

Agenda

Bond Reimbursement and Grant Review Committee Meeting Agenda

April 20, 2012

8:00 am to 4:30 pm

Permanent Fund Conference Room, Third Floor
801 West 10th Street
Juneau, Alaska

Chair:	Elizabeth Nudelman
	<u>Agenda Topics</u>
8:15 – 8:30 AM	Committee Preparation <ul style="list-style-type: none"> • Arrival, Packet Review
8:30 – 8:45 AM	Review and Approval of Agenda and Minutes New Business, Additions to the Agenda
8:45 – 9:15 AM	Public Comment (5 minutes maximum, time will be prorated if more than three people wish to comment)
9:15 – 10:00 AM	CIP Funding Analysis (Doug Crevensten) Staff Briefing <ul style="list-style-type: none"> • Debt Reimbursement Funding Status (SB 237 Report) • Final CIP Lists • Cost Model Update • FY2014 Application Overview <ul style="list-style-type: none"> • FY 2014 Application • FY 2014 Application Instructions • FY 2014 CIP Eligibility and Scoring Criteria • FY 2014 Rater's Guide
10:00 – 10:15 AM	BREAK
10:15 – 12:30 PM	Full Committee Interactive Work Session <ul style="list-style-type: none"> • Application changes
12:30 – 1:30 PM	LUNCH
1:30 – 2:30 PM	Full Committee Interactive Work Session <ul style="list-style-type: none"> • Application changes
2:30 – 3:15 PM	Public Comments on Application Changes
3:00 – 3:15 PM	BREAK
3:15 – 4:15 PM	Committee Discussion and Amendments to FY2014 CIP Application, Instructions, Scoring Criteria, Eligibility Checklist and Raters Guide Action Items <ul style="list-style-type: none"> • Vote on FY2014 CIP application and supporting documentation
4:15 – 4:25 PM	Committee Member Comments
4:25 – 4:30 PM	Set date for next meeting
4:30 PM	Adjourn

Bond Reimbursement and Grant Review Committee Meeting Draft Minutes
December 7, 2011
Department of Education and Early Development
Talking Book Library
Anchorage, Alaska

Committee Members	EED Staff	Other Attendees
Elizabeth (Sweeney) Nudelman - Chair	Sam Kito	Don Carney – Mat-Su
Carl John	Kim Andrews	Don Hiley – SERRC
Dean Henrick		Robert Reed – LYSD
Doug Crevensten		Charlie Carlson – SERRC
Robert Tucker		
Mark Langberg		
Mary Cary		

CALL TO ORDER AND ROLL CALL AT 1:00PM

REVIEW and APPROVAL of AGENDA

Carl moved to approve agenda; Bob Tucker seconded.
 Agenda approved as submitted.

REVIEW and APPROVAL of MINUTES

Mary moved to approve minutes; Dean seconded.
 Minutes approved as submitted.

PUBLIC COMMENT

No public comment.

STAFF BRIEFING – Refer to attachment for details page 10, 13, 14 of 59

Sam discussed a staffing change of the Building Management Specialist for Facilities stating that the new Building Management Specialist will start in January 2012.

PREVENTATIVE MAINTENANCE

Sam referenced the State of the State report, which is current as of August 15, 2011. Pribilof Island School District has indicated that the certification program is not fair to their district, and they are concerned about their inability to submit a CIP application. Refer to page 10 of 59 in the meeting Packet.

A question was asked about whether Kashunamiut School District certification is pending. Sam explained that districts who have certification pending are working with EED to become certified.

Carl expressed concern that personnel changes in the Building Management Specialist position will affect the ability of certification pending districts to submit an application.

Elizabeth stated that Tanana will have to submit current PM documents to close a current project. She is confident they will be able to provide current documentation.

Sam gave an example of the Pelican School District who did not have a program in place on June 1, but worked with EED to become provisionally certified by August 1 in order to submit a CIP application. A district does not need a full year of data for provisional certification but these schools need to be working with EED by June 1. The three schools not certified have not submitted any reports.

—A question was asked about whether the preventative maintenance program should be standardized across the districts. Sam stated that he doesn't want to tell districts which program to use whether it is a manual program, SERRC, SchoolDude, etc.

Sam talked about upcoming visits to districts and stated that the department is currently up to date on site visits.

DEBT REIMBURSEMENT FUNDING STATUS (SB 237 Report) page 10, 11, 15-18 of 59

Sam referenced the SB237 report and discussed the information listed on page 10 of 59.

The department will now be required to submit a school construction funding report to the legislature along with the SB237 report starting in January 2013.

When SB237 was passed the "sunset date" was removed, meaning that there is not a timeline for the expiration of the debt projects; therefore, project agreements will need to stipulate what the timeline is of the project. Alaska Statutes and Regulations state that there must be voter approval within five years of EED approval of a CIP application or else the application will expire.

INITIAL CIP LISTS page 11, 19-26 of 59

The lists are currently in the reconsideration process and there may be changes before the legislative session. The reconsideration CIP list will be available by 12/22/11.

Sam discussed the summary table on page 11 of 59. When asked if there was a common reason for ineligibility, Kim said that the most common reasons were that a detailed scope and budget was not provided, applications were for routine maintenance, PM information was not provided, and the districts were not eligible for more space.

General discussion ensued about the table and the differences between FY12 and FY13. It was noted that the lower requested amount in FY13 was due to the fact that many districts overlapped their grant applications with bond reimbursement applications in FY12.

Sam pointed out an update to the Participating Share Requirement chart on page 27 of 59, noting that a 20% participating share requirement was added due to SB237. Each project's participating share is calculated by comparing the number of students in the district with the value of taxable property in the district.

A question was asked regarding whether the 70/30 rule still applies and if there is a waiver.

Elizabeth explained what the 70/30 rule is, stating that roughly 28 districts have applied for a waiver and, generally speaking, if a district spends more than 20% of their operating costs on energy or if their operating budget is less than \$3M, they will not meet the 70/30 requirement. The rule strictly considers the districts operating budget and does not factor in any bonds.

There was a discussion about the effect of TERS and PERS on the operating budget.

A question was asked regarding whether EED is concerned that there is not enough funding is being put into maintenance?

Sam stated that districts need to make sure there is enough funding to maintain staff at the facilities. Many maintenance staff hours have been cut so that districts can meet their budget and he would like to see more funding put towards maintenance, but that depends on what instructional and energy costs are.

A question was asked regarding whether EED can provide a list of districts that have requested waivers. Elizabeth offered to distribute the list but cautioned that one may not be able to draw an accurate conclusion when comparing this list to the CIP applications.

As a part of a settlement between the State of Alaska and REAAs, there will be funding for five projects on FY12 list: the renovation/additions of Emmonak K-12, Nightmute School, Kwethluk K-12, and Kivalina K-12; and the replacement of Koliganek K-12.

Bob asked if the allocated funds are scheduled to be released next year, which Sam responded that \$35M will be deposited into the school construction fund for REAAs each year starting in FY13.

Mary asked if there are any significant concerns with these five projects, to which Sam answered there were no imminent concerns.

Carl asked if there is any kind of rule or comment process regarding the rating of elements outside the actual school building that are included on the CIP lists.

Sam responded that the measure in place is the official reconsideration request for projects that have had a change in category which resulted in a change in the list.

The Major Maintenance list is not a first come first served type of system. If a project continues to show up on the list then that means other projects are a higher priority. There are more cases of CIP applications being submitted as a "recovery of funds". This type of application gives districts the reasonable expectation that they will have funding for projects and will just need to recoup the funds.

A question was asked about whether an up-front out-of-pocket expense project moves to the top of the list?

Sam stated they can since costs are known and work has been completed. EED will note how much work is completed on a project, but districts that have a high life/safety need can score higher without having work done. He points out the importance of a well written application and that highlighting life safety, and health issues will help improve a project's score.

Sam discussed two issues with CIP applications: varying levels of experience of personnel at school districts who are preparing applications and inaccurate project cost estimates. EED has a cost model which can be used as a tool. If a district decides not to use this tool or does not hire an architect who can determine a cost for the project, it is difficult to trust the amounts that are in applications because of the inaccuracies. He emphasized that a district needs to put effort into the cost estimates.

Mary asked if there is a way to track projects that have been resubmitted multiple times, and if it can be determined what changes have been made in the application over the years.

Sam responded that projects can change over time but still keep the same name which is why you see a project moving around the list from year to year.

Mary showed concern about a roof replacement or plumbing system replacement that doesn't move up on the list after several attempts by the district. She suggested that there be a new category like a "mini major maintenance" for the smaller projects like roofs and flooring.

Sam reiterated that districts can submit a CIP application as a "recovery of funds".

It was noted that school districts with smaller projects can come up with a well scoring project. If districts are willing to spend money up front on smaller projects they will be rewarded, but

many districts are not willing to pay up front expenses without being guaranteed EED funding. Sam responded that EED cannot address an internal process or decisions of a district.

Sam discussed objective points versus subject points. If a project keeps scoring low year after year, the district is probably not submitting enough information to demonstrate the immediate need for funding.

There was great discussion about the projects that continue to show up on CIP lists year after year, and concern was shown about if these projects are at smaller and poorer districts. It was declared that if there are any inequities against smaller districts that it should be known.

It was mentioned that projects that are funded are the ones who put in the effort to write an application; it isn't always the wealthier districts. It was noted that the Kake, Pelican, and single-site districts without a lot of money still put funding and effort towards writing an application.

Discussion followed about the districts that cannot afford to fund projects out-of-pocket, and the question was raised if it is possibly the districts that are applying for 70/30 waivers. It was then suggested that there be "design only" projects and it was determined that EED will send the last five years' CIP lists to the attendees for their review.

Several districts have been struggling to get projects on the list, but Kim stressed that options are given to districts for writing a grant application. EED helps as much as possible to assist districts who want to submit well-supported applications.

Sam discussed the pros and cons of having the maintenance staff writing the CIP applications. They know about the work that is required but may not be able to articulate it as well as a professional grant writer. Also, the time that the maintenance staff spends on writing the application is a real cost which may be better spent on hiring a professional grant writer.

Sam stated that he would like to keep doing the year-to-year comparison for the CIP applications submitted. Mentioned that a project score can only be reused once, and that EED tries to point out how a district can identify where a project can score better. It is difficult for EED to evaluate how every project can score better, but we will assist if a district reaches out.

BREAK

SITE SELECTION CRITERIA page 11, 29-59 of 59

There have been technical changes made to the transportation/traffic guidelines. Items 0, 2, and 4 were added, and filler information was added to items 1 and 3 in order for differentiation. DOT has attempted to make the "Traffic" section more relevant to rural communities.

Sam answered a question that Kathy Christy posed at the March 16, 2011 meeting about instituting a means test. He stated that it is the district that has control over these criteria.

Sam indicated that there is an action item on the agenda addressing the requirement that a standard size lot be used in all cases. It is suggested that the site selection be based on a calculation which takes into account the type facility being built and what the facility use will be.

There was discussion about the formatting of the “Traffic and Access Related Criteria” section in order to clear the confusion about where that section begins.

DOT has submitted a color version of the Urban/Suburban School Layout on page 59 of 59.

ENERGY REGULATION UPDATE page 11 of 59

It will now be a requirement for EED to collect energy information on school facilities for projects that will have an effect on the ability of a building to retain heat: HVAC, roofing, siding, etc. Districts will need to provide a cost report for utilities detailing their current energy usage and cost compared to an estimated usage and cost after the project is complete. This is beneficial because districts will have a reasonable understanding of expected utility costs after project completion.

Mark recommended completing the energy report at the design development level, noting that these figures are calculated based on the energy consumed and applying the current utility rates.

There was concern about trying to predict future prices of utilities, in which Sam stated that the information being compared are the consumption rates and that today’s utility prices can be used as an estimate.

The four standards to take a look at to determine which energy standard to implement are:

- Collaboration for high performance schools (CHPS)

- LEED Program – achieving global sustainability

- ASHRAE 90.1 standard

- International energy efficiency code – EED is leaning more toward this standard because it encompasses the ASHRAE 90.1 standard.

The legislature is asking for a baseline in regulation, but we need to make sure that items identified in the baseline will still be relevant to the smaller districts. The baseline would also depend on if the project’s scope involves new construction or major renovation.

It was suggested that there could be different sets of classes like those that IECC has.

Mary asked if there could be information sharing between BRGR and CEFPI as related to the standardizing of the energy baselines.

PUBLICATIONS UPDATE page 12 of 59

Site Selection Criteria Handbook with information updated by DOT. See attachment.

Preventative Maintenance and Facility Management Guide

Revision started in 2005 but it will be worthwhile to start from scratch. It will take another year to compile a booklet that provides relevant and detailed information.

STAFFING UPDATE page 12 of 59

Sam identified Michael Gaede as the upcoming Building Management Specialist.

ACTION ITEMS

Mark moved to accept site selection guideline; Carl seconded.

“Site Selection Guide” as updated passed.

COMMITTEE MEMBER COMMENTS

Carl acknowledged Facilities for working with half the staff and mentioned that the Facilities publications are very important tools.

It was stated that there is a necessity to look at the Energy regulation closely and would like to collaborate with CEFPI to reduce the possibility of smaller districts being negatively affected.

SET DATE FOR NEXT MEETING

Set for April 19, 2012

There were questions about what the next meeting would consist of. Sam stated that the BRGR Committee will review and approve the CIP application for FY14, and that no major changes are expected. There will also be a draft cost model available at the next meeting.

MEETING ADJOURNED

State of Alaska

Department of Education & Early Development
Division of School Finance/Facilities

By: Sam Kito III, P.E.

Date: April 20, 2012

Phone: 465-6906

File: 2012-04-20 Staff Briefing

For: Bond Reimbursement and Grant
Review Committee

Subject: EED Facilities Overview

S T A F F B R I E F I N G

Staff Briefing

Preventive Maintenance Update (PM State of the State)

On January 3, 2012, the department hired Mike Gaede as the new Building Management Specialist. Mr. Gaede has completed nine site visits. Five reports have been finalized, and four are in the process of completion and review. Completed site visits since the December BR&GR meeting include:

- Sitka School District,
- Chatham School District
- Craig School District, and
- Klawock School District,
- Hoonah City School District.

Assessments that are pending as of this meeting are Hydaburg School District, Copper River School District, Alaska Gateway School District and Delta School District.

Pending site visits for the remainder of the school year include Nome School District, Southeast Island School District and Matanuska Susitna Borough School District.

Our records indicate that the Delta, Haines, Nome and Southeast Island School Districts have switched to the School Dude Computerized Maintenance Management System (CMMS)

The Preventive Maintenance State of the State report (attached) was updated on April 12 2012.

Districts that are certified, but still working with the department to develop a full year of reports (Provisional Certification) include:

- Dillingham City School District
- Northwest Arctic Borough School District
- Haines Borough School District

Districts that are not currently certified include:

- Aleutian Region
- Kashunamiut
- Pribilof
- Tanana

Debt Reimbursement Funding Status (SB 237)

The updated debt tracking report under SB237 starting July 1, 2010 is attached to the committee packet. The total amount of bond authorization requested under SB 237 is \$507,797,551. The total amount approved by the department is \$507,257,551. The total voter approved amount is \$452,932,551. The amount for projects that are both voter and EED approved is \$452,932,551.

Debt Reimbursement voter and EED approved at 70% - \$434,142,551
Debt Reimbursement voter and EED approved at 60% - \$18,790,000

The department currently has two pending debt applications that have been submitted by districts to the department, but have not yet received department approval. Both applications are from the North Slope Borough School District with requested project amounts of \$5,587,194 and 1,808,200.

Final CIP Lists

On March 8th and 9th, the State Board of Education met in Juneau and approved the final CIP priority lists. The Final CIP lists are included in the packet.

For FY2013, 34 of 53 school districts submitted a total of 158 applications for the first year of the districts' revised six-year plans, 138 of the applications were scored, and the districts requested that 20 application scores be re-used for the FY 2013 list. The department determined that 11 applications were ineligible, modified the category of 4 projects that resulted in a change of list, and adjusted the budgets of 18 projects under the provisions of AS 14.11.

The major maintenance list contains a total of 120 projects amounting to a total of over \$267 million, and the school construction list contains a total of 27 projects amounting to a total of over \$276 million.

Following are some year-to-year statistics

	FY2013	FY2012
Districts Submitting Applications	34	38
Number of Applications Submitted	158	158
Number of Applications Scored	138	113
Number of Applications Reused	20	45
Number of Applications Ineligible	11	9
Number of Applications with a Change in List	4	6
Number of Applications with a Budget Adjustment	18	31
Number of Projects on the Major Maintenance List	120	117
Number of Projects on the School Construction List	27	32
Amount Requested on Major Maintenance List (Final)	\$267,017,375	\$275,132,938
Amount Requested on School Construction List (Final)	\$276,691,304	\$313,999,772

Cost Model Update

The department has contracted with HMS Inc. to update the Cost Model tool to assist school districts in estimating construction and renovation costs. The Cost Model (12th Edition Update Revised) is complete and will be posted on the department's website before the department's annual CIP training session which is tentatively scheduled for May 10, 2012 in Anchorage.

Included with this meeting packet are the Cost Model, Cost Model Introduction and Table, and the Cost Model Publication. All of the documents have been updated to reflect the latest version of the document.

FY2014 Application Changes

The following changes have been identified for the FY2014 CIP application and instructions:

Application Changes

- Question 6 b – A question has been added that establishes Adequacy of Documentation as an eligibility criterion. Districts will check the box stating that they have provided adequate documentation. This change corresponds to the proposed removal of Adequacy of Documentation as an evaluative scoring criteria (see change in Rater's Guide and Rating Forms).
- Question 18 – The Cost Model Reference has been updated to reflect the 12th Edition Update Revised Cost Model.
- Question 23 – The year column has been updated to the current ADM year and subsequent ten years for student population data.
- Question 30 – The Assessment descriptions have been updated to reflect proposed changes from Subjective to Evaluative and Objective to Formula-Driven.

- Footer – The form number reference will be changed to reflect the correct form number when it is issued.

Application Instruction Changes

- Question 2c. – Change was made to the tense in the final sentence of this explanation.
- Question 3 – The form reference will be changed to reflect the correct form number when it is issued.
- Question 6b – Identifies statutory and regulatory reference for this proposed change. Also provides a statement indicating that documentation adequacy will be reflected in the specific categories that the documentation applies such as Maintenance Narratives, Emergency, Life/Safety and Code, Adequacy of Space, Cost Estimate, Cost Savings, Alternatives or Options.
- Question 15 – Reference to the 1997 Site Selection Criteria and Evaluation Handbook has been updated to 2011 reflecting the adoption of the updated document by the BR&GR in December of 2011.
- Question 18 – The edition of the Cost Model was updated to reflect the “Revised” update to the tool.
- Question 30 – Proposed change to all occurrences of subjective to evaluative and objective to formula-driven.
- Footer – The form reference will be changed to reflect the correct form number when it is issued, and the revision date will be changed to reflect approval month of the Application Instructions by the Bond Reimbursement and Grant Review Committee.

Eligibility Form Changes

- Proposed addition of eligibility criteria “N” as a result of proposed change of Adequacy of Documentation from a scoring criterion to an eligibility criterion.

Rater’s Guide Changes

- General – Proposed change of subjective to evaluative and objective to formula-driven.
- Narrative Paragraph 7 – Proposed addition of eligibility criteria “N” to the eligibility items evaluated by the raters.
- Adequacy of Documentation – Proposed removal of Adequacy of Documentation as a scoring criterion.
- Footer – Dates will be changed to reflect approval of the Rater’s Guide by the Bond Reimbursement and Grant Review Committee.

Rating Form Changes

- General – Proposed change of subjective to evaluative and objective to formula-driven.
- Changed the display of Category E from the School Construction Column to Major Maintenance Column to reflect changes by the legislature in Senate Bill 237 in 2010.
- Evaluative Rating Form – Proposed removal of Adequacy of Documentation from scoring criteria.
- Date will also be changed to reflect approval of the Rating Forms by the Bond Reimbursement and Grant Review Committee

Energy Regulation Update

The legislature added a responsibility to the Bond Reimbursement and Grant Review Committee to:

“set standards for energy efficiency for school construction and major maintenance to provide energy efficiency benefits for all school locations in the state and that address energy efficiency in design and energy systems that minimize long-term energy and operating costs.” [AS 14.11.014(b)(8)]

The Alaska Housing Finance Corporation has been through a similar exercise that was researched by the Cascadia Green Building Council (<http://cascadiagbc.org/>). I have attached a copy of the resulting report to this meeting packet. I have also attached an article from the journal Structure that provides a discussion of energy codes.

The current schedule is to prepare a briefing paper for review by the BR&GR committee, school districts, and other interested parties, and provide a code adoption recommendation for review by the BR&GR committee at the December 2012 meeting. This activity will take place as time allows.

Publications Update

Following is a list of publications currently managed by the department along with the estimated revision priority, and the year of publication or latest draft

1. Preventive Maintenance and Facility Management Guide (Preventative Maintenance Handbook (1999)); [Draft revision started in 2005]
2. A/E Services handbook (1999-Draft)
3. Swimming Pool Guidelines (1997)
4. Outdoor Facility Guidelines (new)
5. Space Guidelines Handbook (1996)
6. Lifecycle Cost Analysis Handbook (1999)
7. Renewal & Replacement Guideline (2001)
8. Facility Appraisal Guide (1997)
9. Condition Survey (1997)
10. Project Delivery Handbook (2004)
11. Equipment Purchase Guideline (2005)
12. Educational Specification Handbook (2005); and Educational Specifications Supplement (2009)
13. Capital Project Administration Handbook (2007)
14. Site Selection Criteria Handbook (Updated December 2011)

Staff Goals and Objectives

Publications – Staff will continue to review and update department publications as time permits.

Staff Briefing
Bond Reimbursement and Grant Review Committee Meeting
04/20/12

Database review – The Facilities Section currently operates with six separate, but interlinked databases that were developed over a long period of time. The department is working on consolidation of the department’s Facilities databases.

Online application submittal –Staff will work with a database consultant to explore the possibility of developing an online CIP Application. Data entry online for the CIP process has the potential to save district’s time in application preparation, and costs associated with application submittal. Online application submittal will also save a significant amount of staff time during CIP review time and will allow staff to spend more time reviewing the substance of applications more thoroughly.

Staffing Update- As of April 9th, the Facilities Section is fully staffed.

State of Alaska
Department of Education and Early Development
Capital Improvement Projects
SB237 Debt Reimbursement Program - Effective 7/1/2010

<i>District</i>	<i>Project Number</i>	<i>Project Title</i>	<i>Dept Approval</i>	<i>Req Amt</i>	<i>Voter Amt</i>	<i>EED Approved Amt</i>	<i>Rate</i>	<i>EED Approved</i>	<i>Voter Approved</i>	<i>Comments</i>
Anchorage										
		Districtwide Design Projects	1/26/2011	\$5,100,000	\$0	\$5,100,000	60%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	not approved by voters 4/5/11
		Service High School Addition and Renewal	2/1/2011	\$38,000,000	\$0	\$38,000,000	60%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	not approved by voters 4/5/11
		Districtwide Building Life Extension Projects	1/26/2011	\$11,765,000	\$0	\$11,225,000	70%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	not approved by voters 4/5/11
	DR-11-108	Career and Vocational Education Upgrades	1/26/2011	\$17,000,000	\$17,000,000	\$17,000,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-128	Building Life Extension Projects	3/23/2012	\$22,730,000	\$22,730,000	\$22,730,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-129	Career Technology Education Upgrades	3/23/2012	\$8,425,000	\$8,475,000	\$8,425,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-130	Career Technology Education Additions and Chugiak HS Control Room Replacement	3/23/2012	\$15,390,000	\$15,340,000	\$15,390,000	60%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

<i>District</i>	<i>Project Number</i>	<i>Project Title</i>	<i>Dept Approval</i>	<i>Req Amt</i>	<i>Voter Amt</i>	<i>EED Apprvd Amt</i>	<i>Rate</i>	<i>EED Apprvd</i>	<i>Voter Apprvd</i>	<i>Comments</i>
	DR-12-131	Design Projects; Girdwood K-8 Airport Hts Elem	3/23/2012	\$2,900,000	\$2,900,000	\$2,900,000	60%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Anchorage Totals:				\$121,310,000	\$66,445,000	\$120,770,000				
<hr/>										
Cordova										
	DR-11-107	Cordova Jr/Sr HS ILP Building Project	4/6/2011	\$500,000	\$500,000	\$500,000	60%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Cordova Totals:				\$500,000	\$500,000	\$500,000				
<hr/>										
Fairbanks										
	DR-12-102	North Pole Middle School Roof Replacement	7/15/2011	\$3,890,000	\$3,890,000	\$3,890,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-103	North Pole Vocational Wing Renovation	7/15/2011	\$3,740,000	\$3,740,000	\$3,740,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-104	Ryan Renovation Phase II	7/15/2011	\$9,900,000	\$9,900,000	\$9,900,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	voters approved \$9,900,000 for Ryan Phase II
	DR-12-105	Salcha Roof and Envelope Upgrades	7/15/2011	\$1,140,000	\$1,140,000	\$1,140,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-106	Wood River Gym Upgrades	7/15/2011	\$1,620,000	\$1,620,000	\$1,620,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	voters approved \$10,390,000 for 4 projects

<i>District</i>	<i>Project Number</i>	<i>Project Title</i>	<i>Dept Approval</i>	<i>Req Amt</i>	<i>Voter Amt</i>	<i>EED Apprvd Amt</i>	<i>Rate</i>	<i>EED Apprvd</i>	<i>Voter Apprvd</i>	<i>Comments</i>
Fairbanks				\$20,290,000	\$20,290,000	\$20,290,000				
Totals:										
<hr/>										
Juneau City Borough										
	DR-11-101	Auke Bay Elementary Ground Source Heat Pump	12/17/2011	\$1,400,000	\$1,400,000	\$1,400,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		amends DR-11-101
	DR-11-101	Auke Bay Elementary School Renovation Project	9/3/2010	\$18,700,000	\$18,700,000	\$18,700,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Amended 12-17-11 for additional voter approved amount of \$1.400.000
	DR-12-101	Adair-Kennedy Synthetic Turf Replacement Project	8/2/2011	\$1,191,000	\$1,191,000	\$1,191,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Juneau City Borough				\$21,291,000	\$21,291,000	\$21,291,000				
Totals:										
<hr/>										
Kenai Peninsula										
	DR-11-100	Districtwide Roofing Project	7/16/2010	\$16,866,500	\$16,866,500	\$16,866,500	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Kenai Peninsula				\$16,866,500	\$16,866,500	\$16,866,500				
Totals:										
<hr/>										
Ketchikan										
	DR-11-106	Ketchikan High School Roof Replacement	12/22/2010	\$3,400,000	\$3,400,000	\$3,400,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

<i>District</i>	<i>Project Number</i>	<i>Project Title</i>	<i>Dept Approval</i>	<i>Req Amt</i>	<i>Voter Amt</i>	<i>EED Approved Amt</i>	<i>Rate</i>	<i>EED Approved</i>	<i>Voter Approved</i>	<i>Comments</i>
Ketchikan				\$3,400,000	\$3,400,000	\$3,400,000				
Totals:										
<hr/>										
Kodiak Island										
	DR-12-100	Kodiak High School Renovation/Addition	2/1/2012	\$76,310,000	\$76,310,000	\$76,310,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Kodiak Island				\$76,310,000	\$76,310,000	\$76,310,000				
Totals:										
<hr/>										
Mat-Su Borough										
	DR-11-102	Fire Alarm System Replacement, 10 Schools	11/17/2010	\$3,410,038	\$3,410,038	\$3,410,038	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-11-103	Roof Replacement, 7 Schools and Administration Building	11/17/2010	\$26,956,050	\$26,956,050	\$26,956,050	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-11-104	Flooring Replacement, 8 Schools	11/17/2010	\$3,118,963	\$3,118,963	\$3,118,963	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-11-105	ADA Parking and Access, 3 Schools	11/17/2010	\$300,000	\$300,000	\$300,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-107	Big Lake Elementary School Renovation	2/29/2012	\$3,000,000	\$3,000,000	\$3,000,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-108	Palmer High School Renovation	2/29/2012	\$5,500,000	\$5,500,000	\$5,500,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

<i>District</i>	<i>Project Number</i>	<i>Project Title</i>	<i>Dept Approval</i>	<i>Req Amt</i>	<i>Voter Amt</i>	<i>EED Approved Amt</i>	<i>Rate</i>	<i>EED Approved</i>	<i>Voter Approved</i>	<i>Comments</i>
	DR-12-109	Palmer HS/Houston HS Athletic Field Improvements	2/29/2012	\$6,000,000	\$6,000,000	\$6,000,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-110	Wasilla HS/Houston HS Athletic Field Improvements	2/29/2012	\$6,000,000	\$6,000,000	\$6,000,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-111	Fire Alarm Replacement, 3 Schools	2/29/2012	\$600,000	\$600,000	\$600,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-112	Restroom Renovation, 6 Schools	2/29/2012	\$863,000	\$863,000	\$863,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-113	Flooring Replacement, 7-Schools	2/29/2012	\$685,000	\$685,000	\$685,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-114	New Knik Area Middle/High School	2/29/2012	\$65,455,000	\$65,455,000	\$65,455,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-115	Valley Pathways School	2/29/2012	\$22,515,000	\$22,515,000	\$22,515,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-116	Mat-Su Day School	2/29/2012	\$12,426,000	\$12,426,000	\$12,426,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-117	Mat-Su Career & Tech HS Addition	2/29/2012	\$16,150,000	\$16,150,000	\$16,150,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-118	Iditarod Elementary School Replacement	2/29/2012	\$25,214,000	\$25,214,000	\$25,214,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

<i>District</i>	<i>Project Number</i>	<i>Project Title</i>	<i>Dept Approval</i>	<i>Req Amt</i>	<i>Voter Amt</i>	<i>EED Approved Amt</i>	<i>Rate</i>	<i>EED Approved</i>	<i>Voter Approved</i>	<i>Comments</i>
	DR-12-119	New Knik Area Elementary School	2/29/2012	\$26,529,000	\$26,529,000	\$26,529,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-120	Districtwide Energy Upgrades	2/29/2012	\$3,162,000	\$3,162,000	\$3,162,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-121	Districtwide Physical Education Improvements	2/29/2012	\$1,350,000	\$1,350,000	\$1,350,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-122	Districtwide HVAC Upgrades	2/29/2012	\$7,100,000	\$7,100,000	\$7,100,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-123	Emergency Power Generators & Switch Gear, 9-Schools	2/29/2012	\$2,600,000	\$2,600,000	\$2,600,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-124	Houston HS Exterior Envelope Upgrades	2/29/2012	\$600,000	\$600,000	\$600,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-125	Houston MS/Palmer HS Locker Replacement	2/29/2012	\$335,000	\$335,000	\$335,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-126	Districtwide ADA Upgrades	2/29/2012	\$1,500,000	\$1,500,000	\$1,500,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-12-127	Athletic Field Improvements	2/29/2012	\$6,461,000	\$6,461,000	\$6,461,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Mat-Su Borough Totals:				\$247,830,051	\$247,830,051	\$247,830,051				

<i>District</i>	<i>Project Number</i>	<i>Project Title</i>	<i>Dept Approval</i>	<i>Req Amt</i>	<i>Voter Amt</i>	<i>EED Approved Amt</i>	<i>Rate</i>	<i>EED Approved</i>	<i>Voter Approved</i>	<i>Comments</i>
Grand Totals:				\$507,797,551	\$452,932,551	\$507,257,551				
Total of Projects Both Voter and EED Approved:			\$452,932,551							
<i>(This is a total of the EED Approved Amount.)</i>										



