a custodial program requires gathering and deploying resources you have identified in the planning stage. This section offers guidance on carrying out the developed custodial management plan and establishes the importance of resourcing the plan with knowledge, funds, staffing, and equipment; and, finally, executing an action plan.

Resourcing the Plan

In multiple years of assessing school district custodial management programs, the department has found that the resources needed are often challenging to come by. The human factor is to account primarily as the most difficult of these challenges. Finding qualified individuals to work in the K-12 environment presents a formidable recruiting contest where security background checks routinely eliminate numerous applicants from the get-go—most often rightly so. In some instances, low pay along with marginal or no benefits discourages certain prospects from turning in their applications.

Knowledge

The basic knowledge required to adequately execute custodial work in our institutional settings has taken many by surprise. The custodial work involved while taking care of students attending our schools requires adaptability, good communication skill, attention to detail, ability to do repetitious work, reliability, dependability, trustworthiness, willingness to serve others, be problem solvers, etc. Custodial work in our schools is specialty work that requires both skills and abilities that differ from custodial work in residential or lodging settings, for instance. Most custodians can quickly acquire the basic knowledge to do their work in our schools; but an open mind and a willingness to acquire new skills that will match what is expected of their work is necessary so that custodial program objectives can be met.

Funds

A key element that must be brought to the implementation step is funding. Primarily, this will be tied to securing the necessary knowledge and personnel required to execute the program, and to manage its daily, weekly, monthly, and annual cycles. This also implies the need to determine how long any given task takes so that funds can be budgeted to get the required work done; furthermore, annual appropriations must be included for other expenditures such as for materials and equipment purchases / maintenance.

Staffing

As discussed above, labor hours are needed to implement a custodial program and, indubitably, labor hours equal personnel. When implementing a custodial program, there is a need to identify and assign needed tasks to appropriate personnel. This implies identifying each task and to whom each of those tasks get delegated to. This is a vital element of the custodial plan. Unfortunately, when allowed, in some of our schools, custodians are taken away from their main

custodial duties to routinely perform work outside of their assigned line of work (e.g. running various errands, picking up mail, watching over students, etc.). The long-term effect of this practice is usually negligence of custodial care because there isn't sufficient time to accomplish all of what is being asked of each custodian. This ends up making things confusing for custodians and can affect the custodial team's overall effectiveness.

Custodians must be given the same respect as all school professionals and paraprofessionals and be granted the ability to do their work as prescribed in the custodial program. Unless specific time is set aside in the custodial plan for custodians to perform non custodial-related duties, these employees should be given the opportunity to do their work as planned.

Equipment

Custodial equipment selection begins with cleaning needs. The school environment has specialized areas (e.g. kindergarten classroom, nurse's station, cafeteria, etc.) that require the selection of suitable equipment, whether it be cleaning carpets, tiles, concrete walls, porcelain surfaces, etc. Some of the equipment will require manual operation while other will require mechanical use (e.g. floor scrubbers, washers, etc.). Both types will require ongoing maintenance and eventual replacement. Factors to consider while selecting the equipment includes:

- Suitability for job conditions: the equipment must meet the requirement of the work and working conditions.
- Size of equipment: individual equipment selection should be such that it must be able to be used with other matching units. If the equipment selected is of larger size, that will remain idle for most of the time or shall work on part loads, which means production cost will be more. On other hand, if equipment is of smaller size than desired, the equipment will not be able to work with the matching equipment and hence other equipment will have to remain idle or to be allowed to work on part loads, which shall again be uneconomic.
- Past performance: if the equipment being purchased is of new make and models, it is desirable to enquire about its performance from other users who are using this make and models.
- Operating requirements: the equipment selected should be easy to operate and maintain, acceptable to the operator and should have lesser energy consumption.
- Reliability of equipment: equipment selected must be reliable.
- Economical aspects: while selecting the equipment, it should be considered that cost of unit production should be minimum.
- Service support: should be available in the area where the equipment shall be used. Service after sales are major criteria for selection of equipment.
- Availability of know-how: the equipment selected should be satisfactorily handled by available custodians. Sophisticated equipment may give excellent performance, but it may be difficult to handle and maintain.
- Multipurpose equipment (versatility): there are certain types of equipment which are not utilized fully. Therefore, whenever possible, selected equipment must be capable of performing more than one function.

- Standardization: it is better to have same type and size of equipment. This means lesser spare parts reserve; more interchangeability of parts if required; it makes it easier for the operators to understand how the equipment functions; and local mechanics will be more proficient maintaining and repairing similar type of equipment.
- Availability of spare parts: while selecting a particular type or make of equipment, it should be ensured that the spare parts will be available at reasonable price throughout the working life of the equipment. It should also be ensured that the downtime of the equipment for want for spare parts may not affect long-term performance of the equipment.
- Availability of equipment: the equipment which is easily available in the market should be purchased. It should also be ensured that the equipment is of repute and is likely to be continued to be manufactured in future. This is necessary for future standardization and ensuring spare parts supply.

The equipment list should be inclusive of all that is required to address cleaning needs for each facility. The following are examples that could be included in the custodial program:

- vacuum cleaner, with attachments for hard surfaces and carpet
- bucket or container to carry supplies
- mop and bucket
- auto-scrubber
- scrubber dryers
- duster (both long and short)
- dustpan and broom
- floor sweepers
- paper towels
- microfiber cloths (have separate, color-coded ones for the kitchen and bathroom)
- glass cleaning cloths
- protective rubber gloves
- cleaning brushes
- disinfectant wipes (perfect for bathroom and kitchen surfaces)
- shoe covers (to keep floors clean)
- spray bottle
- pressure washer

Executing the Plan

The development of the custodial program will inform the elements of the action plan. The creation of an action plan is a necessary tool which will act as a blueprint to guide and monitor the systematic approach to improved school health and cleanliness. The action plan needs to focus on the scope and scale of goals, targets, roles, and resources. To promote success, the plan should be accepted by all areas of the facility that it addresses.

At this point in time, the next step is to implement the action plan. This step begins by raising awareness, building capacity, motivating staff, and tracking and monitoring progress. Continual feedback on successes achieved can help motivate stakeholders to continually improve.

Constructive feedback to the custodial workforce may consist of a simple gesture such as publicly acknowledging the organizational support orchestrated by custodians in getting the local gymnasium ready for community events such as during sport tournaments, fund raising events, weddings, funerals, etc. These events add a tremendous workload to custodial efforts such as moving equipment, setting up tables, isolating portions of the school, coordinating work with various parties, going to work early, staying up late, checking on security, being constantly attentive to the organizers' needs, etc. Other examples can be seen in custodians' workspaces where students have given thank you notes or drawings, or where students issued an award certificate through their student council in recognition for the great work and support demonstrated by a noteworthy custodian.

Reporting & Feedback

The implementation of a formal custodial performance feedback loop is one of the primary tools to help evaluate the overall performance of the custodial program. Include a variety of stakeholders to gather this input and strive to make it objective, non-personal, and non-threatening.

Numerous custodial performance evaluation review forms are available online. The main premise is to give program administrators knowledge of their custodial personnel work performance. The evaluative framework usually includes basic elements such as:

- job knowledge
- quality of work
- quantity of work
- adaptability
- working relations
- initiative and innovation
- dependability
- attendance / punctuality
- care of equipment
- communication skills
- human relation skills
- use of proper cleaning techniques
- observation skills
- personal appearance
- health and energy
- ability to climb and work at heights
- performance appraisal profile
- overall appraisal
- employee being properly placed within the organization
- recommendations / suggestions

The employee evaluations should afford a way to benefit both the employee and the organization. Custodians are responsible to keep schools clean and safe, and to keep school grounds attractive while playing a pivotal role in the learning environment.

Sustaining a Custodial Program

Introduction

Previously, this document established two principles for sustaining any maintenance or facility management program: 1) by integrating it with other operational practices of the organization, and 2) by making it sufficiently "visible" so that its absence will be missed. Nowhere do these elements come so naturally to the forefront as in the area of custodial care. The year 2020 will likely be a benchmark for years to come on the integration of custodial programs into the core mission of schools. The heightened awareness of custodial protocols on occupant safety in the midst of the Covid-19 pandemic brought the facility professional responsible for this area to a seat at the leadership team table. So ingrained was a district's custodial program into school operations that schools literally could not open without an effective care and cleaning protocol against the virus that caused Covid-19. With regard to visibility, the custodial program has always enjoyed the benefit of front-and-center awareness of all school users—whether students, staff, or the public. While these users may routinely bypass great custodial care without a thought or reaction, not so where that care is lacking. Unlike other facility programs, the custodial program is always on display; it's absence is nearly impossible to miss. This ensures a measure of sustainability.

Performance Metrics

What are some of the elements that can be used to evaluate custodial effectiveness?

- Employee turnover. This will determine your effectiveness at recruiting and retaining custodians. Custodial employee turnover is unavoidable, but retaining employees can greatly reduce the cost of hiring, while keeping employee morale at satisfactory levels.
- Safety. Are custodians performing their work safely? What is the number of near misses? Number of lost workdays due to work-related incidents? It is helpful to have a record of safety numbers during different school years so you can objectively determine whether problems exist.
- Financial effectiveness. Compare budgetary expenses (labor, equipment cost, consumable costs) to overall cost of cleaning (i.e. cost per cleanable square foot). Knowing these numbers can help you better streamline and standardize cleaning processes, tools, and frequencies.

Evaluations, Inspections, & Education

A periodic progress evaluation of the custodial program will help keep everyone informed on improvements made toward goal objectives. This is also a great time to review the action plan itself and to identify any efficiency measures that should be modified or added.

Maintenance Training

Developing a Maintenance and Custodial Training Program

Introduction

Department regulations for maintenance training require:

> *(4) a maintenance training program that specifies training for custodial and maintenance staff and records training received by each person;*

The intention of statute and regulation is that there should be a program of continuous training for maintenance personnel, custodians, and their managers as part of ensuring maintained state financed facilities. Training in facility systems and operations assist a facility in reaching its expected life and insures the continued effectiveness of an educational facility as designed. This maintenance training is separate from the training mandated and provided by a school district's human resources (HR) department. It is specific to facility maintenance and custodial operations. The previously mentioned HR training is important; however, it is not a substitute for mandated training under these statutes and regulations.

Definition: Custodian

" one that guards and protects or maintains "

There are two common problems found when evaluating districts maintenance training programs. The first is that there are many cases of no planning being done. This is usually due to not establishing a training plan with set dates and schedules to perform training. Without a plan, training is forgotten or put off until another time. The second issue is that increased HR training has begun to encroach on maintenance training. Even when there is a scheduled day, or days, of training, the non-maintenance training utilizes this time due to its convenience.

A good training program, as part of an efficient maintenance program, interacts with all other aspects of the program: maintenance management, energy management, custodial, and capital planning. No part of a preventive maintenance program operates in a vacuum. Good custodial is actually one part of a balanced maintenance program and it will be included under the term "maintenance training" in this section.

Planning

The first thing to contemplate when developing a maintenance training program is, what is being maintained? This is where coordination with maintenance management and capital planning is important. Start with a list of school district facilities and assets, including O&M manuals and scheduled preventive maintenance items. Once the list is compiled of equipment, finishes, and other assets that school district personnel need training on, a school district can begin to plan. Training should include initial new hire training, training on new equipment and finishes, periodic re-training, and training review. Also, an essential part of a training program is recording who was trained and on what subject the training was on. Efficient training records list all types of training over the year and the personnel who attended each one, and separately list each individual and each of the training that person received. One convenient way of recording this is through the maintenance management work order system.

HELPFUL HINT

Standardize to reduce training and inventory costs

Working with capital planning and maintenance to develop school district standards for materials and components will simplify operations, minimize variation of inventory parts, and reduce the makes and models of equipment needing training.

Having "training" as an available work order sub-group makes sorting efficient. Assigning a work order to each individual attending a training session and having those individuals code their time to that work order allows easy sorting by training or by individual. This method also captures hours and costs of training. This is not the only method of recording. There are other personnel management programs available for recording training. Just make sure that it shows facility-mandated training versus HR training. A paper record is not recommended, as this is less useful for long-term tracking of personnel training.

Implementing a Maintenance and Custodial Training Program

Introduction

Once maintenance and O&M requirements have been established, a school district can decide what and how much training is required and set in place its training program. Some things to consider are identifying fundamental training elements for new employees, and what items may require annual training versus every few years. Formulate how training will be conducted, as well as when, where, and by whom. See below for some factors to consider as you develop your program.

New Hires

After basic orientation of the duties expected of the assigned position, additional training should be planned depending on the position or craft.

Custodians

If custodians in the school district are only responsible for cleaning, a more accurate job title would be janitor, and initial training in cleaning products, procedures and cleanliness standards would be all that is needed.. However, custodians are the first level of eyes-on for the maintenance program. They need to be trained on inspections and observations and how to initiate a work order based on any conditions requiring maintenance. If they are expected to perform some light maintenance, closer to the definition of a custodian, then additional training should be provided. For some school districts the additional training is performed by maintenance mechanics. A work order is initiated with a new hire for training in mechanical, electrical, or other trade. The assigned mechanic performs the training (e.g. filter changing, flushometers, etc.) and the time is recorded.

Maintenance Technicians

Facilities maintenance will be very new for many maintenance technicians, even for those that have achieved journeyman status in a building trade. While many of these technicians have a background in construction, performing repairs in a facility environment is not the same. Add in the complexity of being in an educational facility with administration, teachers, and students, and it can be a lot to adjust to. Initial training should include how to operate the work order system (including asset numbering) and procedures for working in a school. A very successful method many school districts use for this training is to have new people initially assigned to the preventive maintenance team. The extent of time varies from one complete cycle of preventive maintenance to a set time like six months. This orients the person to all facilities and locations of components, operations in an active educational facility, and how to perform work orders, close work orders, and create new work orders.

Continuous Training

After maintenance management has assembled the list of maintenance training needs, decide if an item requires annual, semi-annual, or periodic training. Setting a schedule for the training that avoids interfering with normal maintenance duties will help learning. One method is to have an annual in-service for employees just prior to a new school year. Depending on the size of a

school district, a strategy can be to have two days with half of the personnel on each day. This helps to keep the numbers manageable and maintains a maintenance personnel presence in the facilities. This becomes a good time for many training sessions with some hands-on training. Balance quantity of training with quality and avoid over-load. If an in-service is not possible or desired, the school district will need to arrange for the proper training either by going to each facility or having some version of a distributed gathering.

HELPFUL HINT

Train the Trainers

Example:
Custodians are tasked with replacing flushometers on the toilets. Have a maintenance technician train the lead custodian for a facility. When he is competent, have that person train the other custodians in the school under the technician's supervision. This will insure work is able to be performed onsite and the lead custodian has better retention of the skill. This will save time and money by not having a centrally based technician travelling to the facility.

Periodic Training

At times, a training need becomes apparent that is outside of normally scheduled training. This could be from the maintenance supervisor(s) seeing repetition of work orders for the same issue or periodic inspections by preventive maintenance staff or building personnel of conditions that need to be addressed. The training program should have built in allowances for investigating issues and arranging for appropriate training.

Opportunity Training

Shadowing a contracted maintenance technician or craftsman can provide another training opportunity for school district maintenance personnel. These visits may occur during regular inspections or as a result of a failed component.

Sustaining a Maintenance and Custodial Training Program

Introduction

As time passes, finishes and assets are replaced. A good training program must be agile -- ready for changes and to develop or update training as required. One way to stay ahead of the curve is to maintain contact with capital planning. As facilities are being planned for construction or renovation, be prepared to discuss specific items in the plan and what training each may require. Identify whether the items are part of the school district's standards and can be included as part of the normal training plan.