PM State-of-the-State

Report of EED Maintenance Assessments and Related Data

AS OF 04/13/2012

District	Date of Last Visit	Year of Next Visit	Approved FAIS	Maintenance Management	Energy	Custodial	Training	R&R Schedule	Maint. Program	Status	Program Name	CIP Eligible	Certification Pending
Alaska Gateway	4/4/2012	2017	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Aleutian Region	8/31/2005	2016	Y	N	N	Y	N	Y	I	2 of 5	School Dude	No	No
Aleutians East	10/8/2009	2015	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Anchorage	7/17/2008	2013		Y	Y	Y	Y	Y	C	5 of 5	Maximo	Yes	No
Annette Island	3/17/2011	2016	Y	Y	Y	Y	Y	Y	I	5 of 5	School Dude	Yes	No
Bering Strait	4/3/2009	2014	Y	Y	Y	Y	Y	Y	C	5 of 5	TMA	Yes	No
Bristol Bay Borough	2/27/2008	2013		Y	Y	Y	Y	Y	C	5 of 5	QQuest	Yes	No
Chatham	2/16/2012	2017	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Chugach	1/16/2008	2013		Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Copper River	4/2/2012	2017	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Cordova	11/16/2009	2015	Y	Y	Y	Y	Y	Y	I	5 of 5	School Dude	Yes	No
Craig City	2/28/2012	2017	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Delta/Greely	4/6/2012	2017	Y	Y	Y	N	N	Y	I	3 of 5	School Dude	Yes	No
Denali Borough	12/7/2009	2015	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Dillingham City	4/10/2006	2016	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Fairbanks	7/15/2008	2013		Y	Y	Y	Y	Y	C	5 of 5	JW Edward	Yes	No
Galena	7/19/2007	2013		Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Haines	11/3/2010	2016	Y	Y	Y	Y	Y	Y	I	5 of 5	School Dude	Yes	No
Hoonah City	3/21/2012	2017	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Hydaburg City	3/1/2012	2017							S		Maximo*		Yes[#]
Iditarod Area	4/14/2009	2014	Y	Y	Y	Y	Y	Y	I	5 of 5	School Dude	Yes	No
Juneau	11/10/2011	2016	Y	Y	Y	Y	Y	Y	C	5 of 5	Maximo	Yes	No
Kake City	5/5/2010	2015	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Kashunamiut	8/27/2009	2015	N	N	N	N	N	N	S	0 of 5	Maximo*	No	Yes
Kenai Peninsula	1/14/2008	2013		Y	Y	Y	Y	Y	I	5 of 5	School Dude	Yes	No
Ketchikan	3/15/2011	2016	Y	Y	Y	Y	Y	Y	I	5 of 5	School Dude	Yes	No
Klawock City	2/29/2012	2017	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Kodiak Island	1/10/2009	2015	Y	Y	Y	Y	Y	Y	I	5 of 5	School Dude	Yes	No
Kuspuk	1/11/2010	2015	Y	Y	Y	Y	Y	Y	I	5 of 5	School Dude	Yes	No
Lake & Peninsula	2/25/2008	2013		Y	Y	Y	Y	Y	C	5 of 5	QQuest	Yes	No
Lower Kuskokwim	3/10/2009	2014	Y	Y	Y	Y	Y	Y	C	5 of 5	D	Yes	No
Lower Yukon	3/11/2009	2014	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Mat-Su Borough	12/10/2006	2012		Y	Y	Y	Y	Y	D	5 of 5	C	Yes	Yes
Nenana City	12/14/2009	2015	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No



PM State-of-the-State

Report of EED Maintenance Assessments and Related Data

AS OF 04/13/2012

District	Date of Last Visit	Year of Next Visit	Approved FAIS	Maintenance Management	Energy	Custodial	Training	R&R Schedule	Maint. Program	Status	Program Name	CIP Eligible	Certification Pending
Nome City	1/28/2007	2012		Y	Y	Y	Y	Y	S	5 of 5	. Maximo*	Yes	Yes
North Slope Borough	7/17/2007	2013		Y	Y	Y	Y	Y	C	5 of 5	Maximo	Yes	No
Northwest Arctic	12/7/2011	2016	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Pelican City	5/22/2008	2013		Y	Y	Y	Y	Y	I	5 of 5	School Dude**	Yes	No
Petersburg City	3/30/2011	2016	Y	Y	Y	Y	Y	Y	I	5 of 5	School Dude	Yes	No
Pribilof Island	4/5/2010	2015	Y	N	Y	Y	N	Y	S	3 of 5	Maximo*	No	Yes
Sitka City Borough	2/2/2012	2017	Y	Y	Y	Y	Y	Y	I	5 of 5	School Dude	Yes	Yes
Skagway City	5/28/2008	2014		Y	Y	Y	Y	Y	I	5 of 5	MC	Yes	No
Southeast Island	6/28/2007	2012		Y	Y	Y	Y	Y	I	5 of 5	School Dude	Yes	Yes
Southwest Region	2/17/2011	2016	Y	Y	Y	Y	Y	Y	I	5 of 5	Maximo*	Yes	No
St Mary's	3/13/2009	2014	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Tanana City	12/9/2009	2015	N	Y	Y	Y	N	Y	S	4 of 5	Maximo*	No	Yes
Unalaska City	10/12/2009	2015	Y	Y	Y	Y	Y	Y	I	5 of 5	School Dude	Yes	No
Valdez City	12/17/2007	2013		Y	Y	Y	Y	Y	C	5 of 5	Micro-Main	Yes	No
Wrangell City	3/31/2011	2016	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Yakutat City	11/9/2009	2015	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Yukon Flats	4/9/2009	2014	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Yukon-Koyukuk	4/7/2009	2014	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No
Yupiit	8/24/2009	2015	Y	Y	Y	Y	Y	Y	S	5 of 5	Maximo*	Yes	No

In Compliance

36

49

50

50

47

51

47

49

Legend

N = Not in compliance

I = Commercial IMMS

Y = In full compliance

C = Commercial CMMS

NP = Not participating

D = In-house District Program

U = Undecided

* = Use Maximo through SERCC Service Contract

S = SERRC supported

Bold - Site visit pending

FAIS = Fixed Asset Inventory System

- Hydaburg has been visited as of the date of this report, but the report has not yet been completed so certification remains pending and there is not a CIP status yet.

State of Alaska
 Department of Education and Early Development
 Capital Improvement Projects (FY2013)
 Major Maintenance Grant Fund

Final List

Jan 27	Dec 20	Nov 7	School District	Project Name	Amount Requested	Eligible Amount	Prior Funding	EED Recommended Amount	Participating Share	State Share	Aggregate Amount
1	1	1	Chugach	Whittier K-12 School Heating System Upgrade	\$832,372	\$832,372	\$0	\$832,372	\$16,647	\$815,725	\$815,725
2	2	2	Yukon-Koyukuk	Kaltag K-12 School Mechanical and Electrical Upgrades	\$870,577	\$870,577	\$0	\$870,577	\$17,412	\$853,165	\$1,668,890
3	3	3	Kake City	Kake High School Kitchen Renovation	\$31,401	\$31,401	\$0	\$31,401	\$6,280	\$25,121	\$1,694,011
4	4	4	Annette Island	Metlakatla High School Annex Roof Replacement	\$42,189	\$42,189	\$0	\$42,189	\$844	\$41,345	\$1,735,356
5	5	5	Chatham	Angoon High School Mechanical Upgrades	\$48,794	\$48,794	\$0	\$48,794	\$976	\$47,818	\$1,783,174
6	6	6	Yukon-Koyukuk	Merrelina A Kangas K-12 School Renovation, Ruby	\$5,181,920	\$5,181,920	\$0	\$5,181,920	\$103,638	\$5,078,282	\$6,861,456
7	7	7	Kake City	Kake High School Shower Repairs	\$54,006	\$54,006	\$0	\$54,006	\$10,801	\$43,205	\$6,904,661
8	8	8	Kake City	Kake Elementary School Mechanical Ventilation Completion	\$74,000	\$468,029	\$394,029	\$74,000	\$14,800	\$59,200	\$6,963,861
9	9	9	Bering Strait	Shaktoolik K-12 School Renovation	\$9,363,631	\$9,363,631	\$0	\$9,363,631	\$187,273	\$9,176,358	\$16,140,219
10	10	10	Bristol Bay Borough	Bristol Bay School Voc Ed Wing Renovation	\$2,366,762	\$2,366,762	\$0	\$2,366,762	\$828,367	\$1,538,395	\$17,678,614
11	11	11	Craig City	Craig Elementary & Middle School Alternative Wood Heat Installation	\$179,080	\$179,080	\$0	\$179,080	\$17,908	\$161,172	\$17,839,786
12	12	12	Lower Kuskokwim	Bethel Campus Water, Sewer Line and Utilidor Repairs	\$6,116,791	\$6,116,791	\$0	\$6,116,791	\$122,336	\$5,994,455	\$23,834,241
13	13	13	Aleutians East	Akutan K-12 School Siding Replacement	\$102,500	\$102,500	\$0	\$102,500	\$35,875	\$66,625	\$23,900,866
14	14	14	Aleutians East	Sand Point K-12 School Pool Major Maintenance	\$111,960	\$111,960	\$0	\$111,960	\$39,186	\$72,774	\$23,973,640
15	15	15	Lower Kuskokwim	Tununak K-12 School Major Maintenance	\$20,216,706	\$20,216,706	\$0	\$20,216,706	\$404,334	\$19,812,372	\$43,786,012
16	16	16	Anchorage	Districtwide Roof Replacements & Structural Upgrades, 5 Schools	\$8,550,000	\$8,550,000	\$0	\$8,550,000	\$2,565,000	\$5,985,000	\$49,771,012
17	17	17	Lower Kuskokwim	Bethel Campus Boiler Replacement	\$2,111,880	\$2,111,880	\$0	\$2,111,880	\$42,238	\$2,069,642	\$51,840,654
18	18	18	Lower Kuskokwim	Nunapitchuk Fire Alarm Replacement	\$619,790	\$619,790	\$0	\$619,790	\$12,396	\$607,394	\$52,448,048
19	19	19	Northwest Arctic	Buckland K-12 School Heating System Improvements	\$377,828	\$377,828	\$0	\$377,828	\$75,566	\$302,262	\$52,750,310
20	20	20	Annette Island	Metlakatla Elementary School Renovation	\$13,192,096	\$11,739,818	\$0	\$11,739,818	\$234,796	\$11,505,022	\$64,255,332
21	21	21	Craig City	Craig Elementary School Door And Flooring Replacement	\$139,745	\$139,745	\$0	\$139,745	\$13,974	\$125,771	\$64,381,103
22	22	22	Chatham	Tenakee K-12 School Roof Replacement	\$548,495	\$548,495	\$0	\$548,495	\$10,970	\$537,525	\$64,918,628

State of Alaska
 Department of Education and Early Development
 Capital Improvement Projects (FY2013)
 Major Maintenance Grant Fund

Final List

Jan 27	Dec 20	Nov 7	School District	Project Name	Amount Requested	Eligible Amount	Prior Funding	EED Recommended Amount	Participating Share	State Share	Aggregate Amount
23	23	23	Kuspuk	Jack Egnaty Sr. K-12 School Roof Replacement, Sleetmute	\$1,204,771	\$1,204,771	\$0	\$1,204,771	\$24,095	\$1,180,676	\$66,099,304
24	24	24	Southeast Island	Thorne Bay K-12 School Gymnasium Structural Repair	\$170,488	\$170,488	\$0	\$170,488	\$3,410	\$167,078	\$66,266,382
25	25	25	Annette Island	Metlakatla Elementary School Underground Fuel Tank Replacement	\$354,183	\$354,183	\$0	\$354,183	\$7,084	\$347,099	\$66,613,481
26	26	26	Saint Marys	St. Mary's Campus Upgrades	\$3,413,214	\$3,413,214	\$0	\$3,413,214	\$170,661	\$3,242,553	\$69,856,034
27	27	27	Ketchikan	Districtwide Electric Boiler Installation	\$5,069,554	\$5,069,554	\$0	\$5,069,554	\$1,520,866	\$3,548,688	\$73,404,722
28	28	28	Yukon-Koyukuk	Andrew K Demoski K-12 School Renovation, Nulato	\$12,466,642	\$12,466,642	\$0	\$12,466,642	\$249,333	\$12,217,309	\$85,622,031
29	29	29	Valdez City	Valdez High School Fire Alarm And Sprinkler Replacement	\$1,105,173	\$1,105,173	\$0	\$1,105,173	\$386,811	\$718,362	\$86,340,393
30	30	30	Lower Kuskokwim	Nunapitchuk Wastewater Upgrades	\$1,102,789	\$1,102,789	\$0	\$1,102,789	\$22,056	\$1,080,733	\$87,421,126
31	31	31	Lower Yukon	Hooper Bay K-12 School Electrical Upgrades	\$44,046	\$44,046	\$0	\$44,046	\$881	\$43,165	\$87,464,291
32	32	32	Anchorage	Districtwide Lighting Upgrades, 2 Schools	\$2,350,000	\$2,350,000	\$0	\$2,350,000	\$705,000	\$1,645,000	\$89,109,291
33	33	33	Valdez City	Hermon Hutchens Elementary Fire Alarm, Clock, And Intercom Replacement	\$514,378	\$514,378	\$0	\$514,378	\$180,032	\$334,346	\$89,443,637
34	34	43	Fairbanks	Ryan Middle School Renovation, Phase 3	\$40,355,648	\$40,355,648	\$0	\$40,355,648	\$12,106,694	\$28,248,954	\$117,692,591
35	35	34	Galena	Sidney Huntington High School Floor Renovation	\$555,014	\$555,014	\$0	\$555,014	\$27,751	\$527,263	\$118,219,854
36	36	35	Haines	Haines Voc Ed Building Mechanical Upgrades	\$1,569,213	\$1,569,213	\$0	\$1,569,213	\$549,225	\$1,019,988	\$119,239,842
37	37	36	Nenana City	Nenana K-12 School ADA Access Improvements	\$815,898	\$815,898	\$0	\$815,898	\$40,795	\$775,103	\$120,014,945
38	38	37	Nenana City	Nenana K-12 School Major Maintenance	\$2,902,149	\$2,902,149	\$0	\$2,902,149	\$145,107	\$2,757,042	\$122,771,987
39	39	38	Lower Kuskokwim	Mekoryuk Wastewater Upgrades	\$905,761	\$905,761	\$0	\$905,761	\$18,115	\$887,646	\$123,659,633
40	40	39	Yukon Flats	Venetie Generator Building Renovation	\$2,508,487	\$2,508,487	\$0	\$2,508,487	\$50,170	\$2,458,317	\$126,117,950
41	41	40	Craig City	Craig Middle School Renovation	\$11,698,719	\$11,576,635	\$0	\$11,576,635	\$1,157,663	\$10,418,972	\$136,536,922
42	42	41	Annette Island	Metlakatla High School Kitchen Renovation	\$907,687	\$907,687	\$0	\$907,687	\$18,154	\$889,533	\$137,426,455
43	43	42	Haines	Haines High School And Pool Locker Room Renovation	\$1,969,699	\$1,969,699	\$0	\$1,969,699	\$689,395	\$1,280,304	\$138,706,759
44	44	44	Bristol Bay Borough	Bristol Bay School Boiler Installation	\$559,385	\$559,385	\$0	\$559,385	\$195,785	\$363,600	\$139,070,359

State of Alaska
 Department of Education and Early Development
 Capital Improvement Projects (FY2013)
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Final List

Jan 27	Dec 20	Nov 7	School District	Project Name	Amount Requested	Eligible Amount	Prior Funding	EED Recommended Amount	Participating Share	State Share	Aggregate Amount
45	45	45	Anchorage	Districtwide Mechanical Projects, 8 Schools	\$8,900,000	\$8,900,000	\$0	\$8,900,000	\$2,670,000	\$6,230,000	\$145,300,359
46	46	46	Galena	Galena Interior Learning Academy Composite Building Roof Renovation	\$1,039,038	\$1,039,038	\$0	\$1,039,038	\$51,952	\$987,086	\$146,287,445
47	47	47	Denali Borough	Cantwell School Sprinkler Installation And Fire Alarm Upgrade	\$1,251,952	\$1,251,952	\$0	\$1,251,952	\$250,390	\$1,001,562	\$147,289,007
48	48	48	Copper River	Copper Center Elementary School Renovation	\$1,286,973	\$1,286,973	\$0	\$1,286,973	\$25,739	\$1,261,234	\$148,550,241
49	49	49	Anchorage	Districtwide Communication System Upgrades, 3 Schools	\$1,030,000	\$1,030,000	\$0	\$1,030,000	\$309,000	\$721,000	\$149,271,241
50	50	50	Yukon-Koyukuk	Kaltag K-12 School Kitchen Renovation And Generator Installation	\$949,318	\$949,318	\$0	\$949,318	\$18,986	\$930,332	\$150,201,573
51	51	51	Southwest Region	Twin Hills K-8 School Renovation	\$2,312,424	\$2,312,424	\$0	\$2,312,424	\$46,248	\$2,266,176	\$152,467,749
52	52	52	Yukon Flats	Chalkyitsik Water Tank Replacement	\$1,430,834	\$1,185,789	\$0	\$1,185,789	\$23,716	\$1,162,073	\$153,629,822
53	53	53	Anchorage	Districtwide Fire Alarm Upgrades, 7 Schools	\$3,670,000	\$3,670,000	\$0	\$3,670,000	\$1,101,000	\$2,569,000	\$156,198,822
54	54	54	Southeast Island	Thorne Bay K-12 School Fire Suppression System Replacement	\$1,247,523	\$1,247,523	\$0	\$1,247,523	\$24,950	\$1,222,573	\$157,421,395
55	55	55	Annette Island	Metlakatla High School Annex Renovation	\$676,836	\$676,836	\$0	\$676,836	\$13,537	\$663,299	\$158,084,694
56	56	56	Kenai Peninsula	Districtwide School Security Systems	\$1,335,509	\$1,335,509	\$0	\$1,335,509	\$467,428	\$868,081	\$158,952,775
57	57	57	Chatham	Klukwan K-12 School Major Maintenance	\$4,052,845	\$4,052,845	\$0	\$4,052,845	\$81,057	\$3,971,788	\$162,924,563
58	58	58	Kenai Peninsula	Districtwide Window Replacements, 5 Schools	\$2,046,045	\$2,046,045	\$0	\$2,046,045	\$716,116	\$1,329,929	\$164,254,492
59	59	59	Alaska Gateway	Tanacross k-8 School Renovation	\$3,511,467	\$3,511,467	\$0	\$3,511,467	\$70,229	\$3,441,238	\$167,695,730
60	60	60	Copper River	Slana K-12 School Renovation	\$771,504	\$771,504	\$0	\$771,504	\$15,430	\$756,074	\$168,451,804
61	61	61	Kuspuk	Districtwide Heating System Upgrades	\$9,866,280	\$9,866,280	\$0	\$9,866,280	\$197,326	\$9,668,954	\$178,120,758
62	62	62	Denali Borough	Anderson K-12 School Siding Replacement	\$771,192	\$771,192	\$0	\$771,192	\$154,238	\$616,954	\$178,737,712
63	63	63	Fairbanks	Barnette Magnet School Renovation, Phase 4	\$8,826,047	\$8,226,047	\$0	\$8,226,047	\$2,467,814	\$5,758,233	\$184,495,945
64	64	64	Kake City	Kake High School Plumbing Replacement	\$412,163	\$412,163	\$0	\$412,163	\$82,433	\$329,730	\$184,825,675
65	65	65	Yukon Flats	Fort Yukon Soil Remediation & Fuel Tank Replacement	\$9,177,551	\$8,449,174	\$0	\$8,449,174	\$168,983	\$8,280,191	\$193,105,866
66	66	66	Kenai Peninsula	Districtwide Locker Replacement, 9 Schools	\$1,000,000	\$1,000,000	\$0	\$1,000,000	\$350,000	\$650,000	\$193,755,866

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67	67	67	Lower Yukon	Scammon Bay K-12 School Siding Replacement	\$649,013	\$649,013	\$0	\$649,013	\$12,980	\$636,033	\$194,391,899
68	68	68	Ketchikan	Ketchikan High School Stage Lighting System Replacement	\$301,910	\$301,910	\$0	\$301,910	\$90,573	\$211,337	\$194,603,236
69	69	69	Petersburg City	Petersburg Elementary School Exterior Wall Renovation	\$1,052,273	\$1,052,273	\$0	\$1,052,273	\$315,682	\$736,591	\$195,339,827
70	70	70	Southeast Island	Port Alexander K-12 School Domestic Water System Pipe Replacement	\$83,795	\$83,795	\$0	\$83,795	\$1,676	\$82,119	\$195,421,946
71	71	71	Bering Strait	Districtwide Fuel Tank Demolition	\$917,417	\$917,417	\$0	\$917,417	\$18,348	\$899,069	\$196,321,015
72	72	72	Yakutat City	Yakutat Schools Mechanical System Upgrades	\$5,845,020	\$5,845,020	\$0	\$5,845,020	\$1,753,506	\$4,091,514	\$200,412,529
73	73	73	Yakutat City	Yakutat High School Exterior Upgrades	\$1,806,781	\$1,806,781	\$0	\$1,806,781	\$542,034	\$1,264,747	\$201,677,276
74	74	74	Denali Borough	Door Replacement, 3 Schools	\$916,890	\$916,890	\$0	\$916,890	\$183,378	\$733,512	\$202,410,788
75	75	75	Fairbanks	North Pole Middle School Mechanical Systems & Energy Efficiency Upgrades	\$6,026,793	\$3,982,349	\$0	\$3,982,349	\$1,194,705	\$2,787,644	\$205,198,432
76	76	76	Petersburg City	Districtwide Boiler Replacement	\$2,978,573	\$626,160	\$0	\$626,160	\$187,848	\$438,312	\$205,636,744
77	77	77	Ketchikan	Districtwide Major Maintenance	\$1,135,691	\$1,135,691	\$0	\$1,135,691	\$340,707	\$794,984	\$206,431,728
78	78	78	Fairbanks	Tanana Middle School Roof Replacement	\$4,745,701	\$4,177,588	\$0	\$4,177,588	\$1,253,276	\$2,924,312	\$209,356,040
79	79	79	Hoonah City	Hoonah City Schools Major Maintenance	\$4,715,008	\$2,852,618	\$0	\$2,852,618	\$855,785	\$1,996,833	\$211,352,873
80	80	80	Yukon Flats	Venetie Soil Remediation & Fuel Tank Replacement	\$1,578,822	\$1,578,822	\$0	\$1,578,822	\$31,576	\$1,547,246	\$212,900,119
81	81	81	Kodiak Island	Kodiak Middle School Elevator Controls Replacement	\$75,992	\$75,992	\$0	\$75,992	\$22,798	\$53,194	\$212,953,313
82	82	82	Southwest Region	Aleknagik K-8 School Renovation	\$4,230,333	\$4,230,333	\$0	\$4,230,333	\$84,607	\$4,145,726	\$217,099,039
83	83	83	Southeast Island	Thorne Bay K-12 School Underground Storage Tank Replacement	\$290,054	\$290,054	\$0	\$290,054	\$5,801	\$284,253	\$217,383,292
84	84	84	Anchorage	Chugiak & East High Schools Sprinkler Upgrades	\$4,405,000	\$4,405,000	\$0	\$4,405,000	\$1,321,500	\$3,083,500	\$220,466,792
85	85	85	Alaska Gateway	Northway K-12 School Renovation	\$2,095,875	\$2,095,875	\$0	\$2,095,875	\$41,917	\$2,053,958	\$222,520,750
86	86	86	Petersburg City	Petersburg High School Fire Alarm System Replacement	\$347,284	\$347,284	\$0	\$347,284	\$104,185	\$243,099	\$222,763,849
87	87	87	Nenana City	Nenana K-12 School Solar Energy Project And Circulating Pump Upgrade	\$462,371	\$462,371	\$0	\$462,371	\$23,119	\$439,252	\$223,203,101

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88	88	88	Kodiak Island	Underground Storage Tank Replacements, 5 Sites (Kodiak Hs, Chiniak School, East Elementary School, Karluk School, Kodiak Ms)	\$1,746,276	\$1,746,276	\$0	\$1,746,276	\$523,883	\$1,222,393	\$224,425,494
89	89	89	Southeast Island	Thorne Bay K-12 School Mechanical Control Upgrades	\$1,209,776	\$1,209,776	\$0	\$1,209,776	\$24,196	\$1,185,580	\$225,611,074
90	90	90	Anchorage	Districtwide General Building Upgrades, 3 Schools	\$1,405,000	\$1,405,000	\$0	\$1,405,000	\$421,500	\$983,500	\$226,594,574
91	91	91	Kodiak Island	Fire Alarm Panel Upgrades, 3 Sites (Kodiak Hs, Kodiak Ms, Karluk School)	\$134,688	\$134,688	\$0	\$134,688	\$40,406	\$94,282	\$226,688,856
92	92	92	Yukon Flats	Cruikshank School Soil Remediation & Fuel Tank Replacement, Beaver	\$1,198,221	\$1,198,221	\$0	\$1,198,221	\$23,964	\$1,174,257	\$227,863,113
93	93	93	Kodiak Island	Replace Flooring, 3 Sites (East Elementary, Peterson Elementary And Ouzinkie School)	\$1,363,508	\$1,363,508	\$0	\$1,363,508	\$409,052	\$954,456	\$228,817,569
94	94	94	Yakutat City	Yakutat High School Locker Room Renovation	\$479,454	\$479,454	\$0	\$479,454	\$143,836	\$335,618	\$229,153,187
95	95	95	Petersburg City	Petersburg Elementary Lunchroom Renovation	\$1,563,159	\$1,563,159	\$0	\$1,563,159	\$468,948	\$1,094,211	\$230,247,398
96	96	96	Southeast Island	Port Alexander and Thorne Bay K-12 School Roof Replacement	\$3,874,337	\$3,874,337	\$0	\$3,874,337	\$77,487	\$3,796,850	\$234,044,248
97	97	97	Southeast Island	Port Protection K-12 Gymnasium Relocation And Foundation	\$172,426	\$172,426	\$0	\$172,426	\$3,449	\$168,977	\$234,213,225
98	98	98	Petersburg City	Petersburg Middle/High Schol Underground Fuel Tanks Replacement	\$600,932	\$600,932	\$0	\$600,932	\$180,280	\$420,652	\$234,633,877
99	99	99	Lake & Peninsula	Newhalen Kitchen Renovation	\$206,097	\$206,097	\$0	\$206,097	\$41,219	\$164,878	\$234,798,755
100	100	100	Alaska Gateway	Eagle K-12 School Renovation	\$4,390,349	\$4,390,349	\$0	\$4,390,349	\$87,807	\$4,302,542	\$239,101,297
101	101	101	Southeast Island	Thorne Bay and Port Protection Gymnasium Lighting Upgrades	\$557,244	\$557,244	\$0	\$557,244	\$11,145	\$546,099	\$239,647,396
102	102	102	Anchorage	Districtwide Security System Upgrades, 7 Elementary Schools	\$1,115,000	\$1,115,000	\$0	\$1,115,000	\$334,500	\$780,500	\$240,427,896
103	103	103	Kake City	Kake Elementary School Mechanical Controls	\$74,970	\$74,970	\$0	\$74,970	\$14,994	\$59,976	\$240,487,872
104	104	104	Kodiak Island	HVAC Compont Replacements, 2 Sites (Larsen Bay School and Karluk School)	\$1,306,425	\$1,306,425	\$0	\$1,306,425	\$391,927	\$914,498	\$241,402,370
105	105	105	Petersburg City	Districtwide Electrical Upgrades	\$925,949	\$925,949	\$0	\$925,949	\$277,785	\$648,164	\$242,050,534
106	106	106	Yukon Flats	Stevens Village Soil Remediation & Fuel Tank Replacement	\$1,068,031	\$1,068,031	\$0	\$1,068,031	\$21,361	\$1,046,670	\$243,097,204

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107	107	107	Valdez City	Districtwide Technology Upgrades	\$3,206,600	\$3,206,600	\$0	\$3,206,600	\$1,122,310	\$2,084,290	\$245,181,494
108	108	108	Juneau City Borough	Mendenhall River Elementary Renovation	\$5,300,000	\$5,300,000	\$0	\$5,300,000	\$1,855,000	\$3,445,000	\$248,626,494
109	109	109	Fairbanks	Arctic Light Elementary Lighting Renovation	\$1,806,390	\$1,806,390	\$0	\$1,806,390	\$541,917	\$1,264,473	\$249,890,967
110	110	110	Fairbanks	Administrative Center Air Conditioning Units Replacement	\$1,559,001	\$1,559,001	\$0	\$1,559,001	\$467,700	\$1,091,301	\$250,982,268
111	111	111	Juneau City Borough	Juneau-Douglas High School Main Gymnasium Upgrades	\$500,000	\$500,000	\$0	\$500,000	\$175,000	\$325,000	\$251,307,268
112	112	112	Petersburg City	Districtwide Digital HVAC Controls	\$2,172,034	\$2,172,034	\$0	\$2,172,034	\$651,610	\$1,520,424	\$252,827,692
113	113	113	Kodiak Island	Exterior Renovations, 3 Sites (North Star Elementary, East Elementary, And Port Lions School)	\$576,711	\$576,711	\$0	\$576,711	\$173,013	\$403,698	\$253,231,390
114	114	114	Petersburg City	Petersburg Elementary Plumbing System Replacement	\$736,401	\$736,401	\$0	\$736,401	\$220,920	\$515,481	\$253,746,871
115	115	115	Fairbanks	Pearl Creek Elementary Flooring Replacement & Classroom Upgrades	\$4,746,852	\$4,633,832	\$0	\$4,633,832	\$1,390,150	\$3,243,682	\$256,990,553
116	116	116	Southwest Region	Manokotak K-12 School Sewer And Water Upgrades	\$250,830	\$250,830	\$0	\$250,830	\$5,017	\$245,813	\$257,236,366
117	117	117	Fairbanks	Weller Elementary Flooring Replacement & Classroom Upgrades	\$4,247,926	\$4,148,365	\$0	\$4,148,365	\$1,244,509	\$2,903,856	\$260,140,222
118	118	118	Juneau City Borough	District Maintenance Facility Renovation	\$2,000,000	\$2,000,000	\$0	\$2,000,000	\$700,000	\$1,300,000	\$261,440,222
119	119	119	Lake & Peninsula	Chignik Bay K-12 School Roof Replacement	\$2,197,880	\$2,096,441	\$0	\$2,096,441	\$419,288	\$1,677,153	\$263,117,375
120	120	120	Juneau City Borough	Dzantiki'l Heeni Middle School Renovation	\$6,000,000	\$6,000,000	\$0	\$6,000,000	\$2,100,000	\$3,900,000	\$267,017,375
TOTALS:					\$332,593,985	\$322,698,850	\$394,029	\$322,304,821	\$55,287,446	\$267,017,375	

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1	1	1	Lower Yukon	Emmonak K-12 School Addition/Renovation	\$38,323,106	\$38,323,106	\$1,530,612	\$36,792,494	\$735,850	\$36,056,644	\$36,056,644
2	2	2	Southwest Region	Koliganek K-12 School Replacement	\$24,752,572	\$25,425,321	\$0	\$25,425,321	\$508,506	\$24,916,815	\$60,973,459
3	3	3	Lower Kuskokwim	Nightmute School Renovation/Addition	\$33,638,062	\$33,638,062	\$0	\$33,638,062	\$672,761	\$32,965,301	\$93,938,760
4	4	4	Lower Kuskokwim	Kwethluk K-12 Replacement School	\$42,009,432	\$42,009,432	\$0	\$42,009,432	\$840,189	\$41,169,243	\$135,108,003
5	5	5	Yukon-Koyukuk	Jimmy Huntington K-12 School Renovation and Addition, Huslia	\$16,756,899	\$16,756,899	\$0	\$16,756,899	\$335,138	\$16,421,761	\$151,529,764
6	6	6	Saint Marys	Andreafski High School Gym Construction	\$13,798,293	\$13,798,293	\$0	\$13,798,293	\$689,915	\$13,108,378	\$164,638,142
7	7	7	Lake & Peninsula	Port Alsworth Classroom Expansion	\$14,443,079	\$14,443,079	\$0	\$14,443,079	\$2,888,616	\$11,554,463	\$176,192,605
8	8	8	Kuspuk	Auntie Marie Nicoli Elementary School Replacement, Aniak	\$13,894,691	\$13,894,691	\$0	\$13,894,691	\$277,894	\$13,616,797	\$189,809,402
9	9	9	Galena	Galena Interior Learning Academy Iditarod Classroom Conversion	\$13,818,143	\$13,818,143	\$0	\$13,818,143	\$690,907	\$13,127,236	\$202,936,638
10	10	10	Kuspuk	Johnnie John Sr. K-12 Replacement School, Crooked Creek	\$12,991,743	\$12,991,743	\$0	\$12,991,743	\$259,835	\$12,731,908	\$215,668,546
11	11	11	Lower Yukon	Pilot Station Access Road Relocation	\$618,558	\$618,558	\$0	\$618,558	\$12,371	\$606,187	\$216,274,733
12	12	12	Lower Kuskokwim	Bethel Regional High School Cafeteria Addition	\$5,128,734	\$5,128,734	\$0	\$5,128,734	\$102,575	\$5,026,159	\$221,300,892
13	13	13	Aleutians East	King Cove K-12 School Paving	\$110,627	\$110,627	\$0	\$110,627	\$38,719	\$71,908	\$221,372,800
14	14	14	Fairbanks	North Pole Attendance Area New Elementary School	\$32,663,388	\$21,908,262	\$0	\$21,908,262	\$6,572,479	\$15,335,783	\$236,708,583
15	15	15	Southeast Island	Kasaan K-12 Covered Physical Education Area	\$528,013	\$528,013	\$0	\$528,013	\$10,560	\$517,453	\$237,226,036
16	16	16	Anchorage	Wonder Park Elementary & Chugiak High School Site Improvement Upgrades	\$3,300,000	\$3,300,000	\$0	\$3,300,000	\$990,000	\$2,310,000	\$239,536,036
17	17	17	Kenai Peninsula	Districtwide Asphalt Repairs	\$1,689,600	\$1,689,600	\$0	\$1,689,600	\$591,360	\$1,098,240	\$240,634,276
18	18	18	Annette Island	Metlakatla Schools Track And Field Construction	\$4,991,792	\$4,991,792	\$0	\$4,991,792	\$99,836	\$4,891,956	\$245,526,232
19	19	19	Lower Kuskokwim	Kongiganak K-12 School Water System Upgrades	\$9,375,657	\$5,651,894	\$0	\$5,651,894	\$113,038	\$5,538,856	\$251,065,088
20	20	20	Anchorage	Middle & High School Athletic Field Upgrades	\$10,890,000	\$10,890,000	\$0	\$10,890,000	\$3,267,000	\$7,623,000	\$258,688,088
21	21	21	Juneau City Borough	Marie Drake Building Renovation & Realignment	\$15,400,000	\$17,650,000	\$2,250,000	\$15,400,000	\$5,390,000	\$10,010,000	\$268,698,088
22	22	22	Kenai Peninsula	Homer High School Track Replacement	\$2,289,480	\$2,289,480	\$0	\$2,289,480	\$801,318	\$1,488,162	\$270,186,250

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23	23	23	Petersburg City	Districtwide Covered Sidewalks And Entrances	\$1,236,773	\$1,236,773	\$0	\$1,236,773	\$371,032	\$865,741	\$271,051,991
24	24	24	Juneau City Borough	Juneau School District Site/Safety/Security Improvements	\$3,300,000	\$3,300,000	\$0	\$3,300,000	\$1,155,000	\$2,145,000	\$273,196,991
25	25	25	Fairbanks	Pearl Creek Elementary Traffic Site Improvements	\$1,700,090	\$1,700,090	\$0	\$1,700,090	\$510,027	\$1,190,063	\$274,387,054
26	26	26	Juneau City Borough	Floyd Dryden Middle School Covered Play Area Construction & Dzantiki'i Heeni Middle School Site Improvements	\$2,195,000	\$2,195,000	\$0	\$2,195,000	\$768,250	\$1,426,750	\$275,813,804
27	27	27	Juneau City Borough	Districtwide Food Service Upgrades	\$1,350,000	\$1,350,000	\$0	\$1,350,000	\$472,500	\$877,500	\$276,691,304
TOTALS:					\$321,193,732	\$309,637,592	\$3,780,612	\$305,856,980	\$29,165,676	\$276,691,304	

Priority	District #	District Name	Project Location and Description	Primary Purpose	FY12	FY13	FY14	FY15	FY16	FY17	FY18	Reused?
1	3	Alaska Gateway	Tanacross School Building Upgrade	D		\$ 3,511,467						
2	3	Alaska Gateway	Northway School Building Upgrade	D		\$ 2,095,875						
3	3	Alaska Gateway	Training and Administrative Center	E		\$ 4,114,566						
4	3	Alaska Gateway	Eagle School Building Upgrade	D		\$ 4,390,349						
5	3	Alaska Gateway	Districtwide Solid Waste Disposal Project				\$ 200,000					
6	3	Alaska Gateway	Tok School Roof Replacement Project					\$ 2,000,000				
1	56	Aleutians East Borough School District	Akutan School Siding Replacement	C		\$ 102,500						
2	56	Aleutians East Borough School District	Sand Point K-12 School Pool Remodel	C		\$ 111,960						
3	56	Aleutians East Borough School District	King Cove K-12 School Paving	F		\$ 107,020	(plus escalation)					
1	5	Anchorage	Districtwide Roof Replacement	C		\$ 8,550,000						Y
2	5	Anchorage	Districtwide Fire Alarm Upgrades	D		\$ 3,670,000						
3	5	Anchorage	Districtwide Lighting Upgrade	D		\$ 2,350,000						
4	5	Anchorage	Districtwide Mechanical Upgrades	D		\$ 8,900,000						
5	5	Anchorage	Districtwide Communication System Upgrade	D		\$ 1,030,000						
6	5	Anchorage	Districtwide Traffic/Site Improvements	F		\$ 3,300,000						
7	5	Anchorage	Districtwide Building Renewal Projects	D		\$ 1,405,000						
8	5	Anchorage	Districtwide High & Middle School Athletic Field Upgrades	F		\$ 10,890,000						
9	5	Anchorage	Districtwide Code/Sprinkler Upgrades	D		\$ 4,405,000						
10	5	Anchorage	Districtwide Security System Upgrades	D		\$ 1,115,000						
1	6	Annette Island School District	Metlakatla Elementary School Underground Fuel Tank Replacement	C		\$ 354,183						
2	6	Annette Island School District	Metlakatla Elementary School Renovation	C		\$ 13,192,096						
3	6	Annette Island School District	Metlakatla High School Annex Roof Replacement	C		\$ 42,189						
4	6	Annette Island School District	Metlakatla High School Annex Renovation	C		\$ 676,836						
5	6	Annette Island School District	Metlakatla Schools Kitchn Renovation	D		\$ 907,687						
6	6	Annette Island School District	Metlakatla Schools Athletic Field	F		\$ 4,991,792						
7	6	Annette Island School District	Metlakatla Music Building Remodel	C			\$ 300,000					
8	6	Annette Island School District	Metlakatla Auto Shop Remodel	C				\$ 750,000				
9	6	Annette Island School District	Metlakatla District Office Remodel	C					\$ 250,000			
1	7	Bering Strait	Shaktoolik K-12 Remodel	C		-						
2	7	Bering Strait	Districtwide Fuel Tank Demolition	C		-						
3	7	Bering Strait	Stebbins K-12 School Addition	C								
4	7	Bering Strait	Gambell K-12 School Addition	A								
5	7	Bering Strait	Wales K-12 Remodel	C								
6	7	Bering Strait	Districtwide Code Upgrade, Life Safety	D								
7	7	Bering Strait	Shishmaref K-12 School Addition	A								
1	8	Bristol Bay	Bristol Bay School Voc Ed Wing Renovation	C		\$2,366,762						
2	8	Bristol Bay	Bristol Bay School Boiler Installation	C		\$559,385						
1	9	Chatham	Tenakee School Roof Replacement	C		\$ 530,613	(plus escalation)					Y
2	9	Chatham	Angoon Mechanical Upgrades, 2 Schools	D		\$ 48,794						
3	9	Chatham	Klukwan School Major Maintenance	D		\$ 4,052,844						
1	10	Chugach	Whittier School Heating/Power System Upgrade	D		\$ 832,372						
2	10	Chugach	Tatitlek School Upgrade	D			\$ 2,897,000					
3	10	Chugach	Chenegga Bay School Upgrade	D				\$ 1,218,000				
1	11	Copper River School District	Slana School Upgrade	D		\$ 771,504						
2	11	Copper River School District	Copper Center Elementary School Upgrade	D		\$ 1,286,973						
3	11	Copper River School District	Chistochina Elementary School Upgrade	D			\$ 1,134,000					
4	11	Copper River School District	Glennallen Vocational Education Facility Upgrade	D				\$ 751,000				
5	11	Copper River School District	Kenny Lake High School Upgrade	D					\$ 2,950,000			
6	11	Copper River School District	Glennallen High School upgrade	F						\$ 6,370,000		
1	13	Craig	Craig Alternative Wood Heat Project	E		\$ 179,080						
2	13	Craig	Elementary School Door and Floor Replacement	C		\$ 139,745						
3	13	Craig	Craig MS Renovation	C		\$ 11,698,719						
1	2	Denali Borough	Cantwell/School Sprinkler Installation and Fire Alarm Upgrade	D		\$ 1,251,953						
2	2	Denali Borough	Anderson School Siding Replacement	C		\$ 746,050	(plus escalation)					Y
3	2	Denali Borough	Door Replacement 3 Schools	C		\$ 886,998	(plus escalation)					Y
4	2	Denali Borough	Tri-Valley/Coal Fired Boiler Repairs and Upgrades	C			\$ TBD					
5	2	Denali Borough	Cantwell/Fuel Storage Tank Replace, fencing, elec upgrade, generator bldg remodel, bathroom remodel	D			\$ TBD					
6	2	Denali Borough	Anderson / Replace Boilers and relocate boiler room	C			\$ 2,000,000					
7	2	Denali Borough	Anderson/Re-design and replace roof	C				\$ TBD				
8	2	Denali Borough	Cantwell / replace orig section of school	F				\$ TBD				
9	2	Denali Borough	All Schools / refurbish commercial kitchens	C				\$ TBD				
10	2	Denali Borough	Anderson/Office and Music Room Egress	D					\$ TBD			

Priority	District #	District Name	Project Location and Description	Primary Purpose	FY12	FY13	FY14	FY15	FY16	FY17	FY18	Reused?
11	2	Denali Borough	Trivalley / septic system leach field regrade, foam and heat trace	C					\$ TBD			
12	2	Denali Borough	Cantwell/Septic system leach field regrade, foam and heat trace	C					\$ TBD			
13	2	Denali Borough	Tri-Valley/Upgrade Switch Gear to Generator	D						\$ TBD		
14	2	Denali Borough	Tri-Valley / Refurbish library bathrooms	D							\$ TBD	
1	16	Fairbanks	Ryan Middle School - Renovation, Phase II	C	\$	50,255,645						
2	16	Fairbanks	New Elementary School - North Pole Attendance Area	B	\$	32,663,388						
3	16	Fairbanks	Barnette Magnet School - Renovation Phase IV	D	\$	8,826,047						
4	16	Fairbanks	Admin Ctr-Rooftop AC Units Repl & Upgrade	C	\$	1,562,656						
5	16	Fairbanks	Tanana Middle - Roof Replacement	C	\$	4,745,778						
6	16	Fairbanks	North Pole MS - Mechanical Systems & Energy Upgrads	C	\$	6,029,398						
7	16	Fairbanks	Arctic Light Elem-Lighting & Energy Efficiency Upgrades	C	\$	1,809,987						
8	16	Fairbanks	Pearl Creek - Traffic Safety Upgrades	C	\$	1,700,000						
9	16	Fairbanks	Pearl Creek Elem - Flooring Repl & Classroom Upgrades Ph I	C	\$	4,746,852						
10	16	Fairbanks	Weller Elem - Flooring Repl & Classroom Upgrades Ph I	C	\$	4,247,925						
11	16	Fairbanks	Woodriver - Reno Ph III	D			\$	6,439,347				
12	16	Fairbanks	Districtwide - Replace Hallway Lockers	C			\$	1,389,685				
13	16	Fairbanks	Admin Center - Site Upgrade	C			\$	1,500,000				
14	16	Fairbanks	West Valley - Gym Wing Renovation	C			\$	4,500,000				
15	16	Fairbanks	Lathrop - Kitchen Upgrade	C			\$	2,585,194				
16	16	Fairbanks	Two Rivers - Classroom Reno	C			\$	800,000				
17	16	Fairbanks	Tanana - Mechanical Upgrades & Energy Efficiencies	C			\$	2,500,000				
18	16	Fairbanks	Salcha - Renovation & Expansion	C				\$	2,500,000			
19	16	Fairbanks	North Pole MS - Interior Renovation	C				\$	3,756,000			
20	16	Fairbanks	Ticasuk Brown Elem - Roof Replacement & Ext Upgrades	C				\$	3,900,000			
21	16	Fairbanks	Joy - Flooring, Lighting & Interior Upgrades	C				\$	3,500,000			
22	16	Fairbanks	West Valley - Auditorium Upgrade	F				\$	1,000,000			
23	16	Fairbanks	Lathrop - Site Upgrades	C				\$	2,500,000			
24	16	Fairbanks	North Pole HS - Complete HVAC Controls	C				\$	650,000			
25	16	Fairbanks	University Park - Lighting & Energy Efficiency Upgrades	C				\$	1,250,000			
26	16	Fairbanks	University Park - Traffic Safety Improvements	C				\$	750,000			
27	16	Fairbanks	Admin Center - Flooring Repair & Replacement	C				\$	750,000			
28	16	Fairbanks	North Pole HS - Site Improvements	C				\$	2,500,000			
29	16	Fairbanks	Districtwide - Emergency Electrical System Upgrades	C				\$	2,600,000			
30	16	Fairbanks	Tanana - Renovation Phase I	C				\$	9,750,000			
31	16	Fairbanks	Weller - Traffic Safety Upgrades	C					\$	1,500,000		
32	16	Fairbanks	Crawford - Replace Flooring & Classroom Upgrades	C					\$	6,500,000		
33	16	Fairbanks	Randy Smith - Security & Control Systems Upgrades	C					\$	500,000		
34	16	Fairbanks	Howard Lake - Traffic Safety Improvements	C					\$	550,000		
35	16	Fairbanks	Arctic Light - Site Upgrades	C					\$	750,000		
36	16	Fairbanks	North Pole MS - Exterior Envelope Upgrade	C					\$	950,000		
37	16	Fairbanks	Admin Center - Roof Replacement	C					\$	600,000		
38	16	Fairbanks	Badger Road Elem - Site Upgrades & Safety Improvements	C					\$	900,000		
39	16	Fairbanks	Ticasuk Brown - Flooring Replacement	C					\$	3,500,000		
40	16	Fairbanks	Pearl Creek - Upgrade Mechanical System	C						\$	1,700,000	
41	16	Fairbanks	Badger Road - Renovation Phase II	C						\$	4,500,000	
42	16	Fairbanks	Anderson - Roofing Replacement	C						\$	950,000	
43	16	Fairbanks	Ladd - Site Improvements	C						\$	750,000	
44	16	Fairbanks	Ann Wien - Replace Flooring	C						\$	750,000	
45	16	Fairbanks	Ben Eielson - Career-Tech Upgrades	F						\$	1,000,000	
46	16	Fairbanks	Warehouse - HVAC Upgrades	C						\$	500,000	
47	16	Fairbanks	North Pole Elem - Flooring Replacement	C						\$	500,000	
1	17	Galena	GILA Composite Building Roof Upgrade	C	\$	1,039,000			\$	132,817		
2	17	Galena	Sydney Huntington HS Floor Upgrade	D	\$	555,014						
3	17	Galena	GILA Iditarod Building Upgrade	D	\$	13,818,143						

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4	17	Galena	Sidney Huntington HS Upgrade	D			\$ 7,131,000					
5	17	Galena	Exterior Windows	D				\$ 1,811,000				
6	17	Galena	GILA Composite Building Upgrade	D					\$ 1,340,000			
7	17	Galena	GILA Headquarters Building Upgrade	D					\$ 1,011,000			
1	18	Haines	High School and Locker Room Renovations	B	\$ 1,969,699							
2	18	Haines	Haines Voc Ed Building Mechanical Upgrades	C	\$ 1,569,231							
3	18	Haines	Mosquito Lake School Exterior, Interior, Electrical Upgrades	C			\$ 750,000					
4	18	Haines	Mosquito Lake Utility Building Upgrades	C			\$ 175,000					
5	18	Haines	Haines HS Track and Soccer Field Renovations & Upgrades	F				\$ 1,000,000				
6	18	Haines	High School Roof Replacement	C					\$ 1,500,000			
1	19	Hoonah	Hoonah Schools Major Maintenance	C	\$ 4,715,008							
1	22	Juneau	Marie Drake Building Renovation & realignment for YD HS & Montessori & other programs	C	\$ 15,400,000							
2	22	Juneau	Juneau Douglas HS Main Gym Renovation	C	\$ 500,000							
3	22	Juneau	Juneau School District Site/Safety/Security Improvements	A	\$ 3,300,000							
4	22	Juneau	Mendenhall River Community School Renovation	D	\$ 5,300,000							
5	22	Juneau	DZ MS Renovation	C	\$ 6,000,000							
6	22	Juneau	Districtwide Career Technology Facilities Upgrades	F	\$ 3,100,000							
7	22	Juneau	Floyd Dryden MS Covered Play Area & DZ Trail	F	\$ 2,195,000							
8	22	Juneau	District Maintenance Facility Renovation	C	\$ 2,000,000							
9	22	Juneau	Districtwide Food Service Upgrades	F	\$ 1,350,000							
10	22	Juneau	Thunder Mountain HS Covered Bleachers & Supporting Facilities	F	\$ 2,513,000							
1	23	Kake	Kake Elementary School Ventilation System Upgrade	D	\$ 74,000							
2	23	Kake	Kake HS Kitchen Renovation	C	\$ 31,401							
3	23	Kake	Kake HS Shower Repairs	C	\$ 54,006							
4	23	Kake	Kake HS Plumbing Replacement	C	\$ 41,163							
5	23	Kake	Kake Elem Mechanical Controls	C	\$ 74,970							
6	23	Kake	Covered Play Area	F			\$ 400,000					
1	24	Kenai	Building Reroof Projects	C	\$ 16,866,500	\$ 16,866,500						
2	24	Kenai	Window Replacement Project	C	\$ 1,797,282	\$ 1,797,282						
3	24	Kenai	Homer HS Track Replacement	C	\$ 750,000	\$ 750,000						
4	24	Kenai	High School Locker Replacements	C	\$ 1,000,000	\$ 1,000,000						
5	24	Kenai	School Security Systems	C	\$ 1,977,134	\$ 197,134						
6	24	Kenai	District Wide Asphalt Repairs	F	\$ 1,561,600	\$ 1,561,600						
*only received priorities 1-6, shifted previously submitted projects down and out 1 year.												
7	24	Kenai	High School Track Resurfacing	F			\$ 3,250,000					
8	24	Kenai	Middle School Lockers	C			\$ 250,000					
9	24	Kenai	Arsenic Treatment Systems	A			\$ 500,000					
10	24	Kenai	Moose Pass Water Treatment	D			\$ 50,000					
11	24	Kenai	Homer Middle School Drainage	F			\$ 125,000					
12	24	Kenai	Seward/Soldotna Elevator Upgrades	C			\$ 50,000					
13	24	Kenai	Sterling Primary Wing Heat System Upgrade	C			\$ -					
14	24	Kenai	Kenai Middle School Office Remodel	A			\$ 1,000,000					
15	24	Kenai	Seward Theater Seat Replacement	C				\$ 100,000				
16	24	Kenai	Homer Middle School Field Rehabilitation	C				\$ 900,000				
17	24	Kenai	Tustemena Elementary Siding	C				\$ 40,000				
18	24	Kenai	Nanwalek Propane Tank Separation	D					\$ 55,000			
19	24	Kenai	W. Homer Exterior Wall Seal	C				\$ 100,000				
20	24	Kenai	Homer Flex Parking	F					\$ 100,000			
21	24	Kenai	Ninilchik Bus Turnaround	C					\$ 85,000			
22	24	Kenai	District Wide ADA Upgrades	D						\$ 1,000,000		
23	24	Kenai	Seward Parking Light Upgrades	F							\$ 150,000	
1	25	Ketchikan	District Wide Electric Boilers Addition	E	\$ 4,904,280	\$ 4,904,280	(plus escalation)					Y
2	25	Ketchikan	High School Auditorium/Stage Lighting System	C	\$ 274,676	\$ 301,909						
3	25	Ketchikan	District Wide Major Maintenance	C	\$ 1,098,666	\$ 1,098,666	(plus escalation)					Y
4	25	Ketchikan	Fawn Mountain Elem School Upgrades (debt)	D	\$ 632,792	\$ 632,792						
5	25	Ketchikan	District Wide Security Systems and Fencing (debt)	D	\$ 750,000		\$ 750,000					
6	25	Ketchikan	Physical Education & Sports Field Upgrades	F			\$ 2,000,000					
7	25	Ketchikan	High School & Maintenance Facility Roof & Exterior Door Replacement	C				\$ 1,836,000				
8	25	Ketchikan	Major Maintenance Upgrades High School & Revilla High	C					\$ 2,260,000			

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9	25	Ketchikan	Major Maintenance Upgrades High School, Houghtaling & Valley Park	C						\$ 1,953,000		
10	25	Ketchikan	Houghtaling Roof Replacement	C							\$ 2,000,000	
1	27	Klawock	klawock K-12 UST Replacement	D	\$ 223,145	*Klawock did not submit any application or a 6-Year Plan - left previous data as FYI						
1	28	Kodiak	UST's Throughout District	D	\$ 514,125	\$ 1,746,276						
2	28	Kodiak	fire Alarm Panel Upgrades (High School, Middle School, Auditorium, Karluk)	A		\$ 134,688						
3	28	Kodiak	East Elem New Boiler, Boilerroom and Gym Storage Addition	C		\$ 684,661						
4	28	Kodiak	Kodiak HS Repave Section of Parking Lots	C		\$ 283,114						
5	28	Kodiak	Main Elementary - Replace Entry Walkway	C		\$ 84,859						
6	28	Kodiak	Akhiok School Sewer Line Repair	A	\$ 75,407	\$ 25,495						
7	28	Kodiak	Kodiak MS - Replace/Upgrade Elevator Controls	C		\$ 75,992						
8	28	Kodiak	Replace HVAC Components, 2 schools (Larsen Bay and Karluk)	C		\$ 1,306,425						
9	28	Kodiak	Replace Flooring, 3 Sites (East Elem, Peterson Elem and Ouzinkie Schools)	C		\$ 1,363,508						
10	28	Kodiak	Exterior Renovations, 3 Sites (North Star Elem, East Elem, Port Lions Schools)	C		\$ 576,771						
11	28	Kodiak	Restoration of Kodiak High School	C			\$ 36,556,400					
12	28	Kodiak	High School Gym Seismic Renovation	D		\$ 307,303	\$ 307,303					
13	28	Kodiak	Replace High School Boiler Gun Units	C		\$ 361,633	\$ 423,140					
14	28	Kodiak	Replace High School Gym Wood Floor	C		\$ 456,513	\$ 534,157					
15	28	Kodiak	High School: Upgrade Generator	D		\$ 406,022	\$ 475,079					
16	28	Kodiak	Install Fire Alarm Magnetic Door closures in Middle school, East, and High School	A			\$ 261,022					
17	28	Kodiak	Pave Peterson Elementary Parking Lot	C			\$ 1,404,098					
18	28	Kodiak	New Kodiak High School Academic Addition	F				\$ 43,443,600				
19	28	Kodiak	Replace UST, 5 Sites (Main Elem, Port Lions, Old Harbor, Larsen Bay, Kodiak Learning Center	D				\$ 504,190				
20	28	Kodiak	Main Elementary: Upgrade Crossing lights/Flashers for Safety on Road	A				\$ 51,888				
21	28	Kodiak	East Elementary: Improve Traffic Flow	A				\$ 650,546				
22	28	Kodiak	Larsen Bay Gym Old Wing: Replace Roof	C				\$ 343,200				
23	28	Kodiak	Exterior Renovations, 2 Sites (Larsen Bay & Karluk)	C					\$ 238,790			
24	28	Kodiak	Replace Kodiak MS Gym Wood Floor	C					\$ 577,634			
25	28	Kodiak	Replace HVAC Controls (Kodiak MS, Peterson Elem, Old Harbor Schools)	C					\$ 2,346,837			
26	28	Kodiak	Middle School: Install New Fire Suppression In Server Room	C					\$ 53,953			
27	28	Kodiak	East Elem - Interior Renovation	C						\$ 384,070		
28	28	Kodiak	North Star Elementary: Install Crossing Lights/Flashers for Safety on Road	A						\$ 56,111		
29	28	Kodiak	Village: Earthquake Mitigation Plan (Karluk, Akhiok, Chiniak)	A						\$ 781,663		
30	28	Kodiak	Districtwide Earthquake mitigation plan	A						\$ 526,372		
31	28	Kodiak	New Districtwide Shipping and Receiving building	E						\$ 7,390,273		
32	28	Kodiak	Kodiak MS - Replace Ramp Roof	C							\$ 32,850	
33	28	Kodiak	Districtwide - Add Storage Facility to School Sites	A							\$ 821,141	
34	28	Kodiak	Middle School: Earthquake Mitigation Plan	A							\$ 125,935	
35	28	Kodiak	Install Generator Plug and Emergency Panel, 2 Locations (Peterson Elem and North Star Elem)	C							\$ 90,450	
36	28	Kodiak	Districtwide Security Video Surveillance	A							\$ 217,129	
37	28	Kodiak	North Star Elementary: Water infiltration Mitigation Plan	C							\$ 260,555	
1	29	Kuspuk	Jack Egnaty Sr. School, Sleetmute, Roof Replacement	B		\$ 1,165,494	(plus escalation)					Y
2	29	Kuspuk	Auntie Mary Nicolai Elementary School, Aniak, New Const	C		\$ 13,441,706	(plus escalation)					Y
3	29	Kuspuk	Johnnie John Sr. School, Crooked Ck, New Const	C		\$ 12,568,195	(plus escalation)					Y
4	29	Kuspuk	Essential DW Heating system Upgrades	A		\$ 9,544,626	(plus escalation)					Y
1	30	Lake & Penninsula	Port Alsworth Classroom Expansion	B		\$ 14,443,079						
2	30	Lake & Penninsula	Newhalen Kitchen Remodel/Expansion	A		\$ 206,106						
3	30	Lake & Penninsula	Districtwide HVAC Upgrades	D		\$ 1,548,519						
4	30	Lake & Penninsula	Districtwide Plumbing Upgrades	D		\$ 1,613,806						
5	30	Lake & Penninsula	Districtwide Electrical Upgrades	D		\$ 1,613,923						
6	30	Lake & Penninsula	Chignik Bay School Roof Replacement	C		\$ 2,197,880						

Priority	District #	District Name	Project Location and Description	Primary Purpose	FY12	FY13	FY14	FY15	FY16	FY17	FY18	Reused?	
1	31	Lower Kuskokwim	Bethel Educational Comple Water & Sewer amd Itlidor Repairs	D		\$ 6,116,791							
2	31	Lower Kuskokwim	Tununak K-12 School Major Maintenance	C		\$ 19,557,614						Y	
3	31	Lower Kuskokwim	Nightmute K-12 School Renovation/Addition	B		\$ 33,638,062							
4	31	Lower Kuskokwim	Kwethluk K-12 School Replacement	B		\$ 42,009,432							
5	31	Lower Kuskokwim	Nunapitchuk Fire Alarm Repair/Replacement	D		\$ 619,790							
6	31	Lower Kuskokwim	Water Storage & Treatment, Kongiganak	D		\$ 9,375,657							
7	31	Lower Kuskokwim	Mekoryuk Wastewater Upgrades	D		\$ 902,559						Y	
8	31	Lower Kuskokwim	Nunapitchuk Wastewater Upgrades	D		\$ 1,066,837						Y	
9	31	Lower Kuskokwim	Bethel Campus Boiler Upgrades	C		\$ 2,111,880							
10	31	Lower Kuskokwim	Bethel Regional HS Cafeteria Addition	F		\$ 5,128,734							
11	31	Lower Kuskokwim	Lewis Angakak K-12 School Improvement, Tuntutuliak	B			\$ 41,400,000						
12	31	Lower Kuskokwim	Fuel Tank Remediation - Bethel	D			\$ 185,000						
13	31	Lower Kuskokwim	Quogcuun Memorial School Renovation/Addition, Oscarville	B			\$ 16,100,000						
14	31	Lower Kuskokwim	Nuniwaarmiut K-12 School Deferred Maint, Mekoryuk	C			\$ 6,420,000						
15	31	Lower Kuskokwim	LKSD District Complex Transportation and Drainage Upgrades	C			\$ 7,500,000						
16	31	Lower Kuskokwim	Fuel Tank Remediation - Akiuk, Newtok, Nunapitchuk	D			\$ 2,150,000						
17	31	Lower Kuskokwim	J Alexie School Improvement, Atmaultluk	B				\$ 30,900,000					
18	31	Lower Kuskokwim	Fuel Tank Disposition, Districtwide	D				\$ 5,800,000					
19	31	Lower Kuskokwim	Fuel Tank Upgrades, Districtwide	C				\$ 7,250,000					
20	31	Lower Kuskokwim	Paul T Albert Memorial School Additionl, Tununak	B					\$ 11,500,000				
21	31	Lower Kuskokwim	Nelson Island K-12 School Renovation/Addition, Toksook Bay	B					\$ 40,300,000				
22	31	Lower Kuskokwim	Akiuk Memorial School Renewal & Repairs, Kasigluk-Akiuk	C					\$ 1,100,000				
23	31	Lower Kuskokwim	Eek School Renewal & Repairs	C				\$ 8,986,000					
24	31	Lower Kuskokwim	Roof Repairs, Districtwide	C				\$ 27,800,000					
25	31	Lower Kuskokwim	Anna Tobeluk Memorial School Renovation / Addition, Nunapichuk	B					\$ 43,400,000				
26	31	Lower Kuskokwim	Wastewater Upgrades, Districtwide	D					\$ 14,200,000				
27	31	Lower Kuskokwim	Ayaprun School Replacement, Newtok	B						\$ 44,000,000			
28	31	Lower Kuskokwim	Water Treatment & Storage Upgrades, Districtwide	D						\$ 8,400,000			
29	31	Lower Kuskokwim	Arvik School Upgrades, Platinum	B						\$ 10,700,000			
30	31	Lower Kuskokwim	Energy Improvements, Districtwide	E						\$ 5,679,000			
31	31	Lower Kuskokwim	William Miller School Replacement, Napakiak	B						\$ 23,300,000			
1	32	Lower Yukon	Emmonak School Renovation	B		\$ 38,323,106							
2	32	Lower Yukon	Pilot Station Driveway Relocation	D		\$ 655,283	(plus escalation)					Y	
3	32	Lower Yukon	Hooper Bay School - electrical upgrade	D		\$ 42,610	(plus escalation)					Y	
4	32	Lower Yukon	Scammon Bay - Installation of Electrical Provisions	C		\$ 649,013							
5	32	Lower Yukon	Pilot Station - finish Upgrade	C					\$ 2,722,714				
6	32	Lower Yukon	Kotlik - Finish Upgrade	C					\$ 2,535,186				
1	33	Mat-Su	Mat-Su Day School	A	\$ 13,235,348			*Mat-Su did not submit any application or a 6-Year Plan - left previous data as FYI					
2	33	Mat-Su	Renovate HVAC Systems - 5 Schools, Butte/Pioneer /Peak/Snowshoe/Cottonwood/ Big Lake Elem	D	\$ 23,345,733								
3	33	Mat-Su	Big Lake Elem - Renovate Old Classroom Wing	D	\$ 2,410,001								
4	33	Mat-Su	Renovate and upgrade Boiler Systems - 4 Buildings, Palmer MS, Palmer HS, Admin Bldg, Willow Elem	C	\$ 11,113,556								
5	33	Mat-Su	Butte, Cottonwood Ck, Pioneer Peak & Snowshoe Elem Wash Fountain Replacement	C	\$ 139,711								
6	33	Mat-Su	Admin Building - Replace Generator and related Electrical	C	\$ 742,048								
7	33	Mat-Su	DW energy and Lighting Upgrades	E	\$ 2,738,809								
8	33	Mat-Su	Pioneer Peak Playground Equipment Replacement	D	\$ 68,081								
9	33	Mat-Su	Iditarod School Renovation - Covert Old Central Kitchen to Classrooms/Gym Floor/Bathrooms remodel	D	\$ 8,697,757								
10	33	Mat-Su	Palmer MS - Replace Student Lockers	C	\$ 299,355								
11	33	Mat-Su	Colony HS - Replace all Chalk Boards	A	\$ 151,905								
12	33	Mat-Su	Houston Middle School - Replace Student Lockers	C	\$ 217,712								