As part of project planning, ensure that adequate factory training is included in the project. This should be true factory-level training and not just an orientation showing where it is and how it works. Training should include all facets of maintenance including a list of recommended parts to keep on hand. For items like building automation and fire alarm systems, training should be full maintenance and programing to the level of a certified technician. This project-specific training is required if the project is funded or reimbursed through AS 14.11 state aid. Training requirements should be incorporated in the project's bid documents. Take this training as a time to refresh your long-term staff and as new training for recently added staff.

HELPFUL HINT

Let technology and the force make training easier and less expensive

Use videos from **YouTube** to assist in training. Many manufacturers and some individuals have posted videos of maintenance procedures. Keep a library, or create a playlist, for training and refresher courses.

Use **mobile video chat** program apps to use smartphones or tablets to communicate when performing maintenance.

Use the school's **distance learning assets** for training across the district when face-to-face is not required.

Part of sustaining a training program is to set a schedule for training that works into the foreseeable future. Review individual training histories and be ready to incorporate training that may be missing. A good time for this is during personnel annual reviews. Review any new items that will require a change in training.

A school district training plan should contain or perform the following:

- A written training plan that has training for new staff, annual training, and how the need for periodic training is addressed;
- Produce at any time the scheduled maintenance training for the next year;
- Produce and review an individual's training history;

- Produce and review the prior year's training activity and attendance; and
- An efficient program can track training on the maintenance work order system in order to track training costs and individual training time.

Capital Planning

Developing a Capital Planning Program

Introduction

Department regulations for capital planning require:

> *(5) a renewal and replacement schedule that, for each school facility of permanent construction over 1,000 gross square feet, identifies the construction cost of major building systems, including electrical, mechanical, structural and other components; evaluates and establishes the life-expectancy of those systems; compares life-expectancy to the age and condition of the systems; and uses the data to forecast a renewal and replacement year and cost for each system.*

Of the five maintenance and facility management criteria outlined in regulation, the capital planning requirement is the longest; it uses the most words. In practice, however, it's been demonstrated that a single, relatively simple spreadsheet—for each facility—can accomplish all of the required elements. Most districts utilize the department-developed Renewal and Replacement Schedule spreadsheet file to document their capital planning efforts. Many districts, especially those being served by the Southeast Regional Resource Center (SERRC), have added functions to the department's basic tool. Two of those include: multiple linked worksheets to account for different ages and renewal cycles, and data updates following the completion of capital projects. That said, capital planning is so much more than simply managing renewal and replacement spreadsheets.

The most common deficiency in capital planning seen by the department during its site assessments is its lack of use. The required data can be produced but there is a starkly apparent lack of its relevance to district processes. While there is evidence that every district is doing some amount of capital renewal, little of it springs from, or is even related to, a cohesive plan. The impact of available capital planning data on district six-year CIP plans is noticeably absent. Moving from data to a program, from develop to implement is a challenge for districts of every size. Exacerbating the issue is the value question, "What good does it do?" When there are economic issues that limit resources for capital renewal and deferred maintenance, it's not uncommon to develop the attitude that capital planning is efforts are wasted. This can prove to be shortsighted if and when funding becomes available and districts find themselves not in position for available funding. Even in times of lean funding, a capital renewal plan with prioritized needs based on data and metrics from a robust capital planning program can be of great value to building owners.

Planning

A school district cannot efficiently maintain their facilities through capital planning alone, nor can a school district manage and maintain their facilities properly without capital planning. Capital planning is, as the name implies, planning for future capital needs. But, in order to plan for those needs, the owner needs to identify the capital components, establish an expected life-span of the components, track repairs and maintenance performed during the life of the components, establish protocols for condition assessment of components, modify the life

expectancy based on condition, and plan for the eventual replacement or rehabilitation of the component.

The first step in establishing a capital planning program is to identify what items the school district intends to include in its plan. Statute indicates electrical, mechanical, structural, and other components of facilities owned or operated by the school district; in other words, the physical buildings and grounds. This is the minimum to satisfy state statute, but a program that properly serves the school district should also include items like vehicles, grounds equipment, and other capitalized equipment. The planning part of the process is the most important part of establishing a capital planning program and needs to be thorough in the items to include. Under "grounds", is playground equipment included by components: play structures, swings, free standing slides, etc.? Should it also include paving and other hard surfaces? In mechanical, boilers and fans are obvious items, but consider pumps, variable air volume (VAV) boxes, day tanks, expansion tanks, etc. As a school district begins planning, it needs to establish the criteria of what is, and what is not a capital component.

The next step in establishing the program is uniquely identifying a component from others in order to track its condition and work already performed. The identifying asset number for a particular object should be assigned in the maintenance management program. Some parts of the identifying number and the record keeping of the item should be able to include and sort by the following items that are important to capital planning:

1. Location (facility, room, etc.);
2. Date placed in service;
3. Make, model;
4. Life expectancy, date of replacement, and date of review;
5. Estimated cost of replacement;
6. All work orders including repairs, PM inspections. Include descriptions and costs; and
7. Date removed from service and identifier of replacement.

There is much more information that a good maintenance program should have available, but these elements are critical for effective capital planning. The first is obvious, recording what school a component is associated with, additionally, identifying a specific room is helpful to physically locate the component; sorting by school also assists in evaluating capital needs by facility. Date in service and a component's make and model helps to establish expected life and when a school district can anticipate future needs. Date of review is when school district personnel begin to review the history of repairs and preventive maintenance inspections to possibly adjust the date of replacement. The date of replacement shows that it is no longer in service and including the new component identifier tracks what replaced the item.

Implementing a Capital Planning Program

Introduction

Capital planning does not happen in a vacuum. The identification and scheduling of maintenance is performed through maintenance management. If it can have an effect on energy efficiency, then tracking performance is important. Many items involve custodial operations -- from being the on-site eyes to possibly changing filters or general cleaning. And finally, the proper training on maintaining the component has a large impact on whether the component meets, or possibly exceeds, the expected life. Below are steps and discussion on how to plan a school district's capital planning program, how to implement it, and how to sustain it into the future.

Once all of the capital components and equipment have been identified, tagged, and put into the maintenance management program, the day-to-day (or year-to-year) part begins. As the components start to reach their expected life, capital planning begins to review the records of repairs and inspections and makes adjustments to the replacement schedule. An example of the flow of information and decision making is as follows:

Boiler 001 at school ABC was installed with the construction of the school in 1990. Part of its O&M information is that it is expected to be replaced at 30 years and reviews to begin at 25 years. In 2015, the maintenance program puts the boiler on the review list and capital planning begins review. As part of the review, capital planning reviews the scheduled inspections performed twice a year and the scheduled cleaning, maintenance, and tuning performed once a year. Also reviewed are all repair work orders for scope of repairs, frequency, and costs. The boiler condition is discussed with the boiler technician(s) and maintenance manager. After discussion, it is decided whether the replacement should be done sooner, at the scheduled date, or if the boiler is in a condition that its useful life can be extended. At the same time the cost of replacement is adjusted to reflect the current cost of replacement. Review is performed again at 27 years.

If an asset is not performing well and does not appear to be able to meet its expected life, the technicians doing repairs and inspections can request an earlier review of the asset. The process of review starts and, if needed, a new replacement date is assigned and planned for.

After all scheduled reviews are performed, a report is produced for each facility that shows replacement needs for the next six years and the expected costs. The person(s) deciding on the final six-year capital improvement plan review the replacement report and put together projects for the plan that may combine related items or stand alone as a single project. In the example above, all three boilers are scheduled for replacement and one project is put forward for boiler replacements; it may include other equipment reaching replacement age, like pumps, expansion tanks, etc.

Sustaining a Capital Planning Program

Introduction

As a school district's capital planning program matures, there will be upgrades, component replacements, new facilities, and maybe facilities being removed from the school district. Planning the process of managing the data for these instances will help to smoothly update the system. One challenge is when an asset is transferred from one facility to another. This is usually capitalized equipment that can be easily moved like vehicles, grounds equipment, or educational equipment such as smartboards. Scheduled PM inspections should catch that the equipment is not where it should be per the asset record. Once the asset is located, it can be reassigned in the record or returned.

Another situation is where an asset has reached its end of useful life and is not of a value to be considered a capital improvement project. An example would be a replacement of a heat circulation pump with a value of a few thousand dollars plus labor. When writing a work order for replacement, either to be performed in-house or by contractor, it is best to assign the new asset number in the work order and order both the pump and asset tag. When the work is complete, the out-of-service date is registered with the old asset and a placed-in-service date is registered to the new asset. The O&M manuals can be electronically made part of the new asset's file and the preventive maintenance schedule can be initiated.

HELPFUL HINT

Involve consultants in the asset replacement strategy

During design, identify assets being replaced and assign the new asset numbers and include them in the equipment schedules. Example:

BOILERS

ID	Old Asset Number	New Asset Number	Manufacturer/Model	In-Service
B-1	03MC02OB01	03MC02OB03	Weil-Mclain Model 886	06/02/1990
B-2	03MC02OB02	03MC02OB04	Weil-Mclain Model 886	08/21/2018

This shows that the asset being retired is identified and the new asset number is assigned. For new construction, only the new asset number is shown.

When a large project replaces many assets, it is best to start early in planning and design stages to coordinate asset replacement strategies. At this point involving the consultants, the maintenance management, and capital planning will make the process smoother. Capital planning and the consultants identify which assets are being replaced and maintenance management assigns the new asset numbers and prepares the old assets for retirement in the system. As the project begins, the contractor submits documents on the proposed replacement/new assets. During submittal review, if the submittal is approved, maintenance management inputs data on make/model, preventive maintenance schedule, maintenance parts, and expected life from the submittal documentation. When O&M manuals are provided electronically, the manuals can be attached to the asset file in the CMMS.

Capital Planning

Capital asset management is not a stand-alone operation. It takes coordination with maintenance management, maintenance technicians, maintenance mangers, and the committee that creates and reviews capital improvements.

Appendices

Appendix A

Sample Systems and Components Inventory List

The below listing aligns with the building system and component structure utilized in the department's *Guide for School Facility Condition Surveys*.

Vehicular Surfaces
- Parking lots
- Roads/drives
- Curbs/gutters
- Signage

Pedestrian Surfaces
- Walkways
- Plazas
- Boardwalks

Elevated Decks, Stairs & Ramps
- Elevated Boardwalks
- Elevated Playdecks
- Stairs/railings
- Ramps

Site Walls
- Retaining walls
- Decorative walls

Landscaping & Irrigation
- Turf/Lawn
- Planting/Beds
- Mulch
- Boulders
- Irrigation and controls

Fencing and Gates
- Posts
- Fencing
- Gates
- Vehicle Gates
- Bollards/Staples

Site Furnishings & Equipment
- Benches/tables
- Signs
- Flagpoles
- Planters
- Waste receptacles
- Bike racks

Playgrounds & Playfields
- Playgrounds
- Sports fields
- Hard surface courts
- Ice Rinks
- Playdecks
- Play structures
- Fall protection
- Markings/paintings

Other Site Improvements
- Sledding hills
- Snowmelt systems
- Water features

Freestanding Shelters
- Foundations
- Superstructure
- Enclosure
- Electrical components

Attached Shelters
- Foundations
- Superstructure
- Enclosure
- Electrical components

Support Buildings
- Foundations
- Superstructure
- Enclosure
- Mechanical components
- Electrical components

Appendix A - Sample Systems and Components Inventory List

Water System
- Wells
- Tanks
- Pumps
- Piping/valves
- Treatment system

Sanitary Sewer
- Tanks
- Lift Stations/pumps
- Piping/valves
- Treatment system

Storm Water
- Piping
- Culverts
- Swales
- Catchments
- Fencing
- Treatment system

Fuel Systems
- Foundations
- Tanks
- Piping/valves
- Containment
- Fencing

Heating/Cooling Piping & Utilidors
- Piping
- Valves
- Insulation,
- Utilidors
- Vaults

Electrical Service & Distribution
- Poles
- Transformers
- Switchgear
- Conduit
- Feeders

Data/Comm Service & Distribution
- Conduit
- Cable/wiring
- Satellite dishes
- Foundations
- Equipment

Lighting & Equipment
- Poles
- Fixtures
- Devices
- Panels
- Conduit/feeders

Security Systems
- Poles
- Devices
- Conduit
- Cable

Continuous & Column Footings
- Reinforcement
- Concrete
- Insulation

Foundation Walls & Treatment
- Reinforcement
- Concrete
- Dampproofing
- Insulation

Foundation Drainage
- Pipe
- Geotextile

Structural & Nonstructural Slabs
- Reinforcement
- Concrete
- Joints
- Finish

Appendix A - Sample Systems and Components Inventory List

Trench, Pit, and Pad
- Reinforcement
- Concrete
- Embedments

Underslab Elements
- Vapor barrier
- Insulation
- Pipe
- Geotextile

Piling & Pile Cap
- Pile
- Thermopile
- Pile caps

Caissons
- Piers
- Pile caps

Grade Beams
- Reinforcement
- Concrete
- Insulation

Arctic Foundation Systems
- Thermosyphons
- Refrigeration
- Insulation

Other Special Foundations
- Underpinning
- Vibro-replacement

Lower & Main Floors
- Beams
- Joists
- Decking
- Topping
- Soffit
- Insulation
- Coatings

Upper Floors
- Columns
- Beams
- Joists
- Decking
- Topping
- Coatings

Ramps
- Columns
- Beams
- Joists
- Decking
- Topping
- Coatings

Pitched Roofs
- Columns
- Beams
- Rafters
- Trusses
- Decking
- Bracing

Flat Roofs
- Columns
- Beams
- Rafters
- Trusses
- Decking
- Bracing

Special Roofs
- Pneumatic structures
- Domes

Stair Structure
- Columns
- Landings
- Stringers
- Treads
- Risers
- Toppings

Appendix A - Sample Systems and Components Inventory List

Stair Railings
- Guardrail
- Railing
- Balusters
- Supports
- Coatings

Ladders & Steps
- Ladders
- Steps
- Coatings

Exterior Walls
- Framing
- Sheathing
- Insulation
- Siding
- Vapor/Air barriers
- Vents

Fascias & Soffits
- Framing
- Sheathing
- Insulation
- Siding
- Vapor/Air barriers
- Vents

Curtainwalls & Non-bearing Walls
- Framing
- Mullions/Rails
- Connectors
- Insulation
- Siding
- Barriers
- Interior substrate

Windows
- Frames
- Glazing
- Exterior sills
- Flashings
- Coatings/sealants
- Vandal-proofing

Storefronts
- Framing
- Glazing
- Flashings
- Closures/sealants

Structural Window Walls
- Columns
- Frames,
- Glazing
- Exterior sills
- Flashings
- Closures/sealants

Translucent Panels
- Panel assembly
- Exterior sills
- Flashings

Personnel Doors
- Frames
- Doors
- Lites
- Latch assembly
- Openers
- Thresholds
- Flashings
- Finish

Special Doors
- Frames
- Doors
- Openers
- Lock assembly
- Flashing
- Finish

Louvers, Screens & Shading Devices
- Louvers
- Screens
- Trellis
- Shades/shelfs

Appendix A - Sample Systems and Components Inventory List

Balcony Elements
- Walls
- Grills
- Guardrails
- Handrails

Other Exterior Accessories
- Signage
- Decorations

Pitched Roofing
- Underlayment/barriers
- Roofing
- Flashing
- VTR assembly
- Insulation
- Fascia