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13	33	Mat-Su	Meadow Lakes Elem - Additional Playground Equip	E	\$ 122,986							
14	33	Mat-Su	Talkeetna Elem - Additional Playground Equip	E	\$ 122,986							
15	33	Mat-Su	New Knik Area High & Middle School	C			\$ 176,000,000					
16	33	Mat-Su	New Vehicle Repair Shop	E			\$ 1,256,867					
17	33	Mat-Su	New Valley Pathways HS	A			\$ 18,653,025					
18	33	Mat-Su	Elem Flooring Replacement/room	D			\$ 160,000					
19	33	Mat-Su	Admin Bldg - Replace Windows	C			\$ 35,000					
20	33	Mat-Su	Big Lake Elem Flooring Replacement	D			\$ 120,000					
21	33	Mat-Su	Colony HS Flooring Replacement	D			\$ 250,000					
22	33	Mat-Su	Palmer HS Paving and Sidewalk Improvements	B				\$ 57,000				
23	33	Mat-Su	New Elem School	A				\$ 30,253,000				
24	33	Mat-Su	Tanaina Elem - Add entrance canopies	A				\$ 28,000				
25	33	Mat-Su	Pioneer Peak Elem toilet Room Renovations	C				\$ 45,000				
26	33	Mat-Su	Wasilla Middle School - Renovate Dust Collection System	D				\$ 50,000				
27	33	Mat-Su	Wasilla MS - Renovate Boiler Room Pumps and Piping	D				\$ 145,000				
28	33	Mat-Su	Tanaina Elem - Flooring Replacement	B				\$ 40,000				
29	33	Mat-Su	Admin Bldg - replace Carpeting	B				\$ 170,000				
30	33	Mat-Su	Career & Tech HS Addition	A				\$ 19,536,000				
31	33	Mat-Su	DW ADA Upgrades	B					\$ 266,400			
32	33	Mat-Su	Iditarod Elem Window Replacement	B					\$ 40,000			
33	33	Mat-Su	New Mid-Valley HS	B					\$ 16,372,362			
34	33	Mat-Su	Palmer HS Replace Windows and blinds	C					\$ 75,000			
35	33	Mat-Su	Houston HS Running Track and Athletic Facility Improvements	D					\$ 845,000			
36	33	Mat-Su	Palmer MS - Replace Flooring	B					\$ 120,000			
37	33	Mat-Su	Butte Elem School Renovation	F					\$ 18,563,254			
38	33	Mat-Su	Su-Valley HS Running Track	D					\$ 345,000			
39	33	Mat-Su	Big Lake Elem - Replace Moveable Walls	B					\$ 40,000			
40	33	Mat-Su	Admin Bldg - Renovate Toilet Rooms	B						\$ 48,000		
41	33	Mat-Su	Wasilla MS - Replace Student Lockers	B				\$ 80,000		\$ 80,000		
42	33	Mat-Su	Palmer MS Pave Running Track	B				\$ 65,000		\$ 65,000		
43	33	Mat-Su	Palmer MS Renovation	F						\$ 32,794,628		
44	33	Mat-Su	Reroof Colony MS and HS	C						\$ 9,663,586		
45	33	Mat-Su	Reroof Big Lake/Willow/Pioneer Peak Elem	C						\$ 8,989,653		
46	33	Mat-Su	New Academy Charter	A						\$ 18,653,025		
47	33	Mat-Su	New MS	A							\$ 66,568,456	
48	33	Mat-Su	New Elem School #2	A							\$ 32,253,487	
1	34	Nenana	Major Maintenance: Erosion Control, Protection of Structures, ADA Access	D		\$ 815,898						
2	34	Nenana	Major Maintenance: Nenana School Renovation Ph I	D		\$ 2,459,449						
3	34	Nenana	Major Maintenance: Nenana School Solar Energy Project and Circulating Pump Upgrade	E		\$ 462,371						
4	34	Nenana	Major Maintenance: Nenana City School Boiler Replacements (Alt Energy) Stack Replacements, Removal and Replacement of USTs	E			\$ 575,000					
5	34	Nenana	Major Maintenance: Nenana School Renovation Ph II	D			\$ 1,600,000					
6	34	Nenana	Major Maintenance: Nenana City School Roof Repair/Replacement	C				\$ 1,250,000				
7	34	Nenana	Marjor Maintenance: VocEd Classroom Update and Remodel	D					\$ 1,000,000			
8	34	Nenana	alternative Energy Supplementary Boilers and Building Systems	E						\$ 550,000		
9	34	Nenana	Building and Grounds Safety and Security Systems; Keyless entry, fencing, covered playground area, playground surfaces	A							\$ 500,000	
1	35	Nome	Nome Elem Boiler Replacement	C	\$ 682,298							
2	35	Nome	NES Gym Floor	D								
3	35	Nome	Nome Elem Electrical Lighting Upgrade	C				\$ 150,000				
4	35	Nome	Building A Primary Electrical Service	D				\$ 80,000				
5	35	Nome	Exterior Lighting Upgrades (both school sites)	C					\$ 250,000			
1	36	North Slope Borough	Point Lay Teacher Housing Development	C	\$ 40,000					\$ 40,000		
2	36	North Slope Borough	Technology Infrastructure Upgrades	F	\$ 1,575,900							
3	36	North Slope Borough	Districtwide Facility Upgrades	C	\$ 244,800							

Priority	District #	District Name	Project Location and Description	Primary Purpose	FY12	FY13	FY14	FY15	FY16	FY17	FY18	Reused?
4	36	North Slope Borough	Districtwide Misc Housing Renovations & upgrades	C	\$ 1,062,000		\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	
5	36	North Slope Borough	Districtwide FF&E	E	\$ 725,220		\$ 725,220	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	
6	36	North Slope Borough	Districtwide School Bus Replacement	E	\$ 1,224,000			\$ 132,600	\$ 316,200			
7	36	North Slope Borough	Districtwide Light Duty Vehicle Replacement	E	\$ 618,000		\$ 630,360		\$ 158,100	\$ 280,500	\$ 71,400	
8			Kali School Major Facility Renovations	C	\$ 8,524,742							
9	36	North Slope Borough	Tikigaq School Major Facility Renovations	C	\$ 1,525,000		\$ 11,194,994					
10	36	North Slope Borough	Harold Kaveolook School Gymnasium Addition	F	\$ 1,043,000		\$ 7,649,098					
11	36	North Slope Borough	Barrow Loader Replacement	E	\$ 255,000							
12	36	North Slope Borough	Districtwide Classroom Telephone Upgrades	F	\$ 69,300							
13	36	North Slope Borough	Ipalook Elementary School Major Facility Renovations	C			\$ 1,000,000	\$ 8,120,997				
14	36	North Slope Borough	Meade River School Major Facility Renovations	C				\$ 800,000	\$ 7,264,778			
15	36	North Slope Borough	Tikigaq New High School Center	F				\$ 40,000				
16	36	North Slope Borough	Hopson MS Major Facility Renovations	C				\$ 35,000				
17	36	North Slope Borough	Alak School Major Facility Renovations	C					\$ 800,000	\$ 5,873,359		
18	36	North Slope Borough	Barrow HS Major Facility Renovations	C						\$ 700,000	\$ 4,975,228	
19	36	North Slope Borough	Barrow HS Multipurpose Room Addition	F						\$ 2,100,000	\$ 2,100,000	
20	36	North Slope Borough	Harold Kaveolook Integrated Facility Security System Upgrades	F				\$ 678,450				
21	36	North Slope Borough	Barrow Wide Fiber Optic Cable Replacement	F								
22	36	North Slope Borough	Barrow Wide Telephone System Upgrade	F								
1	37	Northwest Arctic	Buckland Heating System Improvement	E		\$ 366,510						Y
2	37	Northwest Arctic	Kobuk Renovation Completion Funding			\$ 3,750,000						
3	37	Northwest Arctic	Northwest Magnet School Dorm			\$ 16,590,000						
4	37	Northwest Arctic	DW VCT Replacement	n/a			\$ 250,000					
5	37	Northwest Arctic	Kivalina Addition and Renovation	C			\$ 32,000,000					
6	37	Northwest Arctic	Selawik Heating System Upgrade	E			\$ 446,250					
7	37	Northwest Arctic	Upgrades to Kotzebue HS Gym	F			\$ 2,100,000					
1	38	Pelican	Pelican HS Mechanical Upgrades	C	\$ 231,736							* Pelican did not submit an application or 6-Year Plan - left in as FYI
2	38	Pelican	Pelican HS Window Replacement	C			\$ 70,000					
3	38	Pelican	Pelican MS Roof Replacement	C				\$ 250,000				
4	38	Pelican	Pelican HS Plumbing Upgrade	C					\$ 150,000			
5	38	Pelican	Pelican HS Lighting and Electrical Upgrades	C					\$ 350,000			
6	38	Pelican	Pelican HS Roof Replacement	C						\$ 600,000		
1	39	Petersburg	Re-Side Elem School	E		\$ 1,052,273						
2	39	Petersburg	DW Boiler Upgrades	E		\$ 2,978,573						
3	39	Petersburg	Fire Alarm	D		\$ 347,284						
4	39	Petersburg	Lunchroom Renovation	E		\$ 1,563,159						
5	39	Petersburg	Replace Fuel Tanks	D		\$ 600,932						
6	39	Petersburg	Covered Sidewalks and Entrances	A		\$ 1,236,773						
7	39	Petersburg	Electrical Upgrades	D		\$ 925,949						
8	39	Petersburg	Replace Elem Sewer System	D		\$ 736,401						
9	39	Petersburg	Digital HVAC Controls	E		\$ 2,172,024						
10	39	Petersburg	Replace Backstage Floor	D							\$ 80,000	
1	40	Pribilof	St Paul School - Renovate Gym	D	\$ 750,000							* Pribilof did not submit an application or 6-Year Plan - left in as FYI
2	40	Pribilof	St. Paul School - Replace Lighting System	C	\$ 325,000							
3	40	Pribilof	St. Paul School - Install Sprinkler System	C	\$ 525,000							
4	40	Pribilof	St. Paul School Renovate Elem Bathrooms	C				\$ 300,000				
5	40	Pribilof	St. Paul School - Renovate Science Classroom	C				\$ 250,000				
6	40	Pribilof	St. Paul School - Renovate home economics room	D				\$ 250,000				
7	40	Pribilof	St. Paul School - Replace Underground Fuel Storage Tanks	D				\$ 100,000				
8	40	Pribilof	St. Paul School Direct existing drainage from front of school	C				\$ 500,000				
1	46	Saint Mary's	St. Mary's Complex Upgrades	C		\$ 3,413,214						
2	46	Saint Mary's	Andreafski HS Gym Construction	B		\$ 13,798,292						
1	44	Southeast Island	Thorne Bay K-12 Fire Suppression System	C	\$ 685,880							
2	44	Southeast Island	Thorne Bay Gym Structural Repair	C		\$ 170,488						
3	44	Southeast Island	Thorne Bay K-12 School UST Replacement	C	\$ 324,153							
4	44	Southeast Island	Port Alexander K-12 Domestic Water Pipe Replacement	D	\$ 54,013	\$ 83,795						
5	44	Southeast Island	Thorne Bay K-12 Mechanical Control Upgrades	C	\$ 890,590	\$ 1,209,777						
6	44	Southeast Island	Thorne Bay and Port Protection Gymnasium Lighting Upgrades	D	\$ 412,072	\$ 557,244						
7	44	Southeast Island	Kassaan K-12 Covered Physical Education Area	F	\$ 481,304	\$ 528,013						
8	44	Southeast Island	Roof Replacement for Port Alexander and Thorne Bay Schools	C	\$ 3,045,389	\$ 3,874,337						

Priority	District #	District Name	Project Location and Description	Primary Purpose	FY12	FY13	FY14	FY15	FY16	FY17	FY18	Reused?
9	44	Southwest Island	Port Protection K-12 Gymnasium Relocation and Foundation	C	\$ 152,156	\$ 172,426						
1	45	Southwest Region	Koliganek School Replacement	A		\$ 24,752,572						
2	45	Southwest Region	Twin Hills School Renovation	C		\$ 2,126,800						
3	45	Southwest Region	Aleknagik School Renovation	C		\$ 2,635,650						
4	45	Southwest Region	Manokotak School Sewer and Water Upgrades	C		\$ 325,000						
5	45	Southwest Region	Ekwok School Renovation	C			\$ 2,189,820					
6	45	Southwest Region	Clarks Point School Renovation	C				\$ 2,130,640				
7	45	Southwest Region	Manokotak School Interior Floor Finishes and Ceiling Replacement	C						\$ 1,120,875		
1	48	Valdez	Valdez HS Roof Replacement	C		\$ 3,791,008						
2	48	Valdez	Valdez HS Fire Alarm and Sprinkler Upgrades	C		\$ 1,078,475						Y
3	48	Valdez	Hermon Hutchens Elem Fire Alarm, Clock, and Intercom Replacement	C		\$ 497,609						Y
4	48	Valdez	DW Electrical Wiring and Technology Upgrades	F		\$ 3,102,060						Y
5	48	Valdez	Hermon Hutchens Elem Sprinkler & Water Service Repair	C			\$ 500,000					
6	48	Valdez	Hermon Hutchens Elem Exterior Upgrade	C			\$ 1,043,769					
7	48	Valdez	Valdez HS Interior Lighting Upgrade	E			\$ 350,000					
8	48	Valdez	Renovate Science Labs VHS & GJH	F				\$ 200,000				
9	48	Valdez	Install Sprinklers in the Jr. High/Woodshop/Bus Barn	A			\$ 350,000					
10	48	Valdez	Replace and Relocate VHS Fuel Tank	A			\$ 65,000					
11	48	Valdez	DW Storm Drainage Upgrades	C			\$ 300,000					
12	48	Valdez	DW ADA Upgrades	D			\$ 175,000					
13	48	Valdez	DW Waterline Replacement	C				\$ 1,903,405				
14	48	Valdez	DW Mechanical System Upgrades	E						\$ 5,452,448		
15	48	Valdez	DW Gymnasium Floor, Bleacher, and Equipment Upgrade	C			\$ 650,000					
16	48	Valdez	Playground and Equipment for Jr. High	F				\$ 50,000				
17	48	Valdez	HS Student Parking Expansion	F			\$ 100,000					
1	49	Wrangell	Wrangell HS /Stikine MS Fire Alarm Upgrade	D	\$ 273,018	* Wrangell did not submit an application or 6-Year Plan - left in as FYI						
2	49	Wrangell	Evergreen Elem School Paving	C	\$ -							
1	50	Yakutat	Yakutat Schools Mechanical System Upgrades	C		\$ 5,845,021						
2	50	Yakutat	Yakutat HS Exterior Upgrades	C		\$ 1,806,781						
3	50	Yakutat	Yakutat HS Locker Room Renovations	C		\$ 479,454						
1	51	Yukon Flats	Chalkyitsik Water Tank Replacement	C	\$ 1,006,322	\$ 1,430,834						
2	51	Yukon Flats	Venetie Generator Building Renovation	D	\$ 777,523	\$ 2,508,487						
3	51	Yukon Flats	Fort Yukon Fuel Oil Clean-up and Tank Farm Replacement	D	\$ 8,899,302	\$ 9,177,522						
4	51	Yukon Flats	New Cruikshank School (Beaver) Fuel Tank Farm and Clean-up	D	\$ 1,581,454	\$ 1,198,222						
5	51	Yukon Flats	Stevens Village Fuel Tank Farm and Clean-up	D	\$ 1,014,141	\$ 1,068,031						
6	51	Yukon Flats	Venetie Soil Remediation and Fuel Tank Replacement	D	\$ 1,824,027	\$ 1,578,822						
7	51	Yukon Flats	Beaver major Maintenance to include zone valve replacement, generator overhaul, replace windows, HVAC controls	C			\$ -					
8	51	Yukon Flats	Central - Boiler Replacement	C			\$ -					
9	51	Yukon Flats	Stevens Village Major Maintenance - Replace Windows, Zone Valves, sewer pumps	C			\$ -					
10	51	Yukon Flats	Venetie Major Maint - Utility Bldg Upgrade, Replace Plumbing throughout, replace carpet and paint	C			\$ -					
11	51	Yukon Flats	Fort Yukon - Replace Boilers, Lock upgrades and Window Replacement	C				\$ -				
12	51	Yukon Flats	Fort Yukon Voc Ed - Boiler Replacement	C				\$ -				
1	52	Yukon-Koyukuk	Ruby Renewal	C		\$ 5,181,920						
2	52	Yukon -Koyukuk	Kaitag Mechanical and Electrical Upgrades	C		\$ 1,818,895						
3	52	Yukon-Koyukuk	Andrew K Demoski Renovation	D		\$ 12,060,213						
4	52	Yukon-Koyukuk	Jimmy Huntington Addition/Renovation	A		\$ 16,756,899						Y
5	52	Yukon-Koyukuk	Allakaket Water System Repair	Dist		\$ 180,000						
6	52	Yukon-Koyukuk	Koyukuk Restroom Upgrade	USDA		\$ 100,000						
7	52	Yukon-Koyukuk	Allakaket School Replacement	A			\$ 25,000,000					
8	52	Yukon -Koyukuk	Kaitag Exterior Repairs	C			\$ 711,617					
9	52	Yukon -Koyukuk	DW Remote Boiler Monitoring	E			\$ 500,000					
10	52	Yukon -Koyukuk	DW Generator Replacement	C			\$ 400,000					
11	52	Yukon -Koyukuk	District Office Ventilation Upgrades	D			\$ 300,000					
12	52	Yukon -Koyukuk	Minto K-12 School Renovation	C				\$ 8,500,000				

Priority	District #	District Name	Project Location and Description	Primary Purpose	FY12	FY13	FY14	FY15	FY16	FY17	FY18	Reused?
13	52	Yukon -Koyukuk	District Office Upgrade	D				\$ 1,000,000				
14	52	Yukon -Koyukuk	DW Fuel Tank Removal	D				\$ 110,000				
15	52	Yukon -Koyukuk	Manley Renovation and Upgrade	C					\$ 500,000			
Totals:					\$ 135,923,934	\$ 704,119,781	\$ 447,254,445	\$ 193,372,111	\$ 172,738,530	\$ 180,451,015	\$ 222,070,079	\$ 6,002,946.00
										Total Six-Year Plan Estimate \$ 1,920,005,961		
					\$ 539,524,204							

Alaska Department of Education Early Development Program Demand Cost Model for Alaskan Schools 12th Edition Revised

New Construction and Renovation Work

School District: <i>(Name of School District)</i>	Date of Estimate: <i>(Date)</i>
Project: <i>(Name of School)</i>	Location: <i>(Location of School)</i>

PROJECT SUMMARY	NEW CONSTRUCTION	RENOVATION	TOTAL
PROJECT SIZE	0 SF	0 SF ¹	0 SF
CONSTRUCTION COST PER SQUARE FOOT	/SF	/SF	/SF
CONSTRUCTION COST	\$ 0	\$ 0	\$ 0
PROJECT OVERHEAD AND OTHER COSTS:			
Construction Management (by Consultant)	0	0	0
Land Purchase Costs	0	0	0
Site Investigation	0	0	0
Seismic Hazard	0	0	0
Design Services Costs	0	0	0
Construction	0	0	0
Equipment & Technology Costs	0	0	0
District Administrative Overhead	0	0	0
Art	0	0	0
Project Contingency	0	0	0
TOTAL PROJECT COST:	\$ 0	\$ 0	\$ 0

NOTES:

¹ The square foot area for renovation needs to be inserted.

Alaska Department of Education Early Development Program Demand Cost Model for Alaskan Schools 12th Edition Revised

New Construction and Renovation Work

School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

Section:	Quantity	Cost Per Unit	Total
1.00 Instructional Resource/Support Teaching Areas			
1.01 Standard Classroom ¹	0 SF	\$ 208.79	\$ 0
1.02 Kindergarten/Primary Classroom ²	0 SF	227.06	0
1.03 Damp Classroom/Laboratory ³	0 SF	231.93	0
1.04 Gymnasium ⁴	0 SF	288.60	0
1.05 Instructional Media Center (IMC)	0 SF	218.39	0
1.06 Music Room	0 SF	228.05	0
1.07 Home Economics	0 SF	243.47	0
1.08 Industrial Arts ⁵	0 SF	231.89	0
1.09 Other ⁶	0 SF	0.00	0
1.10 Other ⁶	0 SF	0.00	0
1.11 SUBTOTAL (Lines 1.01 thru 1.10):	0 SF		\$ 0

NOTES:

- ¹ Includes general educational space as well as special instructional areas to include: business, driver's education, typing, language laboratory, and special education.
Cost for computer outlets included in classrooms.
- ² Includes a toilet.
- ³ Includes art, sciences, craft and cosmetology.
- ⁴ Physical education (dressing rooms and health classrooms).
- ⁵ Includes wood/metal shop, automotive shop and agriculture.
- ⁶ See Table 4, Categories A and B, for other types of instructional resource/support teaching spaces.

Alaska Department of Education Early Development
 Program Demand Cost Model for Alaskan Schools
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New Construction and Renovation Work

School District:	Date of Estimate:
(Name of School District)	(Date)
Project:	Location:
(Name of School)	(Location of School)

Section:	Quantity	Cost Per Unit	Total
2.00 General Support/Supplementary Areas			
SUBTOTAL CARRIED FORWARD (Line 1.11):	0 SF		\$ 0
2.01 Multipurpose Room ¹	0 SF	\$ 216.71	\$ 0
2.02 Auditorium ²	0 SF	246.86	0
2.03 Lockers and Showers	0 SF	326.86	0
2.04 Administration ³	0 SF	227.75	0
2.05 Cafeteria/Food Preparation ⁴	0 SF	481.39	0
2.06 Storage	0 SF	190.94	0
2.07 Toilets	0 SF	365.06	0
2.08 Circulation (Corridors, Etc.)	0 SF	215.14	0
2.09 Mechanical/Electrical ⁵	0 SF	190.94	0
2.10 Other ⁶	0 SF	0.00	0
2.11 Other ⁶	0 SF	0.00	0
2.12 SUBTOTAL (Lines 1.11 + 2.01 thru 2.11):	0 SF⁷		\$ 0

NOTES:

- ¹ Lunch rooms, etc.
- ² Includes stage and support area square footage.
- ³ Includes space for counselor's area, clinic areas and administrative areas.
- ⁴ Includes kitchen and serving areas (Dining in 2.01 - Multipurpose Room).
- ⁵ Does not include equipment or systems, just space.
- ⁶ See Table 4, Categories C and D, for other types of general support/supplementary space.
- ⁷ The total square foot area arrived at from Sections 1.00 and 2.00 is the gross floor area of the building.

Alaska Department of Education Early Development
 Program Demand Cost Model for Alaskan Schools
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New Construction and Renovation Work

School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

Section:	Quantity	Cost Per Unit	Total
3.00 Special Requirements			
SUBTOTAL CARRIED FORWARD (Line 2.12):			\$ 0
3.01 Emergency Generator (Standby Included)	0 KW	\$ 1,134.62	\$ 0
3.02 Fuel Oil 5,000 Gallon Storage for Generator	0 GAL	7.92	0
3.03 Fire Protection - Pump	0 EA	41,243.00	0
3.04 Fire Protection - Water Storage	0 GAL	5.29	0
3.05 Add for Crawlspace ¹	0 SF	30.57	0
3.06 Add for Pile Foundation ²	0 SF	84.54	0
3.07 Add for Thermopile Foundation ³	0 SF	91.02	0
3.08 Demolition of Existing Building ⁴	0 SF	25.35	0
3.09 Abatement of Existing Building ⁴	0 SF	13.64	0
3.10 Other Special Requirements ⁵	0 LS	0.00	0
3.11 SUBTOTAL (Lines 2.12 + 3.01 thru 3.10):			\$ 0

NOTES:

- ¹ Enter SF of building footprint that will be constructed using standard concrete foundations and a crawlspace.
- ² Enter SF of building footprint that will be constructed using standard pile foundation system.
- ³ Enter SF of building footprint that will be constructed using thermopile foundation system.
- ⁴ Note in the case of complete demolition of an existing structure use Item 3.08, add abatement demolition use Item 3.09 if hazardous materials are present.
- ⁵ Special Requirements may include required infrastructure for prime power generation, water treatment, and sewage treatment.

Alaska Department of Education Early Development
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New Construction and Renovation Work

School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

Section:	Quantity	Cost Per Unit	Total
4.00 Site Work (Technical Assistance Required)			
SUBTOTAL CARRIED FORWARD (Line 3.11):			\$ 0
4.01 Site Preparation ¹ (Estimate)	1 LS	\$ 0.00	\$ 0
4.02 Site Earthwork ² (Estimate)	1 LS	0.00	0
4.03 Site Improvements ³ (Estimate)	1 LS	0.00	0
4.04 Site Structures ⁴ (Estimate)	1 LS	0.00	0
4.05 Site Utilities ⁵ (Estimate)	1 LS	0.00	0
4.051 Water Main	0 LF	97.83	0
4.052 Sewer Main	0 LF	89.79	0
4.06 Bulk Fuel Storage	0 GAL	7.92	0
4.07 Site Electrical ⁶ (Estimate)	1 LS	0.00	0
4.08 Site Lighting (Cost Per Fixture)	0 EA	9,136.75	0
4.09 Other	0 LS	0.00	0
4.10 TOTAL BUILDING COSTS (Lines 3.11 + 4.01 thru 4.09):			\$ 0

NOTES:

- ¹ Include costs associated with soil remediation, building relocation, shoring, & dewatering.
- ² Include costs associated with the site clearing, excavation, grading, & import/export of fill.
- ³ Include costs associated with site paving, walks, sports courts & fields, stairs, ramps, walls, decks, fences, landscaping, play equipment, etc.
- ⁴ Include costs associated with covered walkways, covered play areas and support buildings.
- ⁵ Include costs associated with storm drainage, gas service, and utilidors.
- ⁶ Include costs associated with site electrical service, communications, security and electrical equipment.

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New Construction and Renovation Work

School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

Section:	Total
5.00 Construction General Requirements	
SUBTOTAL CARRIED FORWARD (BUILDING COSTS) (Line 4.10):	\$ 0
5.01 Mobilization, General Operating Costs and Office Overhead Line 4.09 x 13.25%	0
5.02 Contactor's Mark-Up, Risk and Profit Lines 4.09 + 5.01 x 8.50%	0
5.03 Bonds and Insurances Lines 4.09 + 5.01 + 5.02 x 2.45%	0
5.04 BASE TOTAL (Lines 4.10 + 5.01 thru 5.03):	\$ 0

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Alaska Department of Education Early Development
 Program Demand Cost Model for Alaskan Schools
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New Construction and Renovation Work

School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

Section:	Total
6.00 Geographic Area Cost Factor	
SUBTOTAL CARRIED FORWARD (BASE TOTAL) (Line 5.04):	\$ 0
6.01 Place Geographic Area Here (Refer to Table No. 1 for percentage addition)	0
Line 5.04 x 0.00%	
6.02 SUBTOTAL (Lines 5.04 + 6.01):	\$ 0

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Alaska Department of Education Early Development

Program Demand Cost Model for Alaskan Schools

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New Construction and Renovation Work

School District: <i>(Name of School District)</i>	Date of Estimate: <i>(Date)</i>
Project: <i>(Name of School)</i>	Location: <i>(Location of School)</i>

Section:	Total
8.00 Contingencies	
SUBTOTAL CARRIED FORWARD (Line 7.02):	\$ 0
8.01 <u>GENERAL</u> For construction unknowns and the unanticipated, on site and design criteria	Line 7.02 x 10.00% 0
8.02 SUBTOTAL (Lines 7.02 + 8.01):	\$ 0
8.03 <u>ESCALATION</u> Escalation is to be added for future cost estimates. Please put the year you anticipate the project to be escalated to. Escalation has been estimated only up to the year 2012 .	<div style="text-align: center; margin-bottom: 5px;"> 2013 ↓ </div> Line 8.02 x 3.00% 0
8.04 TOTAL ESTIMATED CONSTRUCTION VALUE (Lines 8.02 + 8.03):	\$ 0

Alaska Department of Education Early Development Program Demand Cost Model for Alaskan Schools 12th Edition Revised

New Construction and Renovation Work

School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

Section:	Total	See Below for Suggested EED Ranges
9.00 Project Overhead and Other Costs		
SUBTOTAL CARRIED FORWARD (CONSTRUCTION VALUE) (Line 8.04):	\$ 0	
9.01 Construction Management (by Consultant) ¹ Line 8.04 x 0.00%	0	2% to 4%
9.02 Land Purchase Costs ² 1 LS --	0	
9.03 Site Investigation ² 1 LS --	0	
9.04 Seismic Hazard ⁷ 1 LS --	0	
9.05 Design Services Costs Line 8.04 x 0.00%	0	6% to 10%
9.06 Construction ³ 1 LS --	0	
9.07 Equipment & Technology Costs ^{2, 5} Line 8.04 x 0.00%	0	up to 10%
9.08 District Administrative Overhead ⁴ Line 8.04 x 0.00%	0	up to 9%
9.09 Art ⁶ Line 8.04 x 0.00%	0	0.5% to 1%
9.10 Project Contingency Line 8.04 x 5.00%	0	
9.11 PROJECT TOTAL COST (Lines 8.04 + 9.01 thru 9.10): 5.00% Percentages OK	\$ 0	

NOTES:

- ¹ Percentage is established by AS 14.11.020(c) for consultant contracts (Maximum allowed percentage by total project cost \$0-\$500,000 - 4%, \$500,001-\$5,000,000 - 3%, over \$5,000,000 - 2%).
- ² Include only if necessary for completion of this project. Amounts included for Land and Site Investigation costs need to be supported in the Project Description (Question 17), and supporting documentation should be provided in the attachments.
- ³ Attach detailed construction cost estimate and life cycle cost if new in-lieu of renovation (not Cost Demand Model).
- ⁴ Includes district/municipal/borough administrative costs necessary for the administration of this project. This budget line will also include any in-house construction management cost.
- ⁵ Equipment and technology costs should be calculated based on the number of students to be served by the project. See the department's publication, Guidelines for School Equipment Purchases for calculation methodology (2005). The department will accept a 5% per year inflation rate (from the base year of 2005) added to the amounts provided in the Guideline. Technology is included with Equipment.
- ⁶ Only required for renovation of construction projects over \$250,000 that require an Educational Specification (AS 35.27.020(d)).
- ⁷ Costs associated with assessment, design, design review and special construction inspection services associated with seismic hazard mitigation of a school facility. This amount needs to be provided by a design consultant, and should not be estimated based on project percentage.

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New Construction and Renovation Work

School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

Section:	Quantity	Cost Per Unit	Total
11.00 Renovation			
11.01 FOUNDATION AND SUBSTRUCTURE			
11.02 Repairs (Estimate)	1 LS	\$ 0.00	\$ 0
11.10 SUPERSTRUCTURE			
11.11 Repairs (Estimate)	1 LS	0.00	0
11.12 Seismic Repairs (Estimate)	1 LS	0.00	0
11.20 EXTERIOR CLOSURE			
11.21 Exterior Upgrades (Replace Exterior Beveled Siding) ¹	0 SF	11.41	0
11.22 Exterior Upgrades (Repaint Existing) ¹	0 SF	2.85	0
11.23 Exterior Insulation Finish System to Existing ¹	0 SF	15.64	0
11.24 Exterior Upgrades (Cement Board/Painted) ¹	0 SF	7.47	0
11.25 Exterior Skin (Metal Siding)	0 SF	14.01	0
11.26 Insulation (Replace Insulation and Gypboard)	0 SF	6.44	0
11.27 Exterior Closure (Replace Doors and Frames)	0 EA	1,902.39	0
11.28 Exterior Closure (Replace Windows) ²	0 SF	79.14	0
11.29 Other Repairs (Estimate)	1 LS	0.00	0
11.30 ROOFING (Area of Roof)			
11.31 Replace Metal Roofing	0 SF	26.97	0
11.32 Replace Membrane Roofing	0 SF	19.20	0
11.40 INTERIOR CONSTRUCTION			
11.41 Replace Partitions (Includes Finishes) ⁴	0 SF	15.65	0
11.42 Replace Door Leaf and Frames ³	0 EA	1,438.04	0
11.43 Interior Painting (Walls and Ceilings) ⁵	0 SF	4.20	0
11.44 Replace Carpeting ⁵	0 SF	6.74	0
11.45 Replace Resilient Flooring ⁵	0 SF	7.79	0
11.46 Replace Gym Flooring ⁵	0 SF	25.10	0
11.47 Replace Ceramic Tile ⁵	0 SF	22.43	0
11.48 Replace Acoustical Tile Ceiling ⁵	0 SF	4.39	0
11.49 Replace Gypboard Ceiling ⁵	0 SF	5.95	0

NOTES:¹ Area of exterior wall.

⁴ Area of partition walls.

² Area is the square footage of windows only.

⁵ Actual area of applied finish.

³ For double doors count (2) door leaves.

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School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

Section:			
11.00	Renovation (Continued)	Qty	Cost Per Unit
11.50 SPECIALTIES/FURNISHINGS AND EQUIPMENT			
11.51	Replace Toilet Partitions ²	0 EA	\$ 1,656.67
11.52	Replace Toilet Accessories ¹	0 EA	163.86
11.53	Smart Boards	0 EA	6,379.40
11.54	Replace Sports Equipment and Lockers (Small Gym)	0 LS	27,640.00
11.55	Replace Tack/Chalk/Marker Boards	0 SF	18.92
11.56	Replace Base Cabinet Units	0 LF	250.54
11.57	Replace Wall Hung Units	0 LF	161.17
11.58	Other Repairs (Estimate)	1 LS	0.00
11.60 CONVEYING (Elevators, Etc.)			
11.61	New Two Stop Elevator	0 EA	124,167.00
11.62	Repairs/Replacement (Estimate)	1 LS	0.00
11.70 MECHANICAL			
11.71	Replace Plumbing - Fixtures Only ³	0 EA	1,899.51
11.72	Replace Plumbing - Entire System ^{3, 4}	0 SF	7.92
11.73	Replace Heating Systems ⁴	0 SF	12.87
11.74	Replace Ventilation Systems ⁴	0 SF	16.43
11.75	New Exhaust Fan	0 EA	10,492.00
11.76	New Cooling Systems	0 SF	2.90
11.77	New Controls	0 SF	9.05
11.78	New Sprinkler System (Excludes Replace Ceiling)	0 SF	8.68
11.79	Other Repairs/Replacement (Estimate)	1 LS	0.00

NOTES:

¹ Per toilet fixture.

² Per water closet.

³ If only the plumbing fixtures are to be replaced, then use 11.71. If the entire plumbing system is to be replaced, then use 11.72. Do not use both categories for the same area.

⁴ Will require some building remodel.

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School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

Section:	Qty	Cost Per Unit	Cost
11.00 Renovation (Continued)			
11.80 ELECTRICAL			
11.81 Replace Main Service and Distribution ¹	0 LS	\$ 107,519.00	\$ 0
11.82 Replace MDP ¹	0 LS	47,221.00	0
11.83 New Power Panel ¹	0 EA	8,964.00	0
11.84 Replace Lighting - Fixtures & Wiring ²	0 SF	9.94	0
11.85 Replace Lighting - Fixtures Only ²	0 SF	7.28	0
11.86 Replace Power Devices	0 SF	2.79	0
11.87 New Standby Power and Fuel Oil	0 KW	1,417.89	0
11.90 COMMUNICATIONS			
11.91 New Addressable Fire Alarm System	0 SF	2.20	0
11.92 New Computer Outlets (Rough-In)	0 SF	1.46	0
11.93 New Telephone/P.A./Intercom/Clock System	0 SF	2.42	0
11.94 New Public Address (Gym and Stage)	0 LS	38,361.00	0
11.95 New MATV System	0 SF	0.71	0
11.96 New Hearing Impaired Audio System	0 LS	10,021.00	0
11.97 New Security System/CCTV	0 SF	1.21	0
11.98 Sound Field System (Audio Enhancement System)	0 CR	4,084.40	0
11.99 Other Repairs/Replacement/Demolition (Estimate)	1 LS	0.00	0
11.100 SUBTOTAL (Lines 11.01 thru 11.99):			\$ 0

NOTES:

- ¹ The cost for 11.81 is based on replacement of MDP and 6 power panels. The scope of work for 11.81 is equivalent with selection of one 11.82 and six 11.83. Do not select all three categories.
- ² If the project scope includes replacement of lighting fixtures only, then use 11.84. If the project scope includes replacement of fixtures, wiring and switches, then use 11.85. Do not use both categories for the same area.

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New Construction and Renovation Work

School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

Section:	Quantity	Cost Per Unit	Total
12.00 Additional Costs for Hazardous Material Removal (Options) (Supplement to Section 11.00)			
SUBTOTAL CARRIED FORWARD (Line 11.100):			\$ 0
12.01 Complete Renovation (Interior) (Removal Only)	0 SF	\$ 14.95	\$ 0
12.02 Roof Replacement (Roof Area) (Removal Only)	0 SF	3.20	0
12.03 Exterior Upgrade (Number of Doors) (Removal Only)	0 EA	631.36	0
12.04 Replace Interiors (Removal Only)	0 SF	3.90	0
12.05 Replace Plumbing Fixtures (Removal Only)	0 EA	439.65	0
12.06 Replace Heating and Ventilation Systems (Removal Only)	0 SF	3.57	0
12.07 New Sprinkler System (Removal Only)	0 SF	3.07	0
12.08 Work in Connection with New Electrical Installation (Removal Only)	0 SF	0.76	0
12.09 Replace Small Fuel Oil Tank (Below Ground)	0 GAL	26.93	0
12.10 Replace Bulk Fuel Oil Tank (Above Ground)	0 GAL	8.72	0
12.11 Remove Below Ground Tank & Install New Above Ground Tank	0 GAL	13.27	0
12.12 Remove Above Ground Tank & Install New Below Ground Tank	0 GAL	12.62	0
12.13 Soil Remediation	0 CY	195.94	0
12.14 Other Specific Abatement	1 LS	0.00	0
12.15 SUBTOTAL (Lines 11.100 + 12.01 thru 12.14):			\$ 0

NOTES:

The areas or quantities to be inserted must only be the locations where hazardous materials are found, NOT the total building area.

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School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

Section:	Total
13.00 Construction General Requirements	
SUBTOTAL CARRIED FORWARD (Line 12.15):	\$ 0
13.01 Mobilization, General Operating Costs and Office Overhead	Line 12.13 x 15.00% 0
13.02 Contactor's Mark-Up, Risk and Profit	Lines 12.13 + 13.01 x 10.00% 0
13.03 Bonds and Insurances	Lines 12.13 + 13.01 + 13.02 x 3.00% 0
13.04 BASE TOTAL (Lines 12.15 + 13.01 thru 13.03):	\$ 0

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New Construction and Renovation Work

School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

Section:	Total
14.00 Geographic Area Cost Factor	
SUBTOTAL CARRIED FORWARD (BASE TOTAL) (Line 13.04):	\$ 0
14.01 Place Geographic Area Here (Refer to Table No. 1 for percentage addition)	0
Line 13.04 x 0.00%	
14.02 SUBTOTAL (Lines 13.04 + 14.01):	\$ 0

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School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

Section:	Total
16.00 Contingencies	
SUBTOTAL CARRIED FORWARD (Line 15.02):	\$ 0
16.01 <u>GENERAL</u> For construction unknowns and the unanticipated, on site and design criteria	0
Line 15.02 x 15.00%	
16.02 SUBTOTAL (Lines 15.02 + 16.01):	\$ 0
16.03 <u>ESCALATION</u> Escalation is to be added for future cost estimates. Please put the year you anticipate the project to be escalated to. Escalation has been estimated only up to the year 2012 .	0
Line 16.02 x 3.00%	
<div style="border: 1px solid black; padding: 2px; display: inline-block;">2013</div> ↓	
16.04 TOTAL ESTIMATED CONSTRUCTION VALUE (Lines 15.02 + 16.01 thru 16.03):	\$ 0

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New Construction and Renovation Work

School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

CONSTRUCTION SUMMARY	Gross Floor Area	Construction Costs	Project Total Costs
New School or Additions	0 SF	\$ 0	\$ 0
Renovation Work	0 SF	\$ 0	\$ 0
TOTAL NEW SCHOOL OR ADDITIONS AND RENOVATION WORK:		\$ 0	\$ 0

NEW SCHOOL OR ADDITIONS	Quantity	Cost Per Unit	Total
1.00 Instructional Resource/Support Teaching Areas			
1.01 Standard Classroom	0 SF	\$ 208.79	\$ 0
1.02 Kindergarten/Primary Classroom	0 SF	227.06	0
1.03 Damp Classroom/Laboratory	0 SF	231.93	0
1.04 Gymnasium	0 SF	288.60	0
1.05 Instructional Media Center (IMC)	0 SF	218.39	0
1.06 Music Room	0 SF	228.05	0
1.07 Home Economics	0 SF	243.47	0
1.08 Industrial Arts	0 SF	231.89	0
1.09 Other	0 SF	0.00	0
1.10 Other	0 SF	0.00	0
1.11 SUBTOTAL (Lines 1.01 thru 1.10):	0 SF		\$ 0
2.00 General Support/Supplementary Areas			
2.01 Multipurpose Room	0 SF	\$ 216.71	\$ 0
2.02 Auditorium	0 SF	246.86	0
2.03 Lockers and Showers	0 SF	326.86	0
2.04 Administration	0 SF	227.75	0
2.05 Cafeteria/Food Preparation	0 SF	481.39	0
2.06 Storage	0 SF	190.94	0
2.07 Toilets	0 SF	365.06	0
2.08 Circulation (Corridors, Etc.)	0 SF	215.14	0
2.09 Mechanical/Electrical	0 SF	190.94	0
2.10 Other	0 SF	0.00	0
2.11 Other	0 SF	0.00	0
2.12 SUBTOTAL (Lines 1.11 + 2.01 thru 2.11):	0 SF		\$ 0

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School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

NEW SCHOOL OR ADDITIONS	Quantity	Cost Per Unit	Total
3.00 Special Requirements			
3.01 Emergency Generator (Standby Included)	0 KW	\$ 1,134.62	\$ 0
3.02 Fuel Oil 5,000 Gallon Storage for Generator	0 GAL	7.92	0
3.03 Fire Protection - Pump	0 EA	41,243.00	0
3.04 Fire Protection - Water Storage	0 GAL	5.29	0
3.05 Add for Crawlspace	0 SF	30.57	0
3.06 Add for Pile Foundation	0 SF	84.54	0
3.07 Add for Thermopile Foundation	0 SF	91.02	0
3.08 Demolition of Existing Building	0 SF	25.35	0
3.09 Abatement of Existing Building	0 SF	13.64	0
3.10 Other Special Requirements	0 LS	0.00	0
3.11 SUBTOTAL (Lines 2.12 + 3.01 thru 3.10):			\$ 0
4.00 Site Work (Technical Assistance Required)			
4.01 Site Preparation	1 LS	\$ 0.00	0
4.02 Site Earthwork	1 LS	0.00	0
4.03 Site Improvements	1 LS	0.00	0
4.04 Site Structures	1 LS	0.00	0
4.05 Site Utilities	1 LS	0.00	0
4.051 Water Main	0 LF	97.83	0
4.052 Site Utilities	0 LF	89.79	0
4.06 Bulk Fuel Storage	0 GAL	7.92	0
4.07 Site Electrical	1 LS	0.00	0
4.08 Site Lighting (Cost Per Fixture)	0 EA	9,136.75	0
4.09 Other	0 EA	0.00	0
4.10 TOTAL BUILDING COSTS (Lines 3.11 + 4.01 thru 4.09):			\$ 0
5.00 Construction General Requirements			
5.01 Mobilization, General Operating Costs and Office Overhead		13.25%	0
5.02 Contractor's Mark-Up, Risk and Profit		8.50%	0
5.03 Bonds and Insurances		2.45%	0
5.04 BASE TOTAL (Lines 4.10 + 5.01 thru 5.03):			\$ 0
6.00 Geographic Area Cost Factor			
6.01 Geographic Area Cost Factor		0.00%	0
6.02 SUBTOTAL (Lines 5.04 + 6.01):			\$ 0

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School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

NEW SCHOOL OR ADDITIONS		Total
7.00 Size Factor		
7.01 Size Adjustment Factor		0
7.02 SUBTOTAL (Lines 6.02 + 7.01):		\$ 0
8.00 Contingencies		
8.01 <u>GENERAL</u> : For Construction Unknowns and the Unanticipated, on Site and Design Criteria	10.00%	0
8.02 <u>ESCALATION</u> : Escalation Added for Future Cost Estimates. Project Escalated to the Year . . . 2013	3.00%	0
8.03 TOTAL ESTIMATED CONSTRUCTION VALUE (Lines 7.02 + 8.01 Thru 8.02):		\$ 0
9.00 Project Overhead and Other Costs		
9.01 Construction Management (by Consultant)	0.00%	0
9.02 Land Purchase Costs	--	0
9.03 Site Investigation	--	0
9.04 Seismic Hazard	--	0
9.05 Design Services Costs	0.00%	0
9.06 Construction	--	0
9.07 Equipment & Technology Costs	0.00%	0
9.08 District Administrative Overhead	0.00%	0
9.09 Art	0.00%	0
9.10 Project Contingency	5.00%	0
9.11 PROJECT TOTAL COST (Lines 8.03 + 9.01 Thru 9.10):		\$ 0

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School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

RENOVATION WORK	Quantity	Cost Per Unit	Total
11.00 REMODEL			
11.01 FOUNDATION AND SUBSTRUCTURE			
11.02 Repairs (Estimate)	1 LS	\$ 0.00	\$ 0
11.10 SUPERSTRUCTURE			
11.11 Repairs (Estimate)	1 LS	0.00	0
11.12 Seismic Repairs (Estimate)	1 LS	0.00	0
11.20 EXTERIOR CLOSURE			
11.21 Exterior Upgrades (Replace Exterior Beveled Siding)	0 SF	11.41	0
11.22 Exterior Upgrades (Repaint Existing)	0 SF	2.85	0
11.23 Exterior Insulation Finish System to Existing	0 SF	15.64	0
11.24 Exterior Upgrades (Cement Board/Painted)	0 SF	7.47	0
11.25 Exterior Skin (Metal Siding)	0 SF	14.01	0
11.26 Insulation (Replace Insulation and Gypboard)	0 SF	6.44	0
11.27 Exterior Closure (Replace Doors and Frames)	0 EA	1,902.39	0
11.28 Exterior Closure (Replace Windows)	0 SF	79.14	0
11.29 Other Repairs (Estimate)	1 LS	0.00	0
11.30 ROOFING (Area of Roof)			
11.31 Replace Metal Roofing	0 SF	26.97	0
11.32 Replace Membrane Roofing	0 SF	19.20	0
11.40 INTERIOR CONSTRUCTION			
11.41 Replace Partitions (Includes Finishes)	0 SF	15.65	0
11.42 Replace Door Leafs and Frames	0 EA	1,438.04	0
11.43 Interior Painting (Walls and Ceilings)	0 SF	4.20	0
11.44 Replace Carpeting	0 SF	6.74	0
11.45 Replace Resilient Flooring	0 SF	7.79	0
11.46 Replace Gym Flooring	0 SF	25.10	0
11.47 Replace Ceramic Tile	0 SF	22.43	0
11.48 Replace Acoustical Tile Ceiling	0 SF	4.39	0
11.49 Replace Gypboard Ceiling	0 SF	5.95	0
11.50 SPECIALTIES/FURNISHINGS AND EQUIPMENT			
11.51 Replace Toilet Partitions	0 EA	1,656.67	0
11.52 Replace Toilet Accessories	0 EA	163.86	0
11.53 Smart Boards	0 EA	6,379.40	0

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New Construction and Renovation Work

School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

RENOVATION WORK	Quantity	Cost Per Unit	Total
11.00 REMODEL			
11.50 SPECIALTIES/FURNISHINGS AND EQUIPMENT			
11.54 Replace Sports Equipment and Lockers (Small Gym)	0 LS	27,640.00	0
11.55 Replace Tack/Chalk/Marker Boards	0 SF	18.92	0
11.56 Replace Base Cabinet Units	0 LF	250.54	0
11.57 Replace Wall Hung Units	0 LF	161.17	0
11.58 Other Repairs (Estimate)	1 LS	0.00	0
11.60 CONVEYING (Elevators, Etc.)			
11.61 New Two Stop Elevator	0 EA	124,167.00	0
11.62 Repairs/Replacement (Estimate)	1 LS	0.00	0
11.70 MECHANICAL			
11.71 Replace Plumbing - Fixtures Only	0 EA	1,899.51	0
11.72 Replace Plumbing - Entire System	0 SF	7.92	0
11.73 Replace Heating Systems	0 SF	12.87	0
11.74 Replace Ventilation Systems	0 SF	16.43	0
11.75 New Exhaust Fan	0 EA	10,492.00	0
11.76 New Cooling Systems	0 SF	2.90	0
11.77 New Controls	0 SF	9.05	0
11.78 New Sprinkler System (Excludes Replace Ceiling)	0 SF	8.68	0
11.79 Other Repairs/Replacement (Estimate)	1 LS	0.00	0
11.80 ELECTRICAL			
11.81 Replace Main Service and Distribution	0 LS	107,519.00	0
11.82 Replace MDP	0 LS	47,221.00	0
11.83 New Power Panel	0 EA	8,964.00	0
11.84 Replace Lighting - Fixtures & Wiring	0 SF	9.94	0
11.85 Replace Lighting - Fixtures Only	0 SF	7.28	0
11.86 Replace Power Devices	0 SF	2.79	0
11.87 New Standby Power and Fuel Oil	0 KW	1,417.89	0
11.90 COMMUNICATIONS			
11.91 New Addressable Fire Alarm System	0 SF	2.20	0
11.92 New Computer Outlets (Rough-In)	0 SF	1.46	0
11.93 New Telephone/P.A./Intercom/Clock System	0 SF	2.42	0
11.94 New Public Address (Gym and Stage)	0 LS	38,361.00	0
11.95 New MATV System	0 SF	0.71	0

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New Construction and Renovation Work

School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

RENOVATION WORK	Quantity	Cost Per Unit	Total
11.00 REMODEL			
11.90 COMMUNICATIONS			
11.96 New Hearing Impaired Audio System	0 LS	10,021.00	0
11.97 New Security System/CCTV	0 SF	1.21	0
11.98 Sound Field System (Audio Enhancement System)	0 CR	4,084.40	0
11.99 Other Repairs/Replacement/Demolition (Estimate)	1 LS	0.00	0
11.100 SUBTOTAL (Lines 11.01 thru 11.99):			\$ 0
12.00 ADDITIONAL COSTS FOR HAZARDOUS MATERIALS REMOVAL (OPTIONS) (SUPPLEMENT TO SECTION 11.00)			
12.01 Complete Renovation (Interior) (Removal Only)	0 SF	14.95	0
12.02 Roof Replacement (Roof Area) (Removal Only)	0 SF	3.20	0
12.03 Exterior Upgrade (Number of Doors) (Removal Only)	0 EA	631.36	0
12.04 Replace Interiors (Removal Only)	0 SF	3.90	0
12.05 Replace Plumbing Fixtures (Removal Only)	0 EA	439.65	0
12.06 Replace Heating and Ventilation Systems (Removal Only)	0 SF	3.57	0
12.07 New Sprinkler System (Removal Only)	0 SF	3.07	0
12.08 Work in Connection with New Electrical Installation (Removal Only)	0 SF	0.76	0
12.09 Replace Small Fuel Oil Tank (Below Ground)	0 GAL	26.93	0
12.10 Replace Bulk Fuel Oil Tank (Above Ground)	0 GAL	8.72	0
12.11 Remove Below Ground Tank and Install New Above Ground Tank	0 GAL	13.27	0
12.12 Remove Above Ground Tank and Install New Below Ground Tank	0 GAL	12.62	0
12.13 Soil Remediation	0 CY	195.94	0
12.14 Other Specific Abatement	1 LS	0.00	0
12.15 SUBTOTAL (Lines 11.100 + 12.01 thru 12.14):			\$ 0
13.00 Construction General Requirements			
13.01 Mobilization, General Operating Costs and Office Overhead		15.00%	0
13.02 Contractor's Mark-Up, Risk and Profit		10.00%	0
13.03 Bonds and Insurances		3.00%	0
13.04 BASE TOTAL (Lines 12.15 + 13.01 thru 13.03):			\$ 0

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School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

RENOVATION WORK	Total
14.00 Geographic Area Cost Factor	
14.01 Geographic Area Cost Factor	0.00% 0
14.02 SUBTOTAL (Lines 13.04 + 14.01):	\$ 0
15.00 Adjustment Factor	
15.01 Dollar Adjustment Factor	0
15.02 SUBTOTAL (Lines 14.02 + 15.01):	\$ 0
16.00 Contingencies	
16.01 <u>GENERAL</u> : For Construction Unknowns and the Unanticipated, on Site and Design Criteria	15.00% 0
16.02 <u>ESCALATION</u> : Escalation Added for Future Cost Estimates. Project Escalated to the Year . . . 2013	3.00% 0
16.03 TOTAL ESTIMATED CONSTRUCTION VALUE (Lines 15.02 + 16.01 Thru 16.02):	\$ 0
17.00 Project Overhead and Other Costs	
17.01 Construction Management (by Consultant)	0.00% 0
17.02 Land Purchase Costs	-- 0
17.03 Site Investigation	-- 0
17.04 Seismic Hazard	-- 0
17.05 Design Services Costs	0.00% 0
17.06 Construction	-- 0
17.07 Equipment & Technology Costs	0.00% 0
17.08 District Administrative Overhead	0.00% 0
17.09 Art	0.00% 0
17.10 Project Contingency	5.00% 0
17.11 PROJECT TOTAL COST (Lines 16.03 + 17.01 Thru 17.10):	\$ 0

Alaska Department of Education Early Development
 Program Demand Cost Model for Alaskan Schools
 12th Edition Revised

New Construction and Renovation Work

School District: (Name of School District)	Date of Estimate: (Date)
Project: (Name of School)	Location: (Location of School)

NOTES AND ASSUMPTIONS

Page No.	Line Item	Description
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0. 0.00

*PROGRAM DEMAND COST MODEL
FOR
ALASKAN SCHOOLS*

Introduction, Instructions and Tables



12th Edition Update Revised
(April 2012)



FORWARD

The cost estimate for the Program Demand Cost Model for Alaskan schools was originally developed for the State of Alaska, Department of Education in 1981; and has been used over the years with considerable success. It has been updated from time to time through this being the 12th Edition Update Revised.

This Revised 12th Edition Update Program Demand Cost Model has been developed by HMS Inc., 4103 Minnesota Drive, Anchorage, Alaska 99503, is a complete demand cost model for both new construction (or major additions) and renovation.

The intent of the Program Demand Cost Model is to establish a complete budget for each facility, useful for legislative requests or bond issues, or other forms of appropriation to be placed before the electorate. Also, it can be used merely as a feasibility analysis without going to the expense of producing architectural drawings or engineering reports, but simply with the developed educational specifications and this Program Demand Cost Model. The secondary use for the cost estimate Program Demand Cost Model is to establish the present replacement value for insurance purposes.

Prices and unit rates are based on early 2012 costs for materials, equipment and freight, and labor rates. It should be noted that this is a method to develop a budget only and actual costs will vary. The Program Demand Cost Model will not be applicable for specific projects with developed design beyond concept level.

Escalation is factored in. Refer to HMS Inc.'s Alaskan Construction Escalation Index, Table No. 3, of this report.

Program Demand Cost Models: 1st Edition - May 1981; 2nd Edition - November 1983 (computerized in December 1984); 3rd Edition - August 1986; 4th Edition - August 1988; 5th Edition - June 1991; 6th Edition - July 1997; 7th Edition - November 1997, 8th Edition (7th Revised) - March 2000; 9th Edition - April 2001; 10th Edition - March 2005; 11th Edition - April 2007, 11th Edition Update - March 2008, 11th Edition Revised - April 2009, 12th Edition - April 2010, and 12th Edition Update - April 2011.



INSTRUCTIONS ON HOW TO USE THE DEMAND COST MODEL

The Demand Cost Model is created in Microsoft Excel 2010.

To start, open the template and save a copy on your hard drive.

Starting with the Project Summary sheet, fill in the necessary information in the **RED** cells only (school district, project, location and date) and all other sheets will format accordingly. For a renovation project, the square foot quantity must be placed in appropriate cell, the new construction square foot quantity is calculated using the quantities placed within the model.

Next, go to Tab 1.0 for New Construction, or Tab 11.00 for Renovation Work. Place quantities in applicable **RED** cells. Please note, the red cells are the only cell that can be edited. HINT: If you use the tab key, you will move from cell-to-cell on those requiring input.

Proceed through the other tabbed sheets. All subtotal calculations and summary sheets will be calculated automatically.

After completing the variable information make sure to save your work. You can print the entire workbook by selecting File, Print, Entire Workbook.



BIBLIOGRAPHY

Guide for School Facility Appraisal - Alaska Edition (Adapted for the State Alaska - Department of Education): The Council of Education Facility Planners, International - May 1994.

Cost Estimate Program Demand Model - State of Alaska, Department of Education.

HMS Inc. 1st Edition - May 1981; 2nd Edition - November 1983 (computerized in December 1984); 3rd Edition - August 1986; 4th Edition - August 1988; 5th Edition - June 1991; 6th Edition - July 1997; 7th Edition - November 1997, 8th Edition (7th Revised) - March 2000; 9th Edition - April 2001; 10th Edition - March 2005; 11th Edition - April 2007, 11th Edition Update - March 2008; 11th Edition Revised - April 2009; 12th Edition - April 2010, and 12th Edition Update - April 2011.

Cost Data Files and Records. HMS Inc., 1980 through early 2012.

Title 36, Public Contracts: Laborers' and Mechanics' Minimum Rates of Pay, State of Alaska, Department of Labor, dated September 2011 and review of changes to the Davis Bacon Act.

Department of Education, Appendix F: Type of Space Added or Improved by the Bond Reimbursement & Grant Review Committee, April 18, 1997.

Site Adjustment Factor

Based on a formula developed for the Department of Defense USA federal government projects.



TABLES

- No. 1 - Geographic Area Cost Factor
- No. 2 - Size Adjustment Factor
- No. 3 - Alaskan Construction Escalation Index
- No. 4 - DOE Instruction CIP Application, Appendix F
- No. 5 - Abbreviations
- No. 6 - Statement of Specifications



TABLE NO. 1
GEOGRAPHIC AREA COST FACTOR
APRIL 2012

	INDEX	PERCENTAGE
Alaska Gateway	125.20	25.20%
Aleutian Region	154.50	54.50%
Aleutians East	128.70	28.70%
Anchorage (Base)	100.00	0.00%
Annette Island	124.40	24.40%
Bering Strait	181.20	81.20%
Bristol Bay Borough Schools	128.70	28.70%
Chatham	124.40	24.40%
Chugach	108.50	8.50%
Copper River	113.90	13.90%
Cordova	108.50	8.50%
Craig City Schools	112.40	12.40%
Delta/Greely	119.63	19.63%
Denali Borough	119.63	19.63%
Dillingham City Schools	133.54	33.54%
Fairbanks	105.00	5.00%
Galena	139.30	39.30%
Haines	112.40	12.40%
Hoonah City Schools	124.40	24.40%
Hydaburg City Schools	124.40	24.40%



TABLE NO. 1
GEOGRAPHIC AREA COST FACTOR
APRIL 2012

	INDEX	PERCENTAGE
Iditarod Area Schools		
Yukon River Village	143.05	43.05%
Kuskokwim River Village	154.50	54.50%
Landlocked Village	160.90	60.90%
Juneau City/Borough Schools	103.60	3.60%
Kake City Schools	122.90	22.90%
Kashunamuit	152.36	52.36%
Kenai Peninsula		
Kenai/Soldotna	98.60	-1.40%
Homer Area	105.50	5.50%
Ketchikan	110.80	10.80%
Klawock City Schools	124.40	24.40%
Kodiak Island		
Kodiak	112.40	12.40%
Village	124.40	24.40%
Kuspuk Schools	154.00	54.00%
Lake & Peninsula		
Gulf of Alaska Village	124.40	24.40%
Bristol Bay Village	136.04	36.04%
Landlocked Village	160.73	60.73%
Lower Kuskokwim		
Bethel	156.10	56.10%
Villages	167.10	67.10%
Lower Yukon	167.10	67.10%
Mat-Su Borough Schools		
Palmer - Wasilla	99.00	-1.00%
Other Areas	105.50	5.50%
Nenana City Schools	116.50	16.50%



TABLE NO. 1
GEOGRAPHIC AREA COST FACTOR
APRIL 2012

	INDEX	PERCENTAGE
Nome City Schools	156.10	56.10%
North Slope Borough		
Barrow	171.80	71.80%
Villages	182.20	82.20%
Atqasuk/Pt. Lay	199.90	99.90%
Northwest Arctic Schools		
Kotzebue	150.18	50.18%
Villages	181.50	81.50%
Pelican City Schools	124.40	24.40%
Petersburg City Schools	110.80	10.80%
Pribilof Island Schools	164.70	64.70%
Sitka City Borough	110.80	10.80%
Skagway City Schools	110.80	10.80%
Southeast Island Schools	123.19	23.19%
Southwest Region Schools	140.91	40.91%
St. Mary's School District	159.75	59.75%
Tanana City Schools	134.65	34.65%
Unalaska City Schools	140.00	40.00%
Valdez City Schools	109.30	9.30%
Wrangell City Schools	110.80	10.80%
Yakutat City Schools	115.40	15.40%
Yukon Flats		
Village on Road System	122.95	22.95%
Village on River	141.80	41.80%
Landlocked Village	159.73	59.73%



TABLE NO. 1
GEOGRAPHIC AREA COST FACTOR
APRIL 2012

	INDEX	PERCENTAGE
Yukon-Koyukuk		
Village on Road System	122.95	22.95%
Village on Yukon River	141.80	41.80%
Village on Koyukuk River	154.50	54.50%
Yupiit Schools	152.36	52.36%

NOTES:

This is an estimate of geographic area cost factors based on averages for materials, freight, equipment costs, and current Title 36 labor rates. The cost factors are based on an institutional building in Alaska using a standard AIA contract or similar contract. This is merely a guide, actual costs will vary.

This is only a guide and not necessarily correct for any specific need. It represents only a collection of costs normally found on some construction projects, rather than the custom requirements of a particular project.

This is not an index. This is a geographic area cost factor which includes not merely cost changes and logistical consideration, but also design criteria and how it is applied in different locations. Such design considerations would normally include standard concrete footings used mostly in Southcentral and Southeastern Alaska, to piling requirements in arctic and sub-Arctic, however, as this is a line item in the cost model, it has **not** been included in these calculations.