Gutters & Downspouts
- Gutters
- Membranes
- Downspouts
- Hangers

Flat Roofing
- Underlayment/barriers
- Roofing
- Flashing
- VTR assembly
- Insulation
- Copings

Roof Drains & Piping
- Drains
- Scuppers
- Leaders
- Insulation

Skylights
- Fixed/operable Skylights
- Curbs
- Flashing
- Hardware

Roof Hatches
- Hatches
- Curbs
- Flashing
- Hardware

Roof Decks, Walls & Railings
- Decking/paving
- Protection
- Supports
- Walls
- Railings

Other Roof Accessories
- Snow guards
- Tie-offs
- Pipe supports

Fixed Partitions
- Framing
- Substrates/sheathing
- Blocking
- Insulation

Soffits & Ceilings
- Framing
- Substrates/sheathing
- Blocking
- Insulation

Operable Partitions
- Partition
- Support structure
- Factory finishes

Demountable Partitions
- Partition
- Support structure
- Factory finishes

Appendix A - Sample Systems and Components Inventory List

Glazed Partitions
- Frames
- Glazing
- Glass block
- Trims

Railings & Screens
- Railing assemblies
- Visual screens

Personnel Doors
- Frames
- Doors
- Integral lites
- Hardware
- Trims
- Finish

Special Doors
- Frames
- Doors
- Hardware
- Finish

Windows & Sidelites
- Frame
- Glazing
- Stops

Access Floors
- Framing/stands
- Floor panels
- Factory finishes

Platforms & Stages
- Framing
- Sheathing/panels
- Accessories

Floor Finishes
- Finish material
- Trims
- Wall base
- Transitions

Wall Finishes
- Finish material
- Trims

Ceiling Finishes
- Framing/supports
- Finish material
- Trim

Other Finishes
- Finish material
- Transitions

Interior Specialties
- Toilet partitions/accessories
- Lockers
- Boards
- Protective Guards
- Signage

Casework/Millwork
- Cabinets
- Cubbies
- Wardrobes
- Counters
- Display case
- Trim

Seating
- Framing
- Finish
- Accessories

Window Coverings
- Drapes
- Blinds
- Blackout shades

Passenger Elevator
- Cab
- Rails
- Machinery
- Appurtenances

Appendix A - Sample Systems and Components Inventory List

Lifts & Other Conveyors
- Cab/enclosure
- Rails
- Machinery
- Appurtenances

Elevators & Lifts
- Cab/enclosure
- Rails
- Machinery
- Appurtenances

Hoists & Cranes
- Structure/rails
- Hoist/crane
- Appurtenances

Other Systems
- Structure/rails
- Enclosure
- Appurtenances

Plumbing Fixtures
- Fixture
- Rough-in
- Valves/stops
- Mounts
- Trims

Plumbing Piping
- Pipe
- Fittings
- Hangers
- Insulation

Plumbing Equipment
- Pumps
- Tanks
- Traps
- Hot water generators
- Treatment

Waste & Vent Piping
- Pipe
- Fittings
- Cleanouts
- Supports
- Insulation

Special Systems
- Equipment
- Piping
- Fittings

Heating Equipment
- Boilers
- Furnaces
- Burners
- Flue
- Expansion tank
- Media

Heating Distribution Systems
- Pipe
- Fittings
- Valves
- Pumps
- Insulation
- Strainers

Ventilation Equipment
- Air handling units
- Supply/Return fans
- Exhaust fans
- Coils
- VAVs
- Terminal units

Ventilation Distribution Systems
- Ducting
- Insulation
- Diffusers
- Damper/Silencers

Appendix A - Sample Systems and Components Inventory List

Cooling Equipment
- Air Conditioning units
- Make-up units
- Coils
- Refrigerant

Cooling Distribution Systems
- Pipe
- Fittings
- Valves
- Gauges
- Insulation

Heat Recovery System
- Heat Recovery units
- Fans

Control Systems
- Head End
- Direct Digital Control points
- Wiring
- Sensors
- Gauges

Riser & Equipment
- Riser
- Backflow device
- Headers
- Valves

Sprinklers & Piping
- Pipe
- Fittings
- Heads
- Hangers/Bracing

Special Suppression Systems
- Tanks
- Valves
- Piping
- Controls

Fuel Supply (Gas & Oil)
- Tanks
- Valves
- Piping
- Controls

Dust Collection Systems
- Tank
- Stand
- Fans
- Ducting
- Controls

Compressed Air & Vacuum Systems
- Tanks
- Mounts
- Fans
- Ducting
- Controls
- Outlets

Other Special Mechanical Systems
- Equipment
- Piping/ducting
- Grills

Main Distribution Panels & Switchgear
- Main Distribution Panel enclosure
- Disconnect
- CT Enclosure
- Bus
- Fuses

Panels & Motor Control Centers
- Switchboards
- Panelboards
- Motor control centers

Transformers
- Transformer

Conduit & Feeders
- Conduit
- Hangers/supports
- Fittings
- Wires

Appendix A - Sample Systems and Components Inventory List

Lighting Fixtures
- Interior Fixtures
- Building Mounted Fixtures
- Exit/emergency
- Trims

Lighting Controls
- Control Panel
- Switches
- Occupancy sensors

Conduit & Wiring
- Conduit
- Fittings
- Wiring

Devices & Connections
- Outlets
- Disconnects
- Sensors/timers
- Motor connections

Conduit & Wiring
- Conduit
- Fittings
- Wiring

Fire Alarms
- Devices
- Panels
- Conduit
- Wiring

Data & Communications
- Equipment
- Devices/connections
- Conduit/tray
- Wiring

Security Systems
- Headend
- Detectors
- Closed circuit television
- Access control
- Conduit/tray
- Wiring

Clock Systems
- Clocks
- Controls
- Conduit/tray
- Wiring

Intercom Systems
- Headend
- Interties
- Speakers
- Wiring

Other Special Systems
- Equipment
- Devices
- Conduit/tray
- Wiring

Power Generation & Distribution
- Generators
- Switchgear
- Panels
- Conduit
- Feeders

Electrical Heating Systems
- Baseboards
- Unit Heaters
- Radiator
- Radiant Heat
- Controls

Grounding Systems
- Grounding
- Lightning Protection

Food Service and Kitchen Equipment
- Cooking Equipment
- Refer/Freezer
- Tables/counters

Appendix A - Sample Systems and Components Inventory List

Athletic Equipment
- Basketball goals
- Inserts
- Ropes
- Bars
- Mat hoists

Career & Technology Equipment
- Woodworking
- Metal/welding
- Small engine
- Robotics

Science Equipment
- Casework
- Equipment

Library Equipment
- Stacks
- Shelves
- Desks
- Chairs

Theater Equipment
- Lighting
- Rigging
- Sound system
- Curtains

Art Equipment
- Kilns
- Sinks

Loading Dock Equipment
- Bumpers
- Levelers

Other Equipment
- OT/PT

Fixed Furnishings
- Classroom
- Administration
- Workrooms
- Assembly

Mats
- Mats
- Grates

Other Furnishings
- Window shades

Packaged Utility Modules
- Foundation
- Superstructure
- Enclosure
- Mechanical
- Electrical

Swimming Pool
- Foundation
- Superstructure
- Enclosure
- Mechanical
- Electrical

Greenhouse
- Foundation
- Framing
- Panels
- Mechanical
- Electrical

Appendix B

Anticipated Life Expectancies (Renewal Schedule)

System	System Life Expectancy (Years)
Site Improvements	25
Site Utilities	40
Foundation/Substructure	50
Superstructure	50
Exterior Wall System	25
Exterior Windows	30
Exterior Doors	20
Roof Systems	20
Interior Partitions	50
Interior Doors	30
Interior Floor Finishes	15
Interior Wall Finishes	25
Interior Ceiling Finishes	25
Specialties	40
Conveying Systems	40
Plumbing Piping	30
Plumbing Fixtures	30
Fire Protection/Suppression	30
HVAC Distribution	40
HVAC Equipment	30
HVAC Controls	20
Electrical Service/Generation	40
Electrical Distribution	50
Electrical Lighting	25
Special Electrical	15
Equip and Furnishings	25