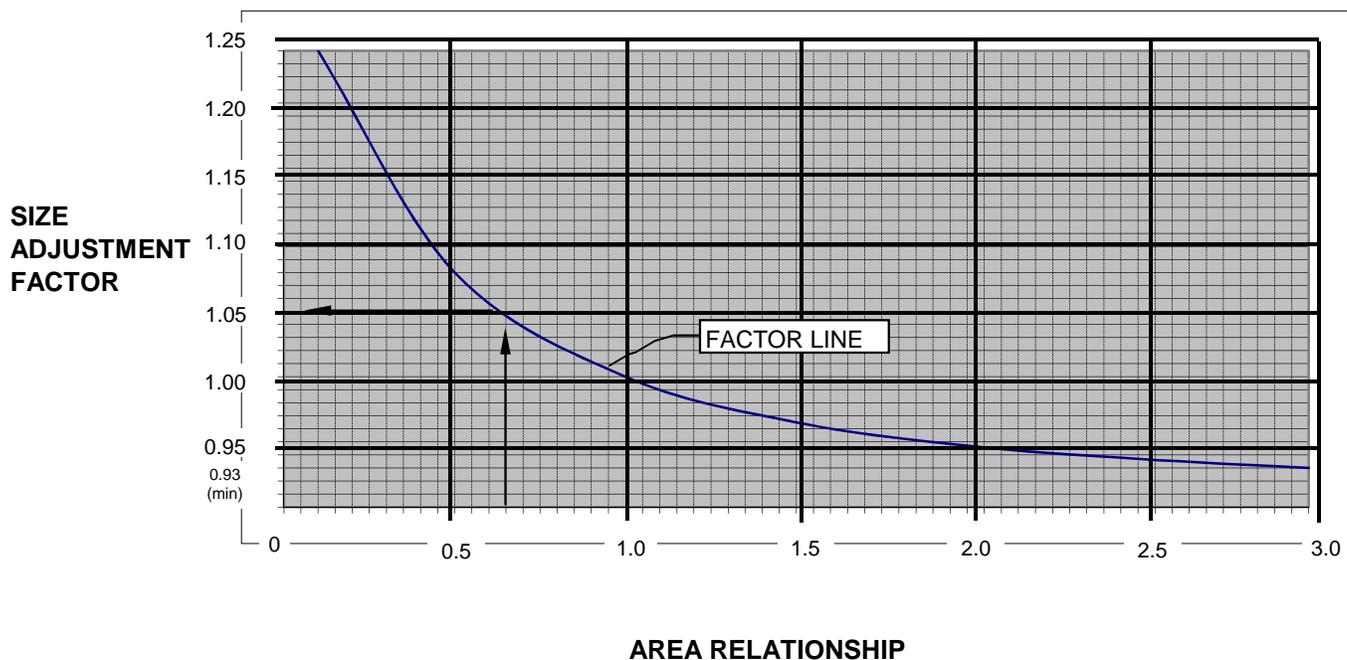
The calculation used in developing these cost factors are based on reasonable assumptions. For example, barge freight is mostly included rather than air freight for all materials and equipment. It is also assumed that local labor can be used to the fullest general availability, rather than all imported workers.

Village-to-village costs will vary plus or minus 5%. When using this geographic cost factor, consider how the location for which the estimate is being prepared is different from other surrounding places.

Regional cost factors are based on general and approximate calculations for anticipated conditions generally found in the area and logistic considerations. The more specific area factors are more subjective and based on opinion rather than any detailed analysis.



TABLE NO. 2a
SIZE ADJUSTMENT FACTOR



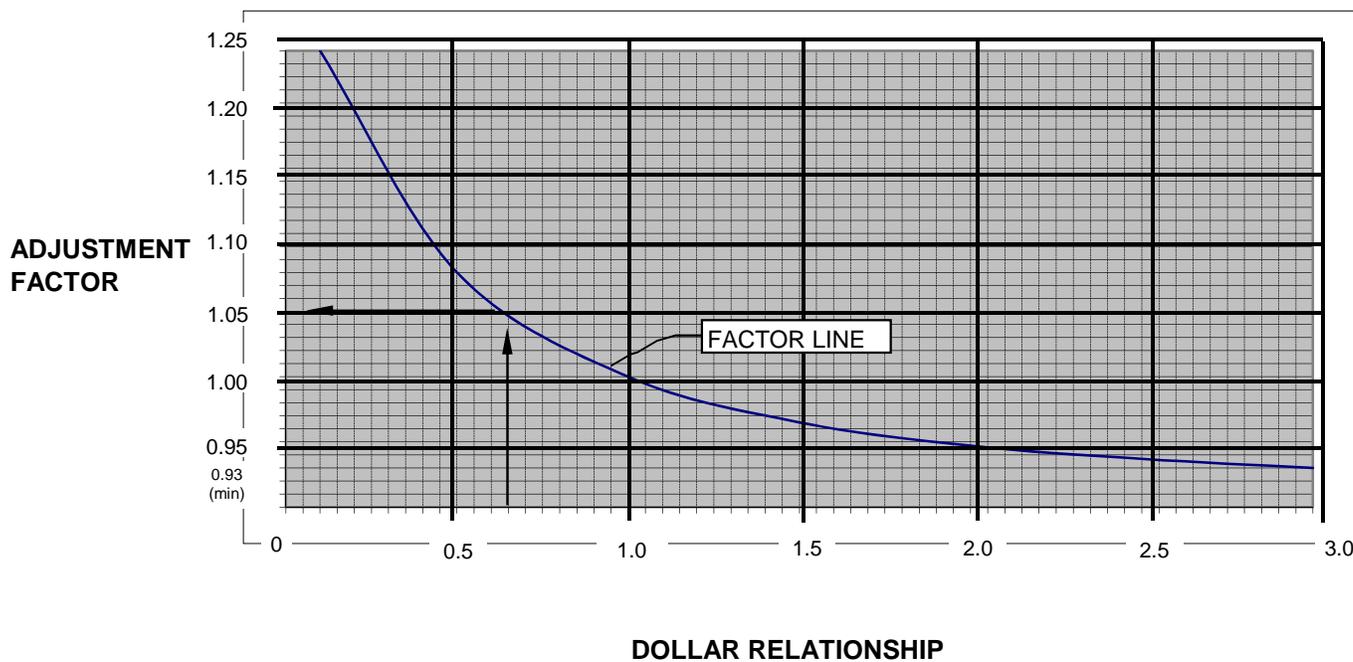
EXAMPLE: The Size Adjustment Factor is desired for a 16,000 SF Academic Facility.

AREA RELATIONSHIP:
$$\frac{\text{PROPOSED FACILITY SIZE}}{\text{TYPICAL FACILITY SIZE}} = \frac{16,000 \text{ SF}}{25,000 \text{ SF}} = 0.64$$

Find .64 on the horizontal axis. Trace a vertical line to the factor curve and then trace a horizontal line to the vertical axis' Size Adjustment Factor which is 1.05.



TABLE NO. 2b
DOLLAR ADJUSTMENT FACTOR



EXAMPLE: The Dollar Adjustment Factor is desired for a \$2,500,000 renovation project.

DOLLAR RELATIONSHIP:
$$\frac{\text{PROPOSED FACILITY } \$2,500,000}{\text{TYPICAL FACILITY } \$4,000,000} = 0.625$$

Find .625 on the horizontal axis. Trace a vertical line to the factor curve and then trace a horizontal line to the vertical axis' Adjustment Factor which is 1.05.



TABLE NO. 3
ALASKAN CONSTRUCTION ESCALATION INDEX
ANCHORAGE, ALASKA

MARCH 2012

Base Year 1980	Index	Base Year 1980	Index	Percentage
1980	100.00	1997	146.70	
1981	104.40	1998	149.12	2.42%
1982	107.70	1999	150.96	1.84%
1983	115.60	2000	152.60	1.64%
1984	118.60	2001	154.53	1.93%
1985	117.70	2002	162.54	8.01%
1986	121.40	2003	166.34	3.80%
1987	123.00	2004	175.57	10.23%
1988	124.80	2005	187.55	11.98%
1989	126.40	2006	197.41	9.86%
1990	131.80	2007	204.73	7.32%
1991	134.30	2008	207.59	2.86%
1992	138.80	2009	209.27	1.68%
1993	143.30	2010	212.09	2.82%
1994	144.40	2011	215.98	3.80%
1995	143.40	2012	218.38	2.40%
1996	146.20	2013		(Guess) 3.00%
		2014		(Guess) 3.10%

NOTES:

Back-up data for this analysis is held at HMS Inc., 4103 Minnesota Drive, Anchorage, Alaska.

These cost estimates are an index based on average costs for materials, freight and equipment, also estimated Title 36 labor rates. The index is based on an institutional building in Anchorage using a standard AIA contract or similar contract.

Remember always that an index is only a useful guide and not necessarily correct for any specific need. It represents only a collection of costs normally found on some construction projects, rather than the custom requirements of a particular project.

Predictions for escalation, we observe high cost of oil and oil products that will have some impact on construction costs in Alaska, also recent signs of slowing down in the construction industry. For this reason, we are estimating escalation leveling over the next two years similar to that we have recently experienced.

From all the information gathered for this study of costs, we suggest a 3.00% escalation allowance to 2013, and for 2014 a suggestion of 3.10%.



TABLE NO. 4

DEPT. OF EDUCATION INSTRUCTION CIP APPLICATION

**APPENDIX F: TYPE OF SPACE ADDED OR IMPROVED
ADOPTED BY THE BOND REINFORCEMENT & GRANT REVIEW COMMITTEE**

Category A - Instructional or Resource

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

Category B - Support Teaching

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

Category C - General Support

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

Category D - Supplementary

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



TABLE NO. 5

ABBREVIATIONS

\$	=	Dollars
SF	=	Square Foot
LS	=	Lump Sum
EA	=	Each
GAL	=	Gallons
CY	=	Cubic Yards
CR	=	Classroom



TABLE NO. 6

STATEMENT OF SPECIFICATIONS

Consideration for pricing of unit costs in the Program Demand Cost Model for Alaskan Schools is based on superior level of specifications generally applied to new construction throughout the state. The reason being is that these schools are subject to hard usage, by day for educational use housing a significant number of students, faculty and support staff, at other times schools are also used by the communities for a variety of functions.

To place the standard of specifications used on Alaskan schools in every day words, it will be reasonable to say that the quality of materials, workmanship and equipment specified is well above residential facilities, above a standard office building, probably similar to an airport and a little lower than a medical center.

Since the early 1970s, Alaska has tried to consider future operations and maintenance cost impacts in the funding of new school programs in the hope that a better funded project would allow for a more economic facility in terms of Life Cycle Cost for the reason schools have designed to a superior level of specification.

In recent years some significance has been placed on ecological concerns that are both earth friendly and long term cost savings.

CONCRETE:

Strength of concrete often is specified to a minimum of 4,000 psi.

MASONRY:

Many areas in Alaska are Seismic Zone 4. Design of masonry work calls for significant reinforcing and support.

METALS:

Many areas in Alaska are Seismic Zone 4. Design of structural elements have enhanced strength connections and cross bracings.

WOODS AND PLASTICS:

Rough carpentry lumber at a minimum No. 2 grade, plywood (structural I) and finish work to a good quality with plastic laminate finish.

Wood framed buildings are also designed for Seismic Zone 4.



TABLE NO. 6

STATEMENT OF SPECIFICATIONS

THERMAL AND MOISTURE PROTECTION:

Thermal insulation in walls, R-19 and R-30, and roof R-50. Roofing material EPDM or Klip Rib metal, the building sealed with Tyvek and joint sealants.

OPENINGS:

Superior quality doors, frames and hardware. Windows Low E and insulated.

FINISHES:

Standard school finishes. Gypboard walls, acoustical tile ceilings, carpet and vinyl flooring with ceramic tile in bathroom toilets.

SPECIALTIES:

Higher quality toilet partitions and toilet accessories, painted metal lockers and comprehensive signage.

EQUIPMENT:

Superior quality kitchen equipment, stainless steel worktops, good quality sports equipment.

FURNISHINGS:

Plastic laminate finish to casework. Window coverings and entry mats.

MECHANICAL:

Copper water piping, insulated cast iron waste, American Standard fixtures.

Weil McLane boilers, hydronic heating, air handling with some cooling and exhaust system with digital controls.

Fully sprinklered fire suppression system throughout the school.

ELECTRICAL:

Good quality switchgear, panels and transformers, copper wiring all in conduit backed up with a standby generator. Lighting with energy saving lamps and good quality devices. Fire alarm system and all low voltage system currently used in modern Alaskan schools.



Program Demand Cost Model for Alaskan Schools

Consultant

HMS, Inc.
4103 Minnesota Drive
Anchorage, Alaska

Editor

Sam Kito III, P.E.
Facilities Engineer
Alaska Department of Education
Juneau, Alaska

Acknowledgements

Thanks to the individuals at HMS, Inc. for their flexibility and professional advice on the 12th Edition Update Revised through the early 2012 construction season. Thanks also to the Bond Reimbursement and Grant Review Committee members who reviewed the publication in its final form and to users of previous editions for their suggestions for improvement.

Also thanks to previous DEED employees who have worked on developing and editing this document in past years.

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State of Alaska
Department of Education
Juneau, Alaska

The 12th Edition Update Revised of the Program Demand Cost Model, developed by HMS Inc., is a complete demand cost model for both new construction (or major additions) and renovation.

Prices and unit rates are based on March/April 2012 costs for materials, equipment, freight, and Title 36 labor rates. It should be noted that this is a method to develop a budget only and actual costs will vary. The Program Demand Cost Model will not be applicable for specific projects with developed design beyond concept level.

Opinions or estimates of probable construction costs used in developing the Program Demand Cost Model and escalation rate are prepared on the basis of HMS Inc.'s experience and qualifications and represent HMS Inc.'s judgment as a professional generally familiar with the industry. However, since HMS Inc. has no control over the cost of labor, materials, equipment or services furnished by others, over contractor's methods of determining prices, or over competitive bidding or market conditions, HMS Inc. cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from HMS Inc.'s opinions or estimates of probable construction cost contained in this cost model study.

Acknowledgements (Continued)

Escalation has been estimated and included based on current understanding of the local construction industry and national effect on the price of commodities, such as oil and oil based products, and labor costs leveling over the next two years.

Material and equipment prices have been gathered from a number of sources that include Spenard Builders Supply, Anchorage Sand and Gravel Company, Inc., and Ace Tanks Anchorage. The Guide, Means Cost Data, and other information obtained through the practice of construction cost estimating.

Program Demand Cost Models: 1st Edition - May 1981; 2nd Edition - November 1983 (computerized in December 1984); 3rd Edition - August 1986; 4th Edition - August 1988; 5th Edition - June 1991; 6th Edition - July 1997; 7th Edition - November 1997, 8th Edition (7th Revised) - March 2000; 9th Edition - April 2001; 10th Edition - March 2005; 11th Edition – March 2007; 11th Edition Update – March 2008; 11th Edition Revised – April 2009; 12th Edition – April 2010, and 12th Edition Update – April 2011.

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How to Use the Cost Model

The Program Demand Cost Model for Alaskan Schools (Cost Model) was originally developed for the State of Alaska, Department of Education in 1981; and has been used over the years with much success. Through the 6th Edition, it was revised periodically to keep unit costs current. The 6th and 7th Editions underwent significant modification of the Renovation module by shifting to a building systems based model to provide users a more versatile estimating tool. The 8th Edition provided detailed renovation cost data. In the 10th Edition further developed building systems and advanced low voltage electrical systems that better reflect those in use in a modern school. The 11th Edition reflects major cost changes experienced in the 2005/2006 period. The 11th Edition Update continues to reflect major cost changes and adds specific classroom technology. The 12th Edition was developed spring 2010 and updated spring 2011. This revision is to include changes in cost and labor rates that have occurred over the last twelve months.

The Cost Model is designed to address two types of construction projects: New Schools or Additions and Renovations. The renovation costs are itemized by building systems to allow the user to generate project specific renovation costs. This provides the renovation module the ability to address a wide variety of project scopes; from window replacements to complete interior tear out and remodel.

The revisions to the renovation section can generate good quality cost estimates but require that the user has an understanding of the building systems affected by the project and a rough idea of the quantity of work required to each building system. It is not as quick as summing the square footage of space to be renovated and applying a light, medium, or high renovation cost. However, properly applied it will generate a good quality, project specific cost estimate.

The Cost Model is to be used to establish a complete budget for a specific school construction project. The project construction budget can be utilized as a basis for legislative funding requests, local bond issues, or other forms of appropriation. It can be used to generate a conceptual estimate without going to the expense of producing architectural drawings or engineering reports or, as a means of assessing a consultant's estimate for its reasonableness.

It should be noted that the Cost Model is a tool to develop a construction project budget for projects with limited information or in the early stages of definition. It is not intended for projects beyond the conceptual design level or for projects where detailed estimates or contractor quotes are available.

Construction and Cost Trends

Over the last year 2011/12 the construction industry in Alaska has been working at reduced rate. The housing market is yet to pick-up so new starts on houses has been limited. The federal government has dramatically reduced spending on military projects, and the private sector has been quiet. Larger projects have been funded by the State of Alaska.

It has been observed that more bidders are after fewer projects, that will be a benefit to getting lower bids with greater competition, however, price and costs increases on materials, labor and transportation will not provide for lower bids.

Over these last twelve months, oil has maintained a high price level keeping the cost of freight high for the supply of all materials. Labor rates have maintained a steady increment but at a slower pace than over recent years.

Because of the increase in competition, it can be expected that profit margins will be lowered by the general contractors and some of the subcontractors; however, mechanical and electrical subcontractors will be kept busy so no change is expected in this sector of the industry.

Getting Started

The Cost Model is available from the Department of Education Education's web site at <http://www.eed.state.ak.us/Facilities/FacilitiesCIP.html>. The following documents are available on the site:

- [Cost Model: a spreadsheet for costing a new school or addition and renovation](#) - MS Excel 2010
- [Tables: Geographic Area Cost Factor; Size Adjustment Factor; Escalation Index; and EED, Appendix F](#) - PDF

To use the model, open the link, and save the file on your hard drive. The Cost Model workbook is composed of a series of worksheets that address different project costs. Worksheets 1.00 through 9.00 are for New Construction or Addition work and Worksheets 11.00 through 16.00 are for Renovation work.

Worksheet – Project Summary

The workbook should open to the *Project Summary* worksheet. This worksheet provides a single page summary of the project identification and the estimated project costs. Please refer to the Samples section for an example of the *Project Summary* worksheet. The cells with red text are to be used for entry of project specific information. The red text cells should be the only editable cells in the workbook. The tab key will move the cursor from editable cell to editable cell while skipping the locked cells. The cells containing estimated project costs are linked to other worksheets and no edits to these cells are required. Complete the project summary information, save the file, and proceed to the next worksheet. It is recommended that the file be saved at the completion of each worksheet.

New School or Addition Projects

Worksheet - 1.00

The next worksheet is titled 1.00. This worksheet contains square foot of floor area unit costs for various types of *Instructional Resource/Support Teaching Areas*. These space categories are similar to those in Appendix F of the CIP Application. Enter the square feet of floor area that is required in each of the space types. The *Other* space categories are available for required instructional spaces that are not specifically listed. Enter a descriptive title for the *Other* space on the worksheet by overwriting the red text cell entitled *Other*. Please provide additional information regarding the physical characteristics of the space and the basis for the estimated cost on the *Notes-Assumptions* worksheet.

Worksheet - 2.00

The next worksheet is titled 2.00. This worksheet contains square foot of floor area unit costs for various types of *General Support/Supplementary Areas*. These space categories are similar to those in Appendix F of the CIP Application. Enter the square feet of floor area that is required in each of the space types. The *Other* space categories are available for required general support spaces that are not listed. Enter a descriptive title for the *Other* space on the worksheet by overwriting the red text cell entitled *Other*. Please provide additional information regarding the physical characteristics of the space and the basis for the estimated cost on the *Notes-Assumptions* worksheet.

Worksheet - 3.00

The next worksheet is titled 3.00. This worksheet contains unit costs for some *Special Requirements* that are often included in the construction of a new school or addition. Please note that the unit costs are not based on square feet of floor area so the units entered in the red text cells must coincide with units used in pricing a particular item. Below is a brief summary of the work items included on worksheet 3.00:

3.01 Emergency Generator (Day Tank Included) – enter the number of kilowatts (KW) required by the project.

3.02 Fuel Oil Storage for Generator (Usually Placed on Site) – enter the gallon capacity of fuel of the generator’s storage tank (this tank is in addition to the day tank).

New School or Addition Projects

3.03 Fire Protection (Pump) – enter the number of pumps required to provide adequate pressure for the fire sprinkler system. Most schools in urban areas will have water supplied at an adequate pressure for the fire sprinkler system. Many rural schools will need pumps to provide adequate pressure for the fire sprinkler system, especially schools that require water storage tanks for the fire sprinkler system.

3.04 Fire Protection (Water Storage) – enter the gallon capacity of water storage tanks required to provide sufficient water to supply the fire sprinkler system. Technical assistance may be required to accurately calculate the water storage tank size requirements.

3.05 Add for Crawlspace – enter the square foot area of the crawlspace. Costs include excavation, structural floor, sprinklers and lighting.

3.06 Add for Pile Foundation – enter the square foot area of the ground floor. Costs include piles, structural floor, soffit with interstitial space, sprinklers and lighting.

3.07 Add for Thermopile Foundation – enter the square foot area of the ground floor. Costs include thermopiles, structural floor, soffit with interstitial space, sprinklers and lighting.

3.08 Demolition of Existing Building – enter complete square foot area of the facility to be demolished. Costs include demolition and landfill costs, but exclude hazardous material abatement. Note, this item is for removal of the entire building.

3.09 Abatement of Existing Building – enter complete square foot area of the facility to be abated. Costs exclude demolition included in 3.08 Demolition of Existing Building.

3.10 Other Special Requirements – enter a lump sum amount for *Other Special Requirements*. The lump sum cost should be calculated as if the work were to be performed in Anchorage. The geographic factor applied on worksheet 6.00 will convert the lump sum cost to an appropriate regional cost. Please provide additional information regarding the other work on the *Notes-Assumptions* worksheet. Technical assistance may be required to accurately calculate cost of *Other Special Requirements*.

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Worksheet - 4.00

The next worksheet is titled 4.00. This worksheet contains some unit costs for *Sitework*, however most of the categories on this worksheet are lump sum entries. This requires the input of a dollar amount rather than a quantity and will probably require technical assistance to accurately complete. Please note that all lump sum costs should be calculated as if the work were to be performed in Anchorage. The geographic factor applied on worksheet 6.00 will convert the lump sum costs to an appropriate regional cost. Below is a brief summary of the work items included on worksheet 4.00:

4.01 Site Preparation – enter the lump sum dollar amount required to prepare the site. Work such as soil remediation, building relocation, shoring, dewatering and environmental protection is to be included in this category.

4.02 Site Earthwork – enter the lump sum dollar amount required for site earthwork. Work such as clearing, excavation, grading, leveling, dewatering and import/export of fill is to be included in this category.

4.03 Site Improvements – enter the lump sum dollar amount required for site improvements. Work such as site paving, walks, sports courts and fields, stairs, ramps, walls, decks, fences, landscaping and play equipment, etc. and installation of other site accessories is to be included in this category.

4.04 Site Structures – enter the lump sum dollar amount required for *Site Structures*. Work such as covered walkways, covered play areas and support buildings is to be included in this category.

4.05 Site Utilities – enter the lump sum dollar amount required for the installation of gas service, utilidor and storm drainage to be included in this category.

4.051 – Water Main – enter the linear foot (LF) length of the proposed water pipe.

4.052 – Sewer Main – enter the linear foot (LF) length of the proposed sewer main.

4.06 Bulk Fuel Storage – enter the gallon capacity of the new *Bulk Fuel Storage* facility. This cost is for construction of a complete new above ground fuel storage and distribution system with a storage capacity exceeding 1,000 gallons. The Cost Model unit cost for this category varies automatically based on the storage capacity. Projects that require replacement of an existing above ground bulk fuel storage system should use category 12.10 *Replace Bulk Fuel System (Above Ground)* in lieu of category 4.06. Projects that require replacement of an existing below ground bulk fuel storage system should use category 12.09 *Replace Small Fuel Oil Tank (Below Ground)* in lieu of category 4.06. Projects that require replacement of an existing below ground bulk fuel storage system with an above ground fuel storage system should use category 12.11 *Remove Below Ground Tank & Install New Above Ground Tank* in lieu of category 4.06.

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Projects that require replacement of an existing above ground bulk fuel storage system with a below ground bulk fuel storage system should use category 12.12 *Remove Above Ground Tank & Install Below Ground Tank* in lieu of category 4.06. Category 12.13 *Soil Remediation* should be used in conjunction with categories 12.09 thru 12.12 if contaminated soil exists at existing fuel storage areas.

4.07 Site Electrical – enter the lump sum dollar amount required for *Site Electrical*. This cost includes headbolt heaters, connections to equipment including the cost for running conduit and wire. Costs associated with electrical supply and communications to the building such as electrical service and transformer should be entered in this category.

4.08 Site Lighting – enter the number of fixtures required for *Site Lighting*. Costs associated with electrical supply to the building, such as electrical service and transformer, should be entered in category 4.07 *Site Electrical*. Generally, category 4.08 *Site Lighting* is to include the cost of running conduit and wire from the facility's panels to various electrical fixtures on the site, and the cost of furnishing and installing those fixtures.

4.09 Other – enter here estimates of additional cost for site work, both on and off site.

Worksheet - 5.00

The next worksheet is titled 5.00. This worksheet calculates the overhead and profit charges for a general contractor's services, insurances and bond. This cost is set at a percentage of the direct construction cost. No entries are required on this worksheet.

Worksheet - 6.00

The next worksheet is titled 6.00. This worksheet calculates the additional cost for construction based on the project location. The unit costs in the Cost Model are all based on the cost of material and labor in Anchorage. Therefore, to accurately reflect construction costs in other regions of the state, a geographic factor is applied to the construction costs to adjust them to reflect the actual cost of construction in the project's locale. This factor is intended to cover expenses such as shipping, subsistence, travel, et cetera.

The regional geographic factors can be found in *Table No. 1 Geographic Area Cost Factor*. Table No. 1 has been expanded so that now the geographic factors are listed alphabetically by school district, with some districts having multiple factors. There are two values to the right of the district name: the Index and the Percentage. Insert the appropriate percentage for the school district into the red text cell for category 6.01. The spreadsheet will automatically calculate the reduced or additional construction cost due to the geographic location of the project.

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Worksheet - 7.00

The next worksheet is titled 7.00. This worksheet calculates the premium that a project will cost based on the *Size* of the project. Projects smaller than 25,000 square feet can anticipate paying more per square foot because some of a contractor's general requirement costs are fixed. The additional cost required due to the size of the project is calculated automatically on this worksheet. No entries are required on this worksheet.

Worksheet - 8.00

The next worksheet is titled 8.00. This worksheet calculates the necessary *Contingencies* for the project. Two contingencies are addressed: a general design contingency and an escalation contingency.

The general design contingency is to accommodate unknowns due to the conceptual level of the design. The general design contingency is fixed at 10% of the subtotal of costs calculated on worksheets 1.00 through 7.00. No entries are required to determine the general design contingency.

The escalation contingency is to account for the increase in construction costs from 2011 to the year that the project is anticipated to be constructed. The escalation rate is automatically calculated based on the anticipated construction date entry that is to be entered in the red text cell for category 8.03.

Worksheet - 9.00

The next worksheet is titled 9.00. This worksheet calculates *Project Overhead and Other Costs* that are associated with the construction of a new school or addition. This worksheet also provides the total project cost. Below is a brief summary of the costs included on worksheet 9.00:

9.01 Construction Management (By Consultant) – enter the percent of construction cost required for *Construction Management*. The amounts allowed for construction management are either 2%, 3% or 4% of the construction cost. Note that AS 14.11.020 (c) places limits on the cost of construction management furnished by a private contractor:

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AS 14.11.020

“(c) The construction management costs of a project assumed under this section may not exceed four percent of the amount of appropriations for the facility if the amount of appropriations is \$500,000 or less. The construction management costs of a project assumed under this section may not exceed three percent of the amount of appropriations for the facility if the amount of appropriations is over \$500,000 but less than \$5,000,000. The construction management costs of a project assumed under this section may not exceed two percent of the amount of appropriations for the facility if the amount of appropriations is \$5,000,000 or more. For purposes of this subsection “construction management” means management of the project’s schedule, quality, and budget during any phase of the planning, design, and construction of the facility by a private contractor engaged by the municipality or regional educational attendance area.”

9.02 Land Purchase Costs – enter the lump sum amount for *Land Purchase Costs*. Even if the site has already been purchased it is wise to include the acquisition cost, especially if state reimbursement or funding is to be sought. Please note that 4 AAC 31.025 defines the requirements for reimbursement of site acquisition costs. Information regarding school site selection is available in the Department of Education publication, [Site Selection Criteria and Evaluation Handbook](#).

9.03 Site Investigation (Estimate) – enter the lump sum amount for *Site Investigation*. Site investigation costs include but are not limited to cost associated with selecting a site, site surveys and geotechnical investigation services.

9.04 Seismic Hazard – enter a cost provided by an Alaska seismic safety design professional to perform seismic surveys of existing facilities, make recommendations and provide a plan/specification to implement seismic improvements.

9.05 Design Services Costs – enter the percent of construction cost required for *Design Services Costs*. Design costs include but are not limited to the cost associated with the project planning (from educational specifications through design development), preparation of construction/bid documents, and overseeing the completion of the work. Typically, large projects require smaller design cost percentages. The Department of Education’s suggested range for the cost of project design is 6 – 10% of the construction cost. If costs are expected to exceed the department’s recommended percentages, please provide a detailed justification of the overage.

9.06 – Construction – enter the total of a detailed construction cost estimate if new in-lieu of renovation (if not Cost Demand Model). This amount should include *all* costs required for completion of work not estimated using the Cost Demand Model.

9.07 Equipment and Technology Costs – enter the percent of construction cost required for *Equipment Costs*. Please refer to the Department of Education publication, [Guidelines for School Equipment Purchases, 2005](#), for information regarding the definition of equipment. Budget parameters for equipment costs on a per student basis are also established in the publication. The Department of Education’s suggested range

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for the cost of furnishings and equipment is up to 10% of the construction cost. Technology is included with equipment. If costs are expected to exceed the department's recommended percentages, please provide a detailed justification of the overage.

9.08 District Administrative Overhead – enter the percent of construction cost required for *District Administrative Overhead Costs*. Indirect costs include, but are not limited to: the school district's cost of facilitating the entire project, accounting costs, in-house construction management costs. Typically, large projects require smaller indirect cost percentages. The Department of Education's suggested range for the cost of project administration is up to 9% of the construction cost. If costs are expected to exceed the department's recommended percentages, please provide a detailed justification of the overage.

9.09 Art (Where Applicable) – enter the percent of construction cost required for *Art*. The Department of Education applies the provisions of AS 35.27.020 to establish the required percent for art in school projects. This requirement is being applied by the department to all School Construction projects and some Major Maintenance projects based on the scope of the project. The minimum requirement for rural school facilities is 1/2% of construction cost. The maximum requirement for all other school facilities is 1% of construction cost.

9.10 Project Contingency for Changes – calculates the *Project Contingency for Changes* for the entire project. The project contingency is fixed at 5% of the subtotal shown in category 8.04, so no entries are required to generate the cost. This contingency is to cover the possibility of above average design, management, or administration costs as well as construction cost overruns. The project contingency is in addition to the 10% general design contingency that was applied in worksheet 8.00.

9.11 Project Total Cost – provides the estimated *Project Total Cost* for new construction or addition work. This line also provides a total of the additional percent costs associated with the project. If these costs exceed 30% of the project construction cost, then a detailed justification of the additional costs will be required.