Appendix C

Checklists

District Preventive Maintenance Program Review

District:
Review Year: Site Visit Date:

Item	Requirement	Approved	Comments
	Maintenance Management		
A1	Provide copies of work orders of varying types and status.	☐	
A2	Report: Total maintenance labor hours collected on work orders by type of work (scheduled, corrective, operations support, etc.) vs. labor hours available—by month for previous 12 months.	☐	
A3	Report: Scheduled and completed work orders—by month for previous 12 months.	☐	
A4	Report: Number of incomplete work orders sorted by age (30, 60, 90 days, etc.) and status (deferred, awaiting materials, scheduled, etc.)—by month for the previous 12 months.	☐	
A5	Report: Comparison of scheduled maintenance work order hours to unscheduled maintenance work order hours—by month for previous 12 months.	☐	
A6	Report: Monthly trend data for unscheduled work orders showing both hours and numbers of work orders—by month for the previous 12 months.	☐	
A7	Report: Planned maintenance activity report—by facility for next 3 months.	☐	
A8	Report: Completed maintenance activity (work orders) including labor and material costs—by facility for previous 3 months.	☐	
	Energy Management		
B1	Provide a written energy management plan.	☐	
B2	Reports: Consumption data for each building, each utility [e.g., fuel oil, ~~electricity,~~ natural gas, LPG, electricity, recovered heat, ~~water~~biomass, etc.]—by month for the previous 12 months.	☐	
B3	Provide support of annual evaluation of need and effectiveness of retro-commissioning for required facilities.	☐	
	Custodial Program		
C1	Provide a written custodial plan that is building-specific and describes both the frequency (schedule) and level of custodial care for each facility.	☐	
	Maintenance Training		
D1	Provide a schedule of planned training for both custodial and maintenance personnel—for the current or upcoming school year.	☐	
D2	Provide a record of training describing type and duration of training—by individual for current school year.	☐	
	Renewal and Replacement (R&R) Schedules		
E1	Provide a Renewal/Replacement Schedule (detailed to at least DEED's 26 systems) for each permanent building over 1000sf.	☐	
E2	Provide information that supports that the data in the R&R schedules was developed based on system condition assessments.	☐	
	Fixed Asset Inventory System (FAIS)		
F1	Report: Report of fixed asset, date acquired, location and estimated period of service.	☐	

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4 AAC 31.013 PREVENTIVE MAINTENANCE AND FACILITY MANAGEMENT COMPLIANCE TEST Page 1

(a) For a district to be eligible for state aid under AS 14.11.011, the chief school administrator of the district must certify, on a form provided by the department, that the district has, and is in compliance with, a facility management program that addresses the following five elements of facility management, including maintenance management:

(1) a maintenance management program that is a formal system that records maintenance activities on a work order basis and tracks the timing and costs, including labor and materials, of maintenance activities in sufficient detail to produce reports of planned and completed work;

Mandatory

- ☐ Show that your system for can recording all maintenance activities on a work order basis and how a work order is handled from its creation to completion?
- ☐ Show your maintenance personnel performed no activities this week or this month not recorded on a work order?
- ☐ Show a record of your work orders that track all of your maintenance activities according to typical categories such as preventive, routine, emergency and operations?
- ☐ Generate a report of your planned maintenance activity for the next quarter that shows the timing (i.e., schedule) and anticipated costs, including labor and materials, of that work?
- ☐ Produce a report covering the previous three months of all maintenance activities and their costs, including labor and materials broken out by typical maintenance categories such as preventive, routine, emergency and operations?
- ☐ Show a report of planned versus completed maintenance activity for each facility by work order?

Best Practice

- ☐ Show that assets are identified for tracking purposes to the component level?
- ☐ Demonstrate how the data collected is used in the day-to-day management program?

(2) an energy management plan that includes

(a) the recording energy consumption for all utilities on a monthly basis for each building; for facilities constructed before December 15, 2004, a district may record energy consumption for utilities on a monthly basis when multiple buildings are served by one utility plant; and

(b) regular evaluation of the effectiveness of and need for commissioning existing buildings;

Mandatory

- ☐ Produce a monthly record of energy consumption for each utility by building?
- ☐ Demonstrate that each building over 1000 square feet is separately measured each month?
- ☐ (If this is not practical at every site, tell what you do instead.)
- ☐ Demonstrate tracking and updating of which facilities are required to be evaluated for retro-commissioning?
- ☐ Provide a worksheet or other method of annual evaluation of need for retro-commissioning required facilities?

Best Practice

- ☐ Show comparison of energy consumption in each building over multi-year period.
- ☐ Identify causes of increased or decreased energy consumption?
- ☐ Demonstrate the development of energy efficiency measures (EEMs) based on consumption analysis?
- ☐ Tracking implementation of EEMs and then accomplishing appropriate measurement and verification?

(3) a custodial program that includes a schedule of custodial activities for each building based on type of work and scope of effort;

Mandatory

- ☐ Produce a copy of your written custodial plan at each site showing a schedule of custodial activities?
- ☐ Show that your plan for each building includes the type of work (i.e., the activity needed for each surface or equipment item) and the scope of effort (i.e., the frequency of care for each type of work)?

Best Practice

- ☐ Demonstrate the district's plan has been made available to all custodial staff, principals, and management personnel?
- ☐ Demonstrate how the plan transfers to custodial work being done at the site?
- ☐ Show that the program has included in a scope of effort the quantity (e.g., square feet of carpet, number of toilet fixtures, etc.)?
- ☐ Custodial plan shows areas of each custodian's responsibility?

(4) a maintenance training program that specifies training for custodial and maintenance staff and records training received by each person; and

Mandatory

- ☐ Show a written training plan or training schedule that addresses annual training goals?
- ☐ Produce a schedule of planned training for the coming year?
- ☐ Produce a record of training activities by individual custodian and maintenance staff?
- ☐ Show training records for last year?

Best Practice

- ☐ Track maintenance training through work orders on CMMS?

(5) a renewal and placement schedule that, for each school facility of permanent construction over 1,000 gross square feet, identifies the construction cost of major building systems, including electrical, mechanical, structural and other components; evaluates and establishes the life-expectancy of those systems; compares life-expectancy to the age and condition of the systems; and uses the data to forecast a renewal and replacement year and cost for each system.

Mandatory

- ☐ Provide a Renewal & Replacement (R&R) Schedule for each permanent building over 1000 square feet in size?
- ☐ Demonstrate that major building systems are identified at least at the level of the 26 systems used on the DEED renewal and replacement schedule?
- ☐ Show information that supports the data in the R&R schedule was developed based on on-site assessments?

Best Practice

- ☐ Show how these schedules are being used by the district to formulate capital plans?
- ☐ Show, for buildings with major additions of different ages, that separate R&R schedules have been created?
- ☐ Demonstrate that the R&R schedules are updated each year?
- ☐ Provide a site-by-site or districtwide forecast of renewal cost by fiscal year?

Appendix D

Definitions

Building System(s)
: An assembly of components created to perform specific functions in a facility (ref. DEED *CostFormat* for descriptions of 11 standard building systems).

Capital Renewal or Replacement
: A scheduled and anticipated systematic upgrading or replacement of a building system or component, anticipated based on life-expectancy, to establish its ability to function for a new life cycle—typically at least five years.

Commissioning
: A systematic process of testing buildings systems to ensure that a building performs in accordance with the design intent, contract documents, and the owner's operational needs. Retro-commissioning is commissioning of building systems that occurs on a facility that has never been commissioned, or occurs after an initial commissioning, to recalibrate building performance to ensure optimal systems performance.

Component
: An item within a building system that provides a function distinct from other elements in that system.

Corrective Maintenance
: Unscheduled maintenance or repair in response to system or component failures that are accomplished at an operational level.

Custodial Care
: The day to day and periodic cleaning of building surfaces and fixtures needed to maintain a facility in safe, clean, and orderly condition; includes the replacement of disposable supplies and building items.

Deferred Maintenance
: Component repair or replacement that is postponed for lack of funds, resources, or other reasons.

Energy Audit and Assessment
: An assessment of a building that review current energy consumption and identifies energy efficiency measures that you can conduct to make the building more energy efficient.

Energy Benchmarking
: Measuring building energy performance against its own past performance or against other buildings with a similar function/use.

Energy Consumption Monitoring
: Measuring, recording, and tracking use of energy utilities by a building. Required to be done on a monthly basis.

Energy Efficiency Measures
: Upgrades, retrofits, or repairs of systems or software or a practice that, when implemented, results in reduced energy use while maintaining the same or higher level of service.

Appendix D - Definitions

Major Maintenance

Facility renewal that requires major repair or rehabilitation to protect the structure, correct building code deficiencies, or achieve an operating cost savings, 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.

Routine Maintenance

Light maintenance and inspection tasks performed at regular intervals (daily, weekly, monthly, etc.). Differentiated from preventive maintenance by level of complexity, specialized skill, and duration of effort.

Note: The above definitions are those adopted by the Bond Reimbursement and Grant Review Committee April 20, 2022.

Appendix E

Master Custodial Schedule

The Department of Education and Early Development, Facilities has developed a template master custodial schedule to assist school district in implementing a Custodial Program in compliance with 4 AAC 31.013. This template provides a comprehensive list of Space Types with their respective custodial tasks and frequencies identified. Edit the list to match any specific education related facility. Frequency of tasks to be performed are suggested and can be modified to meet district objectives.

The template's room-based cleaning list can also be adapted to other organizational models such as schedule-based, or a hybrid approach in which repetitive space-cleaning tasks are summarized in a Cleaning Processes section of the district's custodial guidelines. Examples of these would be: Dusting, Vacuuming, Disinfecting, Window Cleaning, etc. The assumption would be that these tasks would occur in all spaces. Spaces needing specialized cleaning, such as Gymnasiums or Bi-cultural/Bilingual, would continue to be broken out for additional attention.

An excel version of the template is available from the department.

Acronyms
AN = As Needed
SA = Semi-annual
Q = Quarterly
BW = Bi-weekly

Category A – Instructional or Resource (Sample Space)

Art Classroom

Task	Frequency
Dust ceiling/wall perimeter	Weekly
Dust all ceiling mounted light fixtures, projectors, etc.	Weekly
Vacuum all vents and diffusers	Weekly
Dust non-wet-area horizontal surfaces (furniture, trim, sills)	Daily
Clean and disinfect table tops	Daily
Spot clean vertical and horizontal hard surfaces	Weekly
Clean/wipe down countertops	Daily
Clean sinks and faucets	Daily
Clean equipment surfaces (pottery wheel, kiln, racks, easles)	Daily
Empty pencil sharpeners	Daily
Clean window glass on doors/sidelights	Daily
Empty trash receptacles and replace liners	Daily
Vacuum, mop/spot clean and disinfect all hard-surface floors	Daily
Strip and wax all hard-surface flooring	Semi-annual

Task	Frequency
Clean and disinfect all waste receptacles	Weekly
Clean shades or blinds	Monthly
Clean marker boards	As Needed
Replace lamps/bulbs	As Needed
[Other]	
Ceramics/Kiln	
Dust ceiling/wall perimeter	Weekly
Dust all ceiling mounted light fixtures	Weekly
Mop floor	Daily
Spot clean walls hard surfaces	Weekly
Clean equipment surfaces (pottery wheels, kiln, etc.)	Weekly
[Other]	

Category B – Support Teaching (Sample Space)

Teacher Breakroom

Task	Frequency
Dust ceiling/wall perimeter	Weekly
Dust all ceiling mounted light fixtures, projectors, etc.	Weekly
Vacuum all vents and diffusers	Weekly
Dust all horizontal surfaces (furniture, counters, trim, sills)	Daily
Clean and disinfect table tops	Daily
Spot clean vertical and horizontal hard surfaces	Weekly; As Needed
Clean sinks and faucets	Daily
Clean appliances surfaces (range, microwave, refrigerator)	Daily; As Needed
Remove and clean behind around appliances	Annually
Clean window glass on doors/sidelights	Daily
Empty trash receptacles and replace liners	Daily
Vacuum all carpeted floors and area rugs	Daily
Spot clean small marks and stains on carpets and area rugs	Weekly
Extraction cleaning carpeted floors and area rugs	Semi-annual
Vacuum, mop/spot clean and disinfect all hard-surface floors	Daily
Strip and wax all hard-surface flooring	Semi-annual
Clean and disinfect all waste receptacles	Weekly
Clean shades or blinds	Monthly
Clean marker boards	As Needed
Replace lamps/bulbs	As Needed
[Other]	
Restroom	
Mop and disinfect floor using enzymatic cleaner	Daily
Clean and disinfect mirrors	Daily
Clean and disinfect lavatory	Daily
Clean and disinfect toilet	Daily

Task	Frequency
Check & replenish hand soap, paper towel, & tissue supplies	Daily
Clean exterior of all dispensers (tissue, soap, etc.)	Daily
Check that all fixtures are functioning properly	Daily
Clean and disinfect wall surfaces	Weekly
Clean and disinfect all waste receptacles	Weekly
Clean and disinfect exposed plumbing piping and valves	Weekly
[Other]	

Category C – General Support (Sample Space)

Nurse/Clinic Space

Task	Frequency
Dust ceiling/wall perimeter	Weekly
Dust all ceiling mounted light fixtures, projectors, etc.	Weekly
Vacuum all vents and diffusers	Weekly
Dust all horizontal surfaces (furniture, counters, trim, sills)	Daily
Clean and disinfect equipment (cots, apparatus)	Daily
Spot clean vertical and horizontal hard surfaces	Weekly; As Needed
Clean sinks and faucets	Daily
Clean appliances surfaces (range, microwave, refrigerator)	Daily; As Needed
Remove and clean behind around appliances	Annually
Clean window glass on doors/sidelights	Daily
Empty trash receptacles and replace liners	Daily
Vacuum, mop/spot clean and disinfect all hard-surface floors	Daily
Strip and wax all hard-surface flooring	Semi-annual
Clean and disinfect all waste receptacles	Weekly
Clean shades or blinds	Monthly
Clean marker boards	As Needed
Replace lamps/bulbs	As Needed
[Other]	
Restroom	
Mop and disinfect floor using enzymatic cleaner	Daily
Clean and disinfect mirrors	Daily
Clean and disinfect lavatory	Daily
Clean and disinfect toilet	Daily
Check & replenish hand soap, paper towel, & tissue supplies	Daily
Clean exterior of all dispensers (tissue, soap, etc.)	Daily
Check that all fixtures are functioning properly	Daily
Clean and disinfect wall surfaces	Weekly
Clean and disinfect all waste receptacles	Weekly
Clean and disinfect exposed plumbing piping and valves	Weekly
[Other]	

Category D – Supplementary (Sample Space)

Mechanical/Electrical (M/E)

Task	Frequency
Dust ceiling/wall perimeter	Weekly
Dust all ceiling mounted light fixtures, etc.	Weekly
Vacuum all vents and diffusers	Weekly
Dust all horizontal surfaces (furniture, counters, trim, sills)	Daily
Clean window glass on doors/sidelights	Daily
Empty trash receptacles and replace liners	Daily
Sweep, mop/spot clean and disinfect all hard-surface floors	Daily
Strip and wax all hard-surface flooring	Semi-annual
Clean and disinfect all waste receptacles	Weekly
[Other]	