Worksheets 1.00 – 9.00 comprise the New School or Addition module of the Program Demand Cost Model for Alaskan Schools – 12th Edition Update. Please refer to the Samples section for examples of the *Grand Summary*, *General Summary*, and *Notes – Assumptions* worksheets.

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Worksheet - 11.00

The next worksheet is titled 11.00. This worksheet is the heart of the Renovation Cost Model. Unit costs are provided by work assembly. A work assembly can be thought of as a summary of a group of tasks required to complete that item. A building system is composed of a series of work assemblies. An example of a building system would be 11.20 *Exterior Closure*. An example of a work assembly is the replacement of an exterior door. Below are the tasks that contribute to the unit cost to replace an exterior door:

- Remove interior and exterior door trim
- Remove door and door frame
- Dispose of demolition debris
- Install new door frame and hang door
- Install new door hardware
- Install new interior and exterior door trim
- Install new caulking at door opening
- Paint door, door frame, door trim

The use of work assemblies provides users with the flexibility to customize a renovation estimate to the repairs required at a specific facility. Not every conceivable building system replacement is covered here, just the most common building systems found in existing Alaskan schools. If the proposed project incorporates a special building system that is not included in worksheet 11.00, a consultant knowledgeable in the special system will be required to prepare an accurate cost estimate. Please note that hazardous material abatement is not included in worksheet 11.00 unit costs. Costs for removal of hazardous materials are covered on worksheet 12.00 and should be selected as necessary. Below is a brief summary of the unit costs included on worksheet 11.00:

11.02 Foundation and Substructure Repairs – enter the lump sum amount required for *Foundation and Substructure Repairs*. If the facility requires foundation or substructure repairs, technical assistance from a consultant with foundation repair experience will be required to accurately estimate the extent of repairs required and their cost. Please provide additional information describing the required repairs and the basis for the estimated cost on the *Notes-Assumptions* worksheet.

11.11 Superstructure Repairs – enter the lump sum amount required for *Superstructure Repairs*. If the facility requires superstructure repairs, technical assistance from a consultant with structural repair experience will be required to accurately estimate the extent of repairs required and their cost. Please provide additional information describing the required repairs and the basis for the estimated cost on the *Notes-Assumptions* worksheet.

11.12 Seismic Repairs – enter the lump sum amount required for seismic repairs. This item will require technical assistance from a seismic safety design professional who has experience to accurately estimate the extent of repair, upgrades and improvements and

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the associated cost. Please provide additional information describing the required repairs and the basis for the estimated cost on the *Notes – Assumption worksheet*.

For all 11.2X, 11.3X and some other individual items, enter the square footage of the amount of the system to be replaced. Do NOT use the total square footage of the building.

11.21 Exterior Upgrades – enter the square feet of beveled siding to be replaced. This unit cost includes: removal and disposal of existing siding, installation of new Tyvek and beveled cedar siding, installation of new exterior trim and flashing, new caulking at openings, new paint to siding and trim.

11.22 Exterior Upgrades – enter the square feet of exterior siding to be repainted. This unit cost includes: removal of old caulking, installation of new caulking, preparation of surfaces, new paint to doors, trim and exterior siding.

11.23 Exterior Insulation Finish System to Existing – enter the square feet of EIFS to be installed over the existing siding. This unit cost includes: surface preparation of existing siding, installation of 1” EIFS, new sealant and flashing. Please note that the cost to remove existing siding is excluded from 11.23’s unit cost. If your project requires removal and disposal of existing siding enter the lump sum cost in category 11.29 for the demolition work. Please provide a description of extra work on the *Notes-Assumptions worksheet* and remember that all lump sum costs should be calculated as if the work were to be performed in Anchorage. The geographic factor applied on worksheet 14.00 will convert the lump sum costs to an appropriate regional cost.

11.24 Exterior Upgrades – enter the square feet of painted cement board to be installed over the existing siding. This unit cost includes: surface preparation of existing siding, installation of cement board, new exterior trim, painting of exterior, new sealant, new Tyvek, and new flashing. Please note that cost to remove existing siding is excluded from 11.24’s unit cost. If your project requires removal and disposal of existing siding enter the lump sum cost in category 11.29 for the demolition work. Please provide a description of extra work on the *Notes-Assumptions worksheet* and remember that all lump sum costs should be calculated as if the work were to be performed in Anchorage. The geographic factor applied on worksheet 14.00 will convert the lump sum costs to an appropriate regional cost.

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11.25 Exterior Skin – enter the square feet of metal siding to be installed over the existing siding. This unit cost includes: furring and ½” CDX plywood, installation of kynar finish metal siding system, new sealant, new Tyvek, and new flashing. Please note that cost to remove existing siding is excluded from 11.25’s unit cost. If the project requires removal and disposal of existing siding enter the lump sum cost in category 11.29 for the demolition work. Please provide a description of extra work on the *Notes-Assumptions* worksheet and remember that all lump sum costs should be calculated as if the work were to be performed in Anchorage. The geographic factor applied on worksheet 14.00 will convert the lump sum costs to an appropriate regional cost.

11.26 Insulation – enter the square feet of insulation to be replaced in existing exterior wall. This unit cost includes: removal of GWB and insulation on exterior wall, disposal of debris, installation of new R-19 insulation, installation of new 10 mil vapor barrier, and installation of new GWB.

11.27 Exterior Closure (Replace Doors and Frames) – enter the number of door leafs to be replaced. This unit cost includes: removal of interior and exterior door trim, removal of door and frame, disposal of debris, installation of new door and frame, installation of new door hardware, new caulking, and painting of all new work.

11.28 Exterior Closure (Replace Windows) – enter the square feet of glazing to be replaced. This unit cost includes: removal of windows and blinds, disposal of windows and blinds, installation of new metal clad windows, installation of new interior and exterior trim, painting of trim, installation of new horizontal blinds.

11.29 Other Repairs – enter a lump sum amount for repairs or alteration not accounted for elsewhere. Please provide details regarding the additional cost on the *Notes-Assumptions* worksheet.

11.31 Replace Metal Roofing – enter the square feet of metal roofing to be replaced. This unit cost includes: removal and disposal of existing roofing (excluding hazardous material abatement), minor repair of approximately 20% of roof deck, replacement of approximately 20% of insulation and vapor barrier, and installation of new metal roofing.

11.32 Replace Membrane Roof – enter the square feet of flat roof membrane to be replaced. This unit cost includes: removal and disposal of existing roofing, minor repair of approximately 20% of roof deck, installation of new vapor barrier, installation of new 6” rigid insulation, installation of new flashing, and installation of new EPDM roofing.

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11.41 Replace Partitions – enter the square feet of new interior partitions. The quantity of new partitions is the sum of the square feet of framed wall, not the square feet of GWB. This unit cost includes: removal and disposal of existing partitions, framing of new 2x4 and 2x6 partitions, installation of new sound batt insulation, installation of new GWB, installation of new base, installation of new wall finishes, and painting. Please note that this cost, while including a variety of common wall finishes, does not include ceramic tile. Please use category 11.47 for installation of ceramic wall tile.

11.42 Replace Door Leaf and Frames – enter the number of door leafs to be replaced (note, count 2 for double doors). This unit cost includes: removal of door and frame, disposal of debris, installation of new door and frame, installation of new door hardware, and painting of all new work.

11.43 Interior Painting – enter the square feet of walls and ceiling to be painted. This unit cost includes: removal and reinstallation of electrical device covers, painting of walls, painting of ceiling, and painting of doors.

11.44 Replace Carpeting – enter the square feet of new carpeting. This unit cost includes: removal and disposal of existing floor finish, installation of new carpet, and installation of new base.

11.45 Replace Resilient Flooring – enter the square feet of new resilient flooring (sheet vinyl and VCT). This unit cost includes: removal and disposal of existing floor finish, installation of new resilient flooring, and installation of new base.

11.46 Replace Gym Flooring – enter the square feet of new gym flooring. This unit cost includes: removal and disposal of existing floor finish, installation of new sports flooring, and installation of new base. Please note that the sports flooring is a membrane flooring and not a wood gym floor. If a wood gym floor is desired, enter the additional lump sum cost for a wood gym floor in category 11.99. Please provide details regarding the additional cost on the *Notes-Assumptions* worksheet.

11.47 Replace Ceramic Tile – enter the square feet of new ceramic tile. This unit cost includes: removal and disposal of existing tile surfaces, installation of new mosaic floor tile, and installation of new wall tile with cementitious backer.

11.48 Replace Acoustical Tile Ceiling – enter the square feet of suspended acoustic ceiling tile to be replaced. This unit cost includes: removal and reinstallation of light fixtures, removal of existing suspended acoustical ceiling system, and installation of new suspended acoustical ceiling system.

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11.49 Replace Gypboard Ceiling – enter the square feet of new gypsum board ceiling. This unit cost includes: removal and reinstallation of light fixtures, removal of existing gypsum board ceiling, installation of new gypsum board ceiling, and painting of new ceiling.

11.51 Replace Toilet Partitions – enter the number of toilet partitions to be replaced. This unit cost includes: removal and disposal of existing toilet partitions, installation of new toilet partitions, and installation of new associated toilet accessories.

11.52 Replace Toilet Accessories – enter the number of toilet accessories (soap dispensers, waste receptacles, paper towel dispensers, etc.) to be replaced. This cost includes: removal and disposal of existing toilet accessories and installation of new toilet accessories.

11.53 Smart Boards Additions – This assumes one smart board per classroom. This is new technology for the classroom. Could be described as a computer driven chalkboard. The cost includes electrical connections.

11.54 Replace Sports Equipment and Lockers (Small Gym) – enter the number of lots of sports equipment and lockers to be replaced. Each lot includes the following work: removal and disposal of existing equipment, installation of 50 new lockers, installation of two new wall mount basketball goals, installation of four new floor inserts, installation of two new chinning bars, and installation of two new climbing peg boards. This is only useable for a small gym installation (for a full size gym, increase cost by x4).

11.55 Replace Tack/Chalk/Marker Boards – enter the square feet of new marker, chalk, and tack board. This unit cost includes: removal and disposal of existing boards, and installation of new boards.

11.56 Replace Base Cabinet Units – enter the linear feet of new base cabinets. This unit cost includes: removal and disposal of existing cabinets, installation of new base cabinets, and installation of new plastic laminate countertops.

11.57 Replace Wall Hung Units – enter the linear feet of new wall hung cabinets. This unit cost includes: removal and disposal of existing cabinets, and installation of new wall cabinets.

11.58 Other Repairs – enter a lump sum amount for repairs or alteration not accounted for elsewhere. Please provide details regarding the additional cost on the *Notes-Assumptions* worksheet.

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11.61 New Elevator – enter number of elevators. This is installation of a two stop hydraulic elevator for access in a two story school, which would save space over the traditional ramp approach. Cost also includes electrical connections, new walls and cutting and patching.

11.62 Repairs/Replacement (Estimate) – enter a lump sum amount for repair, replacement, or addition of a conveying system. In most cases this category will address the cost of work related elevators or lifts. Technical assistance from a consultant will be required to accurately estimate the cost of this work.

11.71 Replace Plumbing (Fixtures Only) – enter the number of plumbing fixtures to be replaced. This unit cost includes: removal and disposal of existing plumbing fixture, replacement of some associated piping, repair of adjacent finishes, and installation of new plumbing fixture. This category is for replacement of plumbing fixtures only. If the entire plumbing system is to be replaced please use category 11.72.

11.72 Replace Plumbing (Entire System) – enter the square feet of building area that is to receive a new plumbing system. Typically, the entire building square footage should be inserted unless portions of the building have plumbing systems that will not be replaced. The unit cost for this category assumes that this work will occur in conjunction with a major renovation of the space and includes: removal and disposal of existing plumbing system, installation of new sanitary waste and vent piping system, installation of new domestic water piping, installation of new plumbing fixtures, and installation of a new water heater. If this work is not to occur in conjunction with a major renovation project, additional costs to protect and repair existing finishes should be added. Enter the additional lump sum cost for this work in category 11.79. Please provide details regarding the additional cost on the *Notes-Assumptions* worksheet.

11.73 Replace Heating Systems – enter the square feet of building area that is to receive a new heating system. Typically, the entire building square footage should be inserted unless portions of the building have heating systems that will not be replaced. The unit cost for this category assumes that this work will occur in conjunction with a major renovation of the space and includes: removal and disposal of existing heating system, installation of new oil fired boiler and accessories, installation of new distribution piping, installation of new radiators, and installation of a new electrical connections. If this work is not to occur in conjunction with a major renovation project, additional costs to protect and repair existing finishes should be added. Enter the additional lumpsum cost for this work in category 11.79. Please provide details regarding the additional cost on the *Notes-Assumptions* worksheet.

11.74 Replace Ventilation Systems – enter the square feet of building area that is to receive a new ventilation system. Typically, the entire building square footage should be inserted unless portions of the building have ventilation systems that will not be replaced. The unit cost for this category assumes that this work will occur in conjunction with a major renovation of the space and includes: removal and disposal of existing ventilation

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system, installation of new air handling units and exhaust fans, installation of new ductwork, and installation of a new electrical connections. If this work is not to occur in conjunction with a major renovation project, additional costs to protect and repair existing finishes should be added. Enter the additional lump sum cost for this work in category 11.79. Please provide details regarding the additional cost on the *Notes-Assumptions* worksheet.

11.75 New Exhaust Fan – enter the number of new exhaust fans. This unit cost includes: demolition and disposal of finishes to provide access for new system, installation of new up to 1500 CFM (cubic foot per minute) exhaust fan, installation of new ductwork, installation of new exterior venting, repair of existing finishes, and installation of a new electrical connections. Alternative pricing by the CFM.

11.76 New Cooling Systems – enter the square feet of building area that is to receive a new cooling system. Typically, the entire building square footage should be inserted unless portions of the building will not be served by the cooling system. This unit cost includes: removal and disposal of existing cooling system, installation of new air handling units and exhaust fans, installation of new ductwork, and installation of a new electrical connections. This unit cost assumes that an adequate ventilation system is available for the distribution of cool air through out the building. If a ventilation system is not available, refer to category 11.74 *Replace Ventilation Systems*. Alternative pricing by the ton.

11.77 New Controls – enter the square feet of building area that is to receive new controls. This unit cost includes: removal and disposal of existing controls, installation of new thermostats, and installation of new DDC control system.

11.78 New Sprinkler System – enter the square feet of building area that is to be fire sprinkled. Please note that some building types may require sprinklers in attic spaces and large exterior canopy areas, so it is not uncommon for the square feet of sprinkled area to exceed the actual square feet of building area. This unit cost includes: installation of a new fire water service, demolition and replacement of ceiling finishes, and installation of a new wet pipe fire sprinkler system. Please place an adder in category 11.79 for a dry pipe sprinkler system. A consultant may be required to determine the additive cost of a dry pipe over a wet pipe sprinkler system.

11.79 Other Repair/Replacement – enter a lump sum amount for *Other Repairs/Replacement*. The lump sum cost should be calculated as if the work were to be performed in Anchorage. The geographic factor applied on worksheet 14.00 will convert the lump sum cost to an appropriate regional cost. Please provide additional information regarding the other work on the *Notes-Assumptions* worksheet.

11.81 Replace Main Supply and Distribution – enter the number of lots of main electrical supply and distribution to be replaced. Each lot includes the following work: removal and disposal of seven existing electrical panels, installation of a new 1600 amp

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MDP, installation of a new 1600 amp disconnect switch, installation of two 225 amp subpanels, installation of four new 100 amp subpanels, and installation new wiring between panels. Please note that categories 11.82 and 11.83 are subsets of category 11.81. Therefore, an entry in category 11.81 will typically preclude entries into the other categories.

11.82 Replace MDP – enter the number of main distribution panels (MDP) to be replaced. This unit cost includes: removal and disposal of existing MDPs, installation of a new 1600 amp MDP, installation of a new 1600 amp disconnect switch.

11.83 New Power Panel – enter the number of new power panels to be installed. This unit cost includes: installation of a new 225-amp power panel and connection to existing power supply.

11.84 Replace Lighting Fixtures and Wiring – enter the square feet of building area to receive new lighting. This unit cost includes: removal and disposal of existing lighting and wiring, installation of new wiring, installation of new devices, and installation of a light fixtures.

11.85 Replace Lighting Fixtures Only - enter the square feet of building area to receive new lighting. This unit cost includes: removal and disposal of existing lighting and installation of a light fixtures.

11.86 Replace Power Devices – enter the square feet of building area to receive new power wiring. This unit cost includes: removal and disposal of existing power devices (outlets, etc.) and wiring, installation of new wiring, and installation of new power devices.

11.87 New Standby Power and Fuel Oil – enter the number of kilowatts (KW) for new standby power required. This unit cost is based on new above ground fuel storage tank, new tank foundation, new fuel piping to the generator, a new 150 KW generator and day tank, and a new 600 amp automatic transfer switch.

11.91 New Addressable Fire Alarm System – enter the square feet of building area to receive a new fire alarm system. Typically, the entire building square footage should be inserted unless portions of the building already have a functional fire alarm system. This unit cost includes: all work required for a complete fire alarm system.

11.92 New Computer Outlets (Rough In) – enter the square feet of building area to receive new computer outlets. Typically, the entire building square footage should be inserted unless portions of the building already have functional computer outlets and will not be receiving new outlets. This cost is included in the cost for additions and new construction and should not be duplicated here. This unit cost includes: installation of new conduit, installation of new computer wire, an allowance for cutting and patching, and installation of new data outlets.

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11.93 New Telephone/Public Address/Intercom/Clock System – enter the square feet of building area to receive a new telephone/intercom/public address system (a synchronized clock system is included with the public address system). Typically, the entire building square footage should be inserted unless portions of the building already have a functional telephone/intercom/public address system and will not be receiving any new work. This unit cost includes: all work required for a complete telephone/intercom/public address system.

11.94 New Public Address (Gym and Stage) – enter the number of a new gym and stage public address systems required. This unit cost includes: all work required for a complete gym and stage public address system.

11.95 New Master Antenna Television (MATV) System – enter the square feet of building area to receive a new MATV system. Typically, the entire building square footage should be inserted unless portions of the building already have a functional MATV system and will not be receiving any new work. This unit cost includes: all work required for a complete MATV system excluding the video monitors.

11.96 New Hearing Impaired Audio System – enter the number of a hearing impaired audio systems required. This unit cost includes: all work required for a complete hearing-impaired audio system for (8) listeners only.

11.97 New Security System/CCTV – enter the square feet of building area to receive a simple new security system. Typically, the entire building square footage should be inserted unless portions of the building already have a functional security system and will not be receiving any new work. This unit cost includes: all work required for a complete security system.

11.98 Sound Field System (Audio Enhancement System) – enter number of classrooms served. New technology for the classroom. A teacher’s aid for communication.

11.99 Other Repairs/Replacement/Demolition – enter a lump sum amount for *Other Repairs/Replacement/Demolition*. The lump sum cost should be calculated as if the work were to be performed in Anchorage. The geographic factor applied on worksheet 14.00 will convert the lump sum cost to an appropriate regional cost. Please provide additional information regarding the other work on the *Notes-Assumptions* worksheet.

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Worksheet - 12.00

The next worksheet is titled 12.00. This worksheet addresses the costs associated with the removal of hazardous materials. The unit costs for categories 12.01 through 12.08 are to be used in conjunction with the work assembly costs in category 11.00 when the demolition will require removal of hazardous materials. Categories 12.09 through 12.11 provide stand-alone unit costs for a complete work assembly. Below is a brief summary of the unit costs included on worksheet 12.00:

12.01 Complete Renovation (Interior) (Removal Only) – enter the square feet of building area to be completely gutted. This unit cost includes: removal of asbestos containing wallboard, roofing, vinyl flooring, ceiling tiles, pipe insulation, and wall covering adhesives; removal of doors with lead paint; removal of PCBs from light fixture ballasts. Please note that categories 12.02 through 12.08 are subsets of category 12.01. If a major renovation is planned and asbestos containing materials are anticipated to be encountered during demolition, use category 12.01 and disregard categories 12.02 through 12.08.

12.02 Roof Replacement (Roof Area) (Removal Only) – enter the square feet of asbestos containing roofing to be removed. This unit cost includes: removal of asbestos containing roofing.

12.03 Exterior Upgrade (Number of Doors) (Removal Only) – enter the number of exterior doors with lead paint to be removed. This unit cost includes: removal of exterior doors with lead paint.

12.04 Replace Interiors (Removal Only) – enter the square feet of building area that is to receive new finishes. This unit cost includes: removal of asbestos containing vinyl flooring, ceiling tiles, and wall covering adhesives.

12.05 Replace Plumbing Fixtures (Removal Only) – enter the number of plumbing fixtures to be replaced. This unit cost includes: removal of asbestos containing pipe insulation from domestic water piping. Please note that it may be possible to replace plumbing fixtures without significantly disturbing existing piping.

12.06 Replace Heating and Ventilation Systems (Removal Only) – enter the square feet of building area that is to receive heating and ventilation system upgrades. This unit cost includes: removal of asbestos containing ceiling tiles and pipe insulation from radiant heat piping.

12.07 New Sprinkler System (Removal Only) – enter the square feet of building area that is to receive a new fire sprinkler system. This unit cost includes: removal of asbestos containing ceiling tiles.

Renovation Projects

12.08 Work in Connection with New Electrical Installations (Removal Only) – enter the square feet of building area that is to receive new electrical work. Typically, the entire building square footage should be inserted unless distinct portions of the building (for example, a detached wing) will not be receiving any new work. This unit cost includes: removal of asbestos containing wallboard and ceiling tiles.

12.09 Replace Small Fuel Oil Tank (Below Ground) – enter the gallon capacity of the new underground fuel tank that is to replace an existing underground fuel tank. This unit cost includes: draining of existing tank, excavation of existing tank, removal of existing piping, soils testing for contamination, disposal of existing tank, installation of new underground fuel tank and leak detection system in existing pit, installation of new piping, and backfill of existing pit. Please note that remediation of contaminated soil is excluded from this cost. Use category 12.13 for costs associated with the remediation of contaminated soil.

12.10 Replace Bulk Fuel Oil Tank (Above Ground) – enter the gallon capacity of the new aboveground fuel tank that is to replace an existing aboveground fuel tank. This unit cost includes: draining of existing tank, removal of existing piping, disposal of existing tank, installation of new aboveground fuel tank and containment system, and installation of new piping. Please note that remediation of contaminated soil is excluded from this cost. Use category 12.13 for costs associated with the remediation of contaminated soil.

12.11 Remove Below Ground Tank and Install New Above Ground Tank – enter the gallon capacity of the new above ground fuel tank that is to replace an existing below ground fuel tank. This unit cost includes: draining of existing tank, removal of existing piping, disposal of existing tank, installation of new aboveground fuel tank and containment system, and installation of new piping. Please note that remediation of contaminated soil is excluded from this cost. Use category 12.13 for costs associated with the remediation of contaminated soil.

12.12 Remove Above Ground Tank and Install New Below Ground Tank – enter the gallon capacity of the new below ground fuel tank that is to replace an existing above ground fuel tank. This unit cost includes: draining of existing tank, removal of existing piping, disposal of existing tank, installation of new aboveground fuel tank and containment system, and installation of new piping. Please note that remediation of contaminated soil is excluded from this cost. Use category 12.13 for costs associated with the remediation of contaminated soil.

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12.13 Soil Remediation – enter the cubic yards of soil that requires remediation. This unit cost includes: soil testing, excavation of contaminated soils, treatment of contaminated soils, disposal of contaminated soils, and replacement of excavated soil with non-frost susceptible fill.

12.14 Other Specific Abatement – enter the lump sum.

Worksheet - 13.00

The next worksheet is titled 13.00. This worksheet calculates the overhead and profit charges for a general contractor's services, insurances and bonds. This cost is set at a percentage of the direct construction cost. The extra percentage over new construction is to allow for additional coordination efforts typical of renovation projects. No entries are required on this worksheet.

Worksheet - 14.00

The next worksheet is titled 14.00. This worksheet calculates the additional cost for construction based on the project location. The unit costs in the Cost Model are all based on the cost of material and labor in Anchorage. Therefore, to accurately reflect construction costs in other regions of the state, a geographic factor is applied to the construction costs to adjust them to reflect the actual cost of construction in the project's locale. This factor is intended to cover expenses such as shipping, subsistence, travel, et cetera.

The regional geographic factors can be found in *Table No. 1 Geographic Area Cost Factor*. Table No. 1 has been expanded so that now the geographic factors are listed alphabetically by school district, with some districts having multiple factors. There are two values to the right of the district name: the Index and the Percentage. Insert the appropriate percentage for the school district into the red text cell for category 14.01. The spreadsheet will automatically calculate the additional, or reduced in a few regions, construction cost due to the geographic location of the project.

Worksheet - 15.00

The next worksheet is titled 15.00. This worksheet calculates the premium that a project will cost based on the dollar amount of the project. Projects smaller than \$4,000,000 can anticipate paying more per square foot because some of a contractor's general requirement costs are fixed. The additional cost required due to the dollar amount of the project is calculated automatically on this worksheet. No entries are required on this worksheet.

Renovation Projects

Worksheet - 16.00

The next worksheet is titled 16.00. This worksheet calculates the contingencies for the project. Two contingencies are addressed: a general design contingency and an escalation contingency.

The general design contingency is to provide design flexibility and to account for construction unknowns. The general design contingency is fixed at 15% of the subtotal of costs calculated on worksheets 11.00 through 14.00. This is 5% more than the similar contingency on a new construction project. The extra 5% is to allow for additional unknowns typical of renovation projects. No entries are required to determine the general design contingency.

The escalation contingency is to account for the increase in construction costs for the year that the project is anticipated to start construction. The escalation rate is automatically calculated based on the anticipated construction date that is to be entered in the red text cell for category 16.03.

Worksheet - 17.00

The next worksheet is titled 17.00. This worksheet calculates *Project Overhead and Other Costs* that are associated with the construction of a new school or addition. This worksheet also provides the total project cost. Below is a brief summary of the costs included on worksheet 17.00:

17.01 Construction Management (By Consultant) – enter the percent of construction cost required for *Construction Management*. The amounts allowed for construction management are either 2%, 3% or 4% of the construction cost. Note that AS 14.11.020 (c) places limits on the cost of construction management furnished by a private contractor:

AS 14.11.020

“(c) The construction management costs of a project assumed under this section may not exceed four percent of the amount of appropriations for the facility if the amount of appropriations is \$500,000 or less. The construction management costs of a project assumed under this section may not exceed three percent of the amount of appropriations for the facility if the amount of appropriations is over \$500,000 but less than \$5,000,000. The construction management costs of a project assumed under this section may not exceed two percent of the amount of appropriations for the facility if the amount of appropriations is \$5,000,000 or more. For purposes of this subsection “construction management” means management of the project’s schedule, quality, and budget during any phase of the planning, design, and construction of the facility by a private contractor engaged by the municipality or regional educational attendance area.”

17.02 Land Purchase Costs – enter the lumpsum amount for *Land Purchase Costs*. Even if the site has already been purchased it is wise to include the acquisition cost, especially if state reimbursement or funding is to be sought. Please note that 4 AAC 31.025 defines

Renovation Projects

the requirements for reimbursement of site acquisition costs. Information regarding school site selection is available in the Department of Education publication, Site Selection Criteria and Evaluation Handbook.

17.03 Site Investigation (Estimate) – enter the lumpsum amount for *Site Investigation*. Site investigation costs include but are not limited to cost associated with selecting a site, site surveys and geotechnical investigation services.

17.04 Seismic Hazard – enter a cost provided by an Alaska seismic safety design professional to perform seismic surveys of existing facilities, make recommendations and provide a plan/specification to implement seismic improvements.

17.05 Design Services Costs – enter the percent of construction cost required for *Design Services Costs*. Design costs include but are not limited to the cost associated with the project planning (from educational specifications through design development), preparation of construction/bid documents, and overseeing the completion of the work. Typically, large projects require smaller design cost percentages. The Department of Education’s suggested range for the cost of project design is 6 – 10% of the construction cost. If costs are expected to exceed the department’s recommended percentages, please provide a detailed justification of the overage.

17.06 – Construction – enter the total of a detailed construction cost estimate if new in-lieu of renovation (if not Cost Demand Model). This amount should include *all* costs required for completion of work not estimated using the Cost Demand Model.

17.07 Equipment and Technology Costs – enter the percent of construction cost required for *Equipment Costs*. Please refer to the Department of Education publication, Guidelines for School Equipment Purchases, 2005, for information regarding the definition of equipment. Budget parameters for equipment costs on a per student basis are also established in the publication. The Department of Education’s suggested range for the cost of furnishings and equipment is up to 10% of the construction cost. Technology is included with equipment. If costs are expected to exceed the department’s recommended percentages, please provide a detailed justification of the overage.

17.08 District Administrative Overhead – enter the percent of construction cost required for *District Administrative Overhead Costs*. Indirect costs include, but are not limited to: the school district’s cost of facilitating the entire project, accounting costs, in-house construction management costs. Typically, large projects require smaller indirect cost percentages. The Department of Education’s suggested range for the cost of project administration is up to 9% of the construction cost. If costs are expected to exceed the department’s recommended percentages, please provide a detailed justification of the overage.

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17.09 Art (Where Applicable) – enter the percent of construction cost required for *Art*. The Department of Education applies the provisions of AS 35.27.020 to establish the required percent for art in school projects. This requirement is being applied by the department to all School Construction projects and some Major Maintenance projects based on the scope of the project. The minimum requirement for rural school facilities is 1/2% of construction cost. The maximum requirement for all other school facilities is 1% of construction cost.

17.10 Project Contingency for Changes – calculates the *Project Contingency for Changes* for the entire project. The project contingency is fixed at 5% of the subtotal shown in category 16.04, so no entries are required to generate the cost. This contingency is to cover the possibility of above average design, management, or administration costs as well as construction cost overruns. The project contingency is in addition to the 15% general design contingency that was applied in worksheet 16.00.

17.10 Project Total Cost – provides the estimated *Project Total Cost* for new construction or addition work. This line also provides a total of the additional percent costs associated with the project. If these costs exceed 30% of the project construction cost, then a detailed justification of the additional costs will be required.

Worksheets 11.00 – 17.00 comprise the Renovation module of the Program Demand Cost Model for Alaskan Schools – 12th Edition Update. Please refer to the Samples section for an examples of the *Grand Summary*, *General Summary*, and *Notes – Assumptions* worksheets.

Completion of the Cost Model Estimate

General Summary

The *General Summary* worksheet provides a consolidated summary of all the identified project costs. Please refer to the Samples section for an example of the *General Summary* worksheet. No entries are required on this worksheet because all the cost information is pulled from the previous worksheets. This worksheet serves as the project estimate while the other worksheets serve as project estimate back up. Please note that this worksheet provides an estimate structure and unit costs that enables the manual creation of a project estimate should a computer be unavailable. Refer to the Samples section for an example of the *General Summary* worksheet.

Notes – Assumptions

The *Notes – Assumptions* worksheet provides a location for detailed information regarding assumptions made while preparing the cost estimate. Each entry on the worksheet should include the line item (category number) and estimate summary page number defining the location in the estimate where the cost assumption has been placed. Each entry should also include a detailed description of the cost assumption including the dollar value associated with the assumption. Please refer to the Samples section for an example of the *Notes – Assumptions* worksheet.

Saving & Printing

As mentioned earlier, the file should be saved as an Excel Workbook with a descriptive title for easy reference. It is recommended that the file be saved periodically through out the creation of the estimate. When the estimate is complete, all worksheets should be printed. The *Grand Summary* and *General Summary* worksheets serve as broad and detailed estimate summaries, respectively. The *Notes – Assumptions* worksheet serves as a description of assumptions that were made during the creation of the estimate. The remainder of the worksheets serve as estimate back up.

Sample Estimate

The following pages from the Cost Model Workbook, contain samples of the *Project Summary*, the *General Summary*, and the *Notes – Assumptions* worksheets. Estimates prepared for the Department of Education that utilize the Cost Model for Alaskan Schools – 12th Edition Update shall provide the *Project Summary*, the *General Summary*, and the *Notes – Assumptions* worksheets.