Department of Education & Early Development
Division of Finance & Support Services/Facilities

Work Topics for the BR & GR Committee

Proposed As Of: ~~December 9, 2021~~December 1, 2022

BR&GR 2023 Work Items	Responsibility	Due Date
1. CIP Grant Priority Review – [(b)(1)]		
1.1. FY24 MM & SC Grant Fund Final Lists (4 AAC 31.022(a)(2)(B))	Committee	Apr 2023
1.2. FY25 MM & SC Grant Fund Initial List	Committee	Dec 2023
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 Standards		
3.2.1. State Building Systems Standards		~~Mar 19- Feb 22~~
3.2.1.1. Implement New Standards [See 6.3 Regulations]	Dept	May 22-May 24
3.2.1.2. Review/Approve Plan for Biennial Updates	Committee	Apr 2023
3.3. Design Ratios		
3.3.1. Development of Design Ratios O:EW, V:GSF, V:ES		
3.3.1.1. Amended/Corrected Final Ratios	Dept	Feb 2021
3.3.1.2. Final All Ratios – 1st Review	Committee	Apr 2021
3.3.1.3. Validation Study	Dept	Dec 2021
3.3.1.4. Validation Study Review/Recommendations	Subcommittee	Jan 2022
3.3.1.5. Recommendations Review, Release for Comment	Committee	Jun 2022
3.3.1.6. Evaluate Public Comment, Make Recommendations	Committee	Sep 2022
3.3.1.7. Manage Regulation Development & Implementation	Dept	Sep22 – Apr 23
3.3.2. Develop Test Method for Ratios	Subcommittee	Oct 2023
3.4. School Space Allocation Issues		
3.4.1.Space Guidelines Accuracy		
3.4.1.1. K-12 Allocation Calculation/Formula Issue	Subcommittee	Feb 2022
3.4.1.2. Variance Allowances Review	Subcommittee	Mar 2022
3.4.1.3. Exclusions and GSF Definition Review	Subcommittee	Apr 2022
3.4.1.4. Recommend Accuracy Adjustments	Subcommittee	Jun 2022
3.4.1.5. Review Subcommittee, Make Recommendations to SBOE	Committee	Jun 2022
3.4.2. Space Guidelines Adequacy		
3.4.2.1. GSF Definition Review (incl ASHRAE)	Subcommittee	Apr 2022
3.4.2.2. Electrical/Mechanical (incl ASHRAE) Space	Subcommittee	Sep 2022
3.4.2.3. Storage in Remote Locations	Subcommittee	Oct 2022
3.4.2.4. Space Related to Security	Subcommittee	Nov 2022
3.4.2.5. Community Use & Education Adequacy	Subcommittee	Dec 2022
3.4.2.6. Recommend Adequacy Adjustments	Subcommittee	Dec 2022
3.4.2.7. Review Subcommittee, Make Recommendations to SBOE	Committee	Dec 2022
3.4.3. Regulation Actions	Dept	TBD
4. Prototypical Design Analysis – [(b)(4)]		
No current items.		
5. CIP Grant Application & Ranking – [(b)(5) & (6)]		
5.1. FYXX CIP Briefing – Issues and Clarifications	Dept	Annually, Dec
5.2. FY25 CIP Draft Application & Instructions	Dept	Apr 2023
5.2.1. ~~Life Safety/Code/POS Matrix Weighting Review~~	~~Cmte~~	~~2022~~
5.3. FY25 CIP Final Application & Instructions	Committee	Apr 2023

BR&GR 2022 Work Items	Responsibility	Due Date
5.4. Future CIP Application Issues		
5.4.1. Total Point Balance Review	Committee	Dec 22-Apr 23
5.4.1.1. Initial Briefing Paper to Committee	Dept	Dec 2022
5.4.1.2. Analyze and Make Recommendation to Committee	Dept	Feb 2023
~~5.4.1.~~5.4.2. Space Allocation Issues	Dept	TBD
~~5.4.1.1.~~5.4.2.1. Analyze and Make Recommendation to Committee	Dept	TBD
~~5.4.1.2.~~5.4.2.2. Manage Regulation Development and Implementation	Dept	TBD
~~5.4.2.~~5.4.3. Electronic Documents Only	Dept	TBD
~~5.4.2.1.~~5.4.3.1. Analyze and Make Recommendation to Committee	Dept	TBD
~~5.4.2.2.~~5.4.3.2. Manage Regulation Development and Implementation	Dept	TBD
5.4.4. Completed Projects Impact on Ranking	Dept	TBD
5.4.4.1. Analyze and Make Recommendation to Committee	Dept	TBD
5.4.4.2. Manage Regulation Development and Implementation	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	Dec 2021
6.1.2.2. Preventive Maintenance Handbook – Public Comment	Committee	Apr 2022
6.1.2.3. Preventive Maintenance Handbook – Final	Committee	Sep 2022
6.1.3. Life Cycle Cost Analysis Handbook		
6.1.3.1. Life Cycle Cost Analysis Handbook – Validation	Dept	Feb 2023
6.1.3.2. Life Cycle Cost Analysis Handbook – Initial	Dept	Mar 2023
6.1.3.3. Life Cycle Cost Analysis Handbook – Public Cmt	Committee	Apr 2023
6.1.3.4. Life Cycle Cost Analysis Handbook – Final	Committee	Sep 2023
6.1.4. Professional Services for School Capital Project		
6.1.4.1. Professional Services for School Capital Project– Validation	Dept	Nov 2022
6.1.4.2. Professional Services for School Capital Project – Initial	Dept	Nov 2022
6.1.4.3. Professional Services for School Capital Project – Public Cmt	Committee	Dec 2023
6.1.4.4. Professional Services for School Capital Project – Final	Committee	Apr 2023
~~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 – Pub Cmt~~	~~Committee~~	~~Sep 2021~~
~~6.2.1.4. Construction Standards Handbook – Progress~~	~~Dept/Submte~~	~~Jan 2022~~
~~6.2.1.5. Construction Standards Handbook – Pub Cmt~~	~~Committee~~	~~Feb 2022~~
~~6.2.1.6. Construction Standards Handbook – Final~~	~~Committee~~	~~Apr 2022~~
~~6.3.~~6.2. Regulations		
~~6.3.1.~~6.2.1. Baseline Design Ratios (see item 3.5.2)	Dept (w/Cmte)	
~~6.3.1.1.~~6.2.1.1. Draft Regulation	Dept (w/Cmte)	TBD
~~6.3.1.2.~~6.2.1.2. SBOE Public Comment on Regulation	Dept	TBD
~~6.3.1.3.~~6.2.1.3. Review Public Comments from SBOE Comment Period	Committee	TBD
~~6.3.2.~~6.2.2. Reuse of School Plans and Systems (see item 4.2)	Dept (w/Cmte)	
~~6.3.2.1.~~6.2.2.1. Draft Regulation	Dept (w/Cmte)	TBD
~~6.3.2.2.~~6.2.2.2. SBOE Public Comment on Regulation	Dept	TBD
~~6.3.2.3.~~6.2.2.3. Review Public Comments from SBOE Comment Period	Committee	TBD

7. Energy Efficiency Standards – [(b)(8)]

No current items.

Projected Meeting Dates

February (TBD), 2023 - Teleconference

- School Space Guidelines Accuracy/Adequacy
- CIP Application Total Points Balance Review
- Professional Services for School Capital Projects (Draft)

BR&GR 2022 Work Items	Responsibility	Due Date

April (1 ½ Days) (TBD), 2023 In-Person (Juneau)

- FY25 CIP Application Approval
- Professional Services for School Capital Projects (Final)
- Life Cycle Cost Analysis Handbook (Draft)

Bond Reimbursement and Grant Review Committee

As of: August 30, 2022

Member	Appointed	Re-appointed	Term Expires
Elwin Blackwell Chair Commissioner or Commissioner's Designee	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.