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

FY2014

*For each funding request submit **one original and three complete copies of this application and two copies of each attachment.***

For instructions on completing this application, please refer to the department's Capital Project Information and References website at:

<http://www.eed.state.ak.us/Facilities/FacilitiesCIP.html>

*** (Note: The department will only score ten projects from each district during a single rating period) ***

School District: _____

Community: _____

School Name: _____

Project Name: _____

TYPE OF PROJECT AND FUNDING REQUEST

1. Type of funding requested (*Choose only **one** funding source.*)
 - Grant Funding
 - Aid for Debt Retirement (Bonding)
- 2a. **Primary** purpose of project (*Choose only **one** category, per AS 14.11.013 for grant projects, or AS 14.11.100(j)(4) for debt retirement projects). The department will change a project category as necessary to reflect the primary purpose of the project.¹*)

School Construction:	Major Maintenance:
<input type="checkbox"/> Health and life-safety (Category A, this category is not available for debt retirement)	<input type="checkbox"/> Protection of structure (Category C, this category is not available for debt retirement)
<input type="checkbox"/> Unhoused students (Category B; Category A for debt retirement)	<input type="checkbox"/> Building code deficiencies (Category D; Category B for debt retirement)
<input type="checkbox"/> Improve instructional program (Category F; Category D for debt retirement)	<input type="checkbox"/> Achieve operating cost savings (Category E; Category C for debt retirement)

- b. Phases of project to be covered by this funding request (*Indicate **all** applicable phases*)
 - Planning (Phase I)
 - Design (Phase II)
 - Construction (Phase III)

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

- c. Is the work identified in this project request partially or fully complete? yes no
(If the answer is yes, attach 2 copies of documentation that establishes compliance with 4 AAC 31.080 and please note the attachment in question 31.)

BASIC ELIGIBILITY REQUIREMENTS

3. Has a six-year Capital Improvement Plan (CIP) been approved by the district school board? yes no
(Refer to AS 14.11.011(b), and 4 AAC 31.011(c); attach a copy of the 6-year Plan.)
4. Does the school district have a functional fixed asset inventory system? yes no
(Refer to AS 14.11.011(b)(1).)
5. Is evidence of required insurance attached to this application or has evidence been submitted as required to the department? yes no
(Refer to AS 14.11.011(b)(2).)
- 6a. Is the project a capital improvement project and not part of a preventive maintenance program or custodial care? yes no
(The scope of work as outlined in the project description, question 18, must meet the requirements of AS 14.11.011(b)(3).)
- b. Is adequate documentation provided? yes no
(Reference: AS 14.11.013(c)(3)(A) and 4 AAC 31.022(d)(1)

DISTRICT INFORMATION

- 7a. Districtwide maintenance expenditures for the last 5 years will be gathered by the department from audited financial statements. *(Costs for teacher housing, utilities, or expenditures for which reimbursement is being sought will be excluded. See instructions for specific accounting codes to be included.)*
- 7b. Districtwide replacement cost insurance values for the last 5 years will be gathered by the department from annual insurance certification and schedule of values.

EXISTING FACILITIES

8. The existing building(s) will be (check all that apply):
 renovated added to demolished surplusd other
(If the project will result in demolition or surplus of building(s), provide for hazardous material abatement and demolition as part of the project. If the building(s) are state-owned or state-leasd facilities, attach a transition plan for protection and disposal of the properties.)

9. What buildings or building portion (i.e. original building or addition) will be included in the scope of work of the project?

(The department will utilize GSF records to establish project points (up to 30) in the "Weighted Average Age of Facilities" scoring element. Refer to the EED Facilities Database at

<http://www.eed.state.ak.us/Facilities/SchoolFacilityReport/SearchforSchoolFac.cfm> for facility number, name, year, and size information on record.)

Facility #	Building or Building Portion	Year Built	GSF
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
TOTAL GSF			0

RELATED FUNDING

10. Provide AS 14.11 administered grants that have already been appropriated by the legislature as partial funding in support of this project. This does not include debt retirement projects. (30 points possible for previous funding)

EED grant # _____

EED grant # _____

11. Is the district applying for a waiver of participating share? yes no
Only municipal districts with a full value per ADM less than \$200,000 are eligible to apply for a waiver of participating share. REAA's are not eligible to request a waiver of participating share. (If the district is applying for a waiver, attach justification. Refer to AS 14.11.008(d) and Appendix E of the application instructions.)

PROJECT INFORMATION

12. What is the rank of this project under the district's six-year Capital Improvement Plan? (30 points possible for CIP priority) Rank: _____
13. Does this project impact multiple facilities? yes no
(If the answer is yes, describe in the project description and provide applicable data as identified in the instructions.)

14. Is this project an emergency? (50 points possible) yes no
(Refer to AS 14.011.013(b)(1) and the instructions. If the answer is yes, describe the nature of the emergency and actions the district has taken to mitigate the emergency conditions.)

15. Will this project require acquisition of additional land or utilization of a new school site? yes no
(If the answer is yes, attach site description or site requirements. If a new site has been identified, attach the site selection analysis used to select the new site. Note the attachment in question 31.)

16. Has a facility condition survey been completed?* (5 points possible) yes no
(If the answer is yes, attach 2 copies and Note the attachment in question 31.)

Has a facility appraisal been completed? (5 points possible) yes no
(If the answer is yes, attach 2 copies and Note the attachment in question 31.)

Has work been completed on planning?* (10 points possible) yes no
(If yes, attach documentation supporting planning as described in Appendix A, and please note the attachment in question 31.)

Has work been completed on schematic design?* (10 points possible) yes no
(If yes, attach documentation supporting schematic design as described in Appendix A, and please note the attachment in question 31.)

Has work been completed on design development?* (10 points possible) yes no
(If yes, attach documentation supporting design development as described in Appendix A, and please note the attachment in question 31.)

* - Identify the Design consultant. If there is no Design consultant for this project, provide a detailed explanation of why a consultant is not required.

Design Consultant - _____

17. Project Description/Scope of Work: The project description should provide a clear description of the project scope to be completed with this project. If prior or subsequent work is included as a part of the description, be sure to clearly identify the components of work to be completed with

THIS project. Provide an estimated project timeline that includes an estimated date for receipt of funding, construction start date, and construction completion date. (50 points possible for description of severity of life/ safety and code issues)

(Refer to AS 14.11.011(b)(1) and to the instructions accompanying this form. Appendices A and C accompanying the instructions may be particularly helpful. If attached documentation is intended to address this question, please note the attachment in question 31.)

COST ESTIMATES

18. Complete the following tables using the Department of Education & Early Development's 12th Edition Update **Revised** Cost Model or an equivalent cost estimate. Completion of the tables is **mandatory**. (30 points possible)

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

Table 1. TOTAL PROJECT COST ESTIMATE

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

1. Percentage is established by AS 14.11.020(c) for consultant contracts (Maximum allowed percentage by total project cost: \$0-\$500,000 – 4%; 500,001- \$5,000,000 – 3%; over \$5,000,000 – 2%).
2. Include only if necessary for completion of this project. Amounts included for Land and Site Investigation costs need to be supported in the Project Description (Question 17), and supporting documentation should be provided in the attachments.
3. Attach detailed construction cost estimate and life cycle cost if new-in-lieu-of-renovation.
4. Includes district/municipal/borough administrative costs necessary for the administration of this project; This budget line will also include any in-house construction management cost.
5. Equipment and technology costs should be calculated based on the number of students to be served by the project. See the department's publication, Guidelines for School Equipment Purchases for calculation methodology (2005). The department will accept a 5% per year inflation rate (from the base year of 2005) added to the amounts provided in the Guideline. Technology is included with Equipment.
6. Only required for renovation and construction projects over \$250,000 that require an Educational Specification (AS 35.27.020(d)).
7. Costs associated with assessment, design, design review, and special construction inspection services associated with seismic hazard mitigation of a school facility. This amount needs to be provided by a design consultant, and should not be estimated based on project percentage.

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

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

ATTENDANCE AREA AND AVERAGE DAILY MEMBERSHIP (ADM)

Please Note: If you have classified this project as Major Maintenance (Category C or D) and you are not including any new space skip to question 25. **All applications requesting new or replacement space must provide the information requested in this section.** For the purposes of this section, gross square footage is calculated in accordance with 4 AAC 31.020(e).

19. Indicate the student grade levels to be housed by in the proposed project facility: _____

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

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

Project Name	GSF	Grades	Capacity
_____	_____	_____	_____
_____	_____	_____	_____

21. Within the attendance area, are there school facilities that house any student grade levels included in the proposed project? yes no
(If the answer is yes, please provide information below about size, student capacity, and grades served in the table below.)

School Name	GSF	Grades	Capacity

In lieu of data in the format above for questions 20 and 21, we are providing detailed attachments. yes no

22. What is the anticipated date of occupancy for the proposed facility?
(Provide a project schedule if available.) _____
23. In the table below provide the attendance area’s current and projected ADM: (80 points possible for unhoused students)

School Year	K-6 ADM	7-12 ADM	Total ADM
2011-2012			
2012-2013			
2013-2014			
2014-2015			
2015-2016			
2016-2017			
2017-2018			
2018-2019			
2019-2020			
2020-2021			

24. By what method(s) were ADM projections calculated?
(Attach calculations and justifications.) _____

PROJECT SPACE

25. Completion of this table is mandatory for all projects that add space or change existing space utilization. If the project does not alter the configuration of the existing space, it is not necessary to complete this table. Use gross square feet for space entries in this table. (30 points possible available for type of space constructed)

Table 4. PROJECT SPACE EQUATION

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

26. Describe inadequacies of existing space. Specifically address how the inadequacies impact the educational program and facility operations. (40 points possible for inadequacy of space)
(Refer to 4 AAC 31.022 (c)(4). If attached documentation is intended to address this question, please note the attachment in question 31.)

ALTERNATIVE FACILITIES AND OPTIONS

27. List below any alternative regional, community, and school facilities in the area that are capable of housing students. (5 points possible)
(Refer to AS 14.11.013(b)(4). If attached documentation is intended to address this question, please note the attachment in question 31.)

- 28.** Describe at least two and preferably more viable (realistic) options in addition to the proposed project that have been considered in the planning and development of this project. Major maintenance projects should include consideration of project execution options (phasing, in-house vs. contracted construction), and material selection options; New school construction projects need to include a discussion of existing building renovation, acquisition or use of alternative facilities, a life cycle cost analysis and cost benefit analysis, and service area boundary changes where there are adjacent attendance areas; Projects proposing the addition or replacement of space need to consider acquisition or use of alternative facilities, a life cycle cost analysis and cost benefit analysis, and a service area boundary change option where there are adjacent attendance areas. (25 points possible)

(Refer to AS 14.11.013(b)(6). If attached documentation is intended to address this question, please note the attachment in question 31.)

29. Quantify the project's annual operational cost savings, if any, in relation to the project total cost. (30 points possible)
(Refer to 4 ACC 31.022(c)(3). If attached documentation is intended to address this question, please note the attachment in question 31.)

FACILITY MANAGEMENT

30. Provide documents related to the district's maintenance and facility management program. Include management reports, renewal and replacement schedules, work orders, energy reports, training schedules, custodial activities, and any other documentation that will enhance the requirements listed in the instructions. *(Refer to AS 14.11.011(b)(1), AS 14.11.011(b)(4), AS 14.14.090(10), 4 AAC 31.013 and accompanying instructions. Note attached documentation in question 31.)* (55 points possible)

Assessment # 1)	Maintenance Management Narrative (Up to 5 Subjective-Evaluative Points)
Assessment # 2)	Maintenance Labor Reports (Up to 15 Objective-Formula-Driven Points)
Assessment # 3)	PM/corrective maintenance reports (Up to 10 Objective-Formula-Driven Points)
Assessment # 4)	5-Year Average Expenditure on maintenance (Up to 5 Objective-Formula-Driven Points)
Assessment # 5)	Energy Management Narrative (Up to 5 Subjective-Evaluative Points)
Assessment # 6)	Custodial Narrative (Up to 5 Subjective-Evaluative Points)
Assessment # 7)	Maintenance Training Narrative (Up to 5 Subjective-Evaluative Points)
Assessment # 8)	Capital Planning Narrative (Up to 5 Subjective-Evaluative Points)

ATTACHMENTS

31. Please check to indicate all items that are attached to this application and note that two copies of each attachment should be included. Attachments designated as **Required** must be included for the application to be considered complete. Some items may not be applicable to specific projects.

- Documentation establishing compliance with 4 AAC 31.080 (*question 2c*)
- Six-year Capital Improvement Plan (CIP) (*question 3*); **Required for eligibility**
- Description of maintenance and facilities management program (*question 30*); **Required for eligibility**
- Transition plan for state-owned or state-leased properties (*question 8*)
- Justification for waiver of participating share (*question 11*)
- Site description, site requirements, and/or site selection analysis (*question 15*)
- Facility condition survey (*question 16*)
- Facility Appraisal (*question 16*)
- Planning documentation (*question 16*)
- Schematic Design documentation (*question 16*)
- Design Development documentation (*question 16*)
- Cost/benefit analysis (*questions 17, 18, 28, 29*)
- Life cycle cost analysis (*questions 17, 18, 28, 29*)
- Value analysis provided (*question 17, 18, 28, 29*)
- Budget variance justification (*question 18*)
- Cost estimate worksheets (*question 18*)
- Capacity calculations of affected schools in the attendance area/areas (*question 20, 21*)
- Enrollment projections and calculations (*question 23*)
- Appropriate compliance reports (*i.e., Fire Marshal, AHERA, ADA, etc.*)

CERTIFICATION

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

Superintendent or Chief School Administrator

Date

Alaska Department of Education & Early Development



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

FY2014

Use these instructions with Alaska Department of Education & Early Development AKEED Form #05-
~~1112-067XXX~~, Rev 4/~~2011~~2012

Application for Funding Capital Improvement Project by Grant or State Aid for Debt Retirement.
Numbered paragraphs below correspond to numbered questions on the application.

Unless otherwise indicated, each question on the application form must be answered in order for the application to be considered complete. **Only complete applications will be accepted. Incomplete applications will be returned unranked.** The project name on the first page of the application should be consistent with project titles approved by the district school board and submitted with the six-year Capital Improvement Plan (CIP). Please submit *one original and three complete copies* of each application and *two copies of each attachment*. *One copy of the attachment may be in portable document format (PDF).*

(Note: The department will only score ten projects from each district during a single rating period.)

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

TYPE OF PROJECT AND FUNDING REQUEST

1. Check one box to indicate which type of state aid is being requested. Grant funding applications are submitted to the department by September 1st of each year, or on a date at the beginning of September designated by the department in the event that the 1st falls on a weekend or holiday. Debt funding applications can be submitted at any time during the year if there is an authorized debt program in effect. To verify if there is an authorized debt program in effect, contact the department.
- 2a. Check one box to indicate the primary purpose of the project. Each application should be for a single project for a particular facility, and should be independently justified. The district may include work in other categories in a proposed project. These projects will be reviewed and evaluated as mixed-scope projects. Refer to Appendix B of these instructions for descriptions of categories and the limitations associated with category C category D, and category E projects. Application of scoring criteria will be on a weighted

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basis for mixed scope projects. The department will change a project category as necessary to reflect the primary purpose of the project.¹

- b. Check the applicable phase(s) covered by this funding request. Refer to Appendix A for descriptions of phases.
- c. Indicate whether the work identified by the project request is partially or fully complete. If the construction work is partially or fully complete, please attach documentation that establishes that the construction was procured in accordance with 4 AAC 31.080 CONSTRUCTION AND ACQUISITION OF PUBLIC SCHOOL FACILITIES. Competitive sealed bids must be used unless alternative procurement has been previously approved by the department. Projects under \$100,000 can be constructed with district employees if prior approval is received from the department. Projects shall be advertised three times beginning a minimum of 21 days before bid opening. The bid protest period shall be at least 10 days. Construction awards must NOT include provisions for local hire. For construction contracts under \$100,000, districts may use any competitive procurement method practicable. For projects with contracted construction services, attach construction and bid documents utilized to bid the work, advertising information, bid tabulation, construction contract, and performance and payment bonds for contracts exceeding \$100,000. For projects that utilized in-house labor, attach the EED approval of the use of in-house labor [4 AAC 31.080(a)]. If a project utilizes sd in-house labor, or is was constructed with alternative procurement methods, and does not have prior approval from the department, the project will not be scored.

BASIC ELIGIBILITY REQUIREMENTS

3. Attach a current six-year Capital Improvement Plan (CIP) for the district. Use AKEED Form 05-~~1112-068~~XXX. The project requested in the application must appear on the district's six-year plan in order to be considered for either grant funding or debt reimbursement.
4. The district does not need to submit any fixed asset inventory system information to the department as part of the CIP application. The department will verify existence of a Fixed Asset Inventory System during its on-site Preventive Maintenance program review every 5 years. The department will annually review the district's most recently submitted annual audit for information regarding its fixed asset inventory system. School districts that do not have an approved fixed asset inventory system, or a functioning fixed asset inventory system (i.e., cannot be audited) will be ineligible for grant funding under AS 14.11.011.
5. The department may not award a school construction grant to a district that does not have replacement cost property insurance. AS 14.03.150, AS 14.11.011(b)(2) and 4 AAC 31.200 set forth property insurance requirements. The district should annually review the

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

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level of insurance coverage as well as the equipment limitations of the policy, and the per-site and per-incident limitations of the policy to assure compliance with state statute and regulation.

- 6a.** AS 14.11.011(b)(3) requires a district to provide evidence that the funding request is for a capital project and not part of a preventive maintenance or regular custodial care program. Refer to Appendix D for an explanation of maintenance activities.
- b.** An application must include adequate documentation to verify the claims made in the application. The department may reject an application that does not have complete information or adequate documentation. See AS 14.11.013(c)(3)(A) and 4 AAC 31.022(d)(1).

DISTRICT INFORMATION

7. The department will calculate these items based on the Alaska Department of Education & Early Development Uniform Chart of Accounts and Account Code Descriptions for Public School Districts, 2000 Edition annual audited district-wide operations expenditure as the sum of Function 600 Operations & Maintenance of Plant expenditures in Funds 100 General Fund and 500 Capital Project Fund, excluding Object Code 430 Utilities, Object Code 435 Energy, Object Code 445 Insurance, all expenditures for teacher housing, and capital projects funded through AS 14.11. In addition, expenditures included in this calculation will not be eligible for reimbursement under AS 14.11. *[Note: This information is used in calculating scores for Assessment 4; see Question 31.]*

EXISTING FACILITIES

8. The response to this question should be consistent with the space utilization table in question 25. Projects that will result in demolition or surplus of existing state-owned or state-leased facilities should include a detailed plan for transition from existing facilities to replacement facilities. If a facility is to be surplus or demolished, the project must provide for the abatement of all hazardous materials as part of the project. The transition plan should describe how surplus state-owned or state-leased facilities will be secured and maintained during transition.
9. This question requests information on the year the facility was constructed and size of each element of the facility to establish the weighted average age of facilities score. If a project's scope of work is limited to a portion of a building (i.e., the original or a specific addition), the age of *that building portion* will be used in the weighted average age of facilities point calculation. If the project's scope of work expands to multiple portions of a building, the ages of *all building portions receiving work* will be used in the weighted average age of facilities point calculation. *Year built* refers to the year the original facility and any additions were completed or were first occupied for educational purposes. If a date of construction is not available, use an estimate indicated by an (*). *Gross square footage (GSF)* of each addition should be the amount of space added to the original facility. *Total size* should equal the total square footage of the existing facility.

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There are up to 30 points possible depending on the age of the building. Facility number, name, year built, and size are available online at:

<http://www.eed.state.ak.us/Facilities/SchoolFacilityReport/SearchforSchoolFac.cfm>

RELATED FUNDING

10. Prior state funding refers to **grant funds appropriated by the legislature to the department and administered under AS 14.11 as partial funding for this project only**. Any amounts noted here should also be included in Table 1 of the Cost Estimate, Question #18. No other fund sources apply, including debt retirement. There are up to 30 points available if a project includes previous grant funding under AS 14.11, and the project was intentionally short funded by the legislature.
11. Waivers of participating share should be in accordance with AS 14.11.008(d). Justification should be documented. See Appendix E in the attachments to these instructions for detailed information. Only municipal districts with a full value per ADM less than \$200,000 that are not REAAs, are eligible to request a waiver of participating share. Contact the department for a district's most recent full-value per ADM calculation.

PROJECT INFORMATION

12. The district ranking of each project application must be a unique number approved by the district school board and must place each discrete project in priority sequence. The project having the highest priority should receive a ranking of one, and each additional project application of lower priority should be assigned a unique number in priority order. The department will accept only one project with a district ranking of priority one. The ranking of each application should be consistent with the board-approved six-year Capital Improvement Plan (CIP). Please refer to AS 14.11.013(b)(2). Both major maintenance projects and school construction projects should be combined into a single six-year plan. There are up to 30 points available for a district's #1 priority. Points drop off at increments of 3 for each corresponding drop in district priority ranking.

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

13. If this project (1) will result in renovated or additional educational space, and (2) will serve students of the same grade levels currently housed or projected to be housed in other schools, the project description should indicate:
 - the attendance areas that will be impacted (i.e. will contribute students) by this project,
 - the current and projected student populations in each facility (school) affected by the project, and
 - the EED gross square footage for each affected facility (school) in the attendance area.

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Note: for schools housing a combination of elementary and secondary grades, the space allocated to elementary (K-6) and secondary (7-12) may be necessary.

- 14.** Refer to AS 14.11.013(b)(1). If this project is an emergency, describe:
- the nature of the emergency,
 - the facility condition related to the emergency,
 - the threat to students and staff,
 - the consequence of continued utilization of the facility,
 - the individuals or groups affected by the condition,
 - what action the district has taken to mitigate the emergency conditions, and
 - the extent to which any portion of the project is eligible for insurance reimbursement or emergency funding from any state or federal agency.

Evaluation of the emergency will consider all of the information submitted and the responses to each of the emergency elements noted in these instructions. Based on the information submitted, the emergency condition can generate up to 50 possible points.

- 15.** *Acquisition of additional land* refers to expansion of an existing school site using property immediately adjacent to, or in close proximity to, the existing school site. Land acquisition may result from long-term lease, purchase, or donation of land. *Utilization of a new school site* refers to use of a site previously acquired by the district, or a new site acquired as a result of this application and not previously utilized as a public school. If the project site is not yet known, the site description should be the district's best estimate of specific site requirements for the project, and it should be included in the project description. The department's ~~1997-2011~~ publication, *Site Selection Criteria and Evaluation Handbook*, may be useful in responding to this question. A site selection study is required for those projects involving new sites in order to qualify for schematic design points (reference Appendix A).
- 16.** There are five distinct items in this question. Each one has the potential to generate points.

A *facility condition survey* is a technical survey of facilities and buildings, using the department's Guide for School Facility Condition Survey or a similar format, for the purpose of determining compliance with established building codes and standards for safety, maintenance, repair, and operation. Portions of the condition survey, such as that information pertaining to building codes and analysis of structural and engineered systems including site assessment will need to be completed by an architect and/or an engineer. Someone reasonably familiar with the building and its components may complete portions of the condition survey that document the condition of building elements. A facility condition survey is optional; however, a facility condition survey document is useful to the department in evaluating the overall merits of the project request. To receive points for this item, a facility condition survey needs to be less than four years old. The department does not consider submittal of a Spill Prevention,

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Control, and Countermeasures (SPCC) Plan as a condition survey for fuel tank or fuel facility projects. There are up to 5 points possible for a complete condition survey.

A *facility appraisal* is an educational adequacy appraisal following the format of the Council of Educational Facility Planners, International “Guide for School Facility Appraisal”. An appraisal is optional; however, an appraisal document is useful to the department in evaluating the overall merits of the project request. There are up to 5 points possible for a complete facility appraisal.

Planning work includes the items listed under planning in Appendix A of this document. There are up to 10 points possible for completed planning work.

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

Design development work includes items listed under design development in Appendix A of this document. There are up to 10 points possible for completed design development work.

The application needs to identify the district’s A/E consultant for the Condition Survey, Planning, Schematic Design and Design Development work. If there is no consultant, the district must provide a detailed explanation of why a consultant is not required for the project.

PROJECT DESCRIPTION/SCOPE OF WORK

17. The project description/scope of work should include (1) a detailed description of the project, (2) documentation of the conditions justifying the project, (3) a description of the scope of the project and what the project will accomplish, and (4) information or detail related to the project’s cost. If the construction of a new school is proposed, describe any code issues at existing facilities in the attendance area that will be relieved by the project. The scope should also contain sufficient quantifiable analysis to show the project is in the best interest of both the district and the state. The project description/scope of work is a good place to include responses to questions 6, 8, 13, 15, and 16, where applicable. It is helpful to identify the question number if you are answering one of the previously mentioned questions in the project description. There are up to 50 points possible for descriptions identifying the severity of life safety issues addressed by the project.

In addition to the description of the project, provide an estimated project timeline that includes, at a minimum, the estimated date for receipt of funding, estimated construction start date, and estimated construction completion date.

Question #6: Statute requires the district to provide sufficient evidence that the project is not preventive maintenance, routine maintenance, or custodial care. Refer to Appendix D

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of these instructions for information regarding the definitions of maintenance terms related to this question.

Question #8: When a new, renovation, new-in-lieu-of-renewal, or Category E project is proposed, the project description shall include a **detailed cost/benefit analysis and a life cycle cost analysis**. These documents shall provide data documenting conditions that justify the project [AS 14.11.011(b)(1)]. If these documents are attached, they can be referenced summarized and rather than reproduced in the project description. The detailed plan for demolishing or surplusizing state-owned or leased properties should incorporate a draft of the department's Form 05-96-007, Excess Building. For the CIP process, furnish building data and general information; signatures and board resolutions may be excluded

Question #13: If the project impacts multiple facilities, the project description shall identify the facilities impacted and describe how each will be impacted. This applies to district wide projects as well as projects adding space. For projects adding space, use question #21 to summarize gross square footage and student capacity of the impacted facilities.

Question #15: Site description should include location, size, availability, cost and other pertinent information as appropriate. If a site selection and evaluation report is attached, the information can be referenced with a brief summary rather than being reproduced in this section.

Question #16: If a facility condition survey, facility appraisal, schematic design, or design development documents are attached, they can be summarized and referenced rather than reproduced in the description of project need, justification, and scope.

Cost Estimate Support: The project description shall include sufficient information to support meaningful evaluation of the project cost and the reasonableness of the cost estimate. Though basic cost information is to be incorporated into Tables 1 and 2 of question 18, many cost elements reported in standard estimates will require further explanation or support. This is especially true for lump-sum elements used in the department's cost model in sitework and utilities. The project description and cost estimate should be increasingly detailed as project phase's advance.

The description of project scope should include information that will allow the department to evaluate the criteria specified in AS 14.11.013. Please refer to Appendix C for guidelines covering project cost estimate percentages for factored cost items.

COST ESTIMATES

18. For all applications, including those for planning and design, cost estimates should be based on the district's most recent information and should address the project being requested. Refer to Appendix C for descriptions of elements of the total project cost. The cost estimate should be of sufficient detail that its reasonableness can be evaluated. If a

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project is projected to cost significantly more than would be predicted by the Department's Program Demand Cost Model (12th Edition Update Revised), provide attachments justifying the higher cost. If there are special requirements, a detailed explanation and justification should be provided in the project description/scope of work.

In Table 1 all prior AS 14.11 funding for this project should be listed by category and totaled in Column I. If a grant has not been issued, but an appropriation has been made, use the appropriated amount plus participating share in lieu of the issued grant or bond amount. Column II should list the amount of funding being requested in this application, by category and in total. Column III should show a percentage breakdown for the total project allocated costs as a percentage of the total construction cost. Column IV should list the total project cost estimate from inception to completion, all phases. Calculate the percent of construction for all cost categories except Land, Site Investigation, and Seismic Hazard. To calculate the percent of construction divide the category costs by the Construction cost and multiply by 100%. Use Column IV costs to calculate the percent of construction. Other categories should be within the ranges listed. Construction Management (CM) by consultant must be less than 4% if the total project cost is less than or equal to \$500,000; 3% for project costs between \$500,000 - \$5,000,000; and 2% for projects of \$5,000,000 or greater [AS14.11.020(c)]. The percent for art, required for all renovation and construction projects with a cost greater than \$250,000, and which requires an Educational Specification, is given a separate line. Project Contingency is fixed at 5%. The total project cost should not exceed 130% of construction cost, excluding land and site investigation. If your project exceeds the recommended percentages, please add a detailed justification for each category that exceeds the specific sub-category guidelines as well as a detailed description of why the project requires more than 30% in additional percentage costs.

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

<http://www.eed.state.ak.us/Facilities/FacilitiesCIP.html>

Table 2, which summarizes construction costs, is structured to be consistent with the EED cost model. Other estimating formats may not provide an exact correlation; however, the following categories **MUST** be reported to allow adequate comparisons between projects: basic building, site work and utilities, general requirements, contingency, and escalation. Do not blank out or write over this table. If the application

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includes a cost estimate from a designer or professional cost estimating firm, table two must still be filled out as described above.

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

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

ATTENDANCE AREA AND AVERAGE DAILY MEMBERSHIP (ADM)

NOTE: Gross square footage entries in this section should reflect the measurements specified by 4 AAC 31.020. Space variance requests not already approved by the department must be submitted in accordance with 4 AAC 31.020 by the application deadline in order to receive consideration with the current request.

19. The response to this question should reflect the grade levels that will be served by the facility at the completion of the project.
20. Any additional square footage that is funded for construction or approved by local voters for construction should be described, showing student capacity, additional GSF, and grade levels to be served. Include these projects in any capacity/unhoused calculations provided in the year of anticipated occupancy.
21. List all schools in the attendance area that serve grade levels equivalent to those of the proposed project. If the project includes any elementary grades, all schools in the attendance area serving elementary students are to be listed. If the project includes any secondary grades, all schools in the attendance area serving secondary students are to be listed. For each school listed include its size, the grades served, and the school's total student capacity. Use the department's Capacity Worksheet to calculate the total student capacity for each school. Please note that the Capacity Worksheet has been revised to reflect the regulatory changes to 4 AAC 31.020. The Capacity Worksheet is a MS Excel file and is available on the department's web site:

<http://www.eed.state.ak.us/facilities/FacilitiesCIP.html>
22. The date provided here should be the anticipated date the facility will be occupied. This will be the starting point for looking at five-year post-occupancy population projections. If a project schedule is available it should be provided to substantiate the projected date.
23. All projects that are adding new space or replacing existing space must complete Table 3. ATTENDANCE AREA ADM. There are 80 possible points available for unhoused students depending on severity.

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24. Identify the method(s) that were utilized to determine the student population projections listed in Table 3. The department will compare the projections to historic growth trends for the attendance area. The department will revise population projections that exceed historical growth rates, show disparate growth between elementary and secondary populations, or are unlikely to be sustained as an attendance area's overall population grows. The application should include student population projection calculations and sufficient demographic information (i.e. housing construction, economic development, etc.) to justify the project's population projection.

PROJECT SPACE EQUATION

25. This table summarizes space utilization in the proposed project expressed in gross square feet. Space figures represented should tabulate to match the gross building square footages reported in question 9 as well as those shown in Table 2 of the cost estimate section. The worksheet at Appendix F lists types of school space that fit in each category. There are up to 30 points possible for the type of space being constructed.
26. Describe the inadequacies of the existing space. Inadequacies can vary from quality of space to amount of space to the configuration of the space. The response should also address how the inadequacies impact the educational program and whether the educational program is a mandatory, existing local or new local program. The maximum number of points available for this question is 40. There are up to 40 points possible for description of mandated educational programs, up to 20 points are available for existing local educational programs, and up to 15 points are available for new local programs.

ALTERNATIVE FACILITIES AND OPTIONS

27. Statutes require an evaluation of other facilities in the area that may serve as an alternative to accomplishing the project as submitted. Information regarding the availability of such facilities and the effort (i.e. cost, time, etc.) required to make the facility usable for the school needs represented by the project should be provided. The area is not restricted to the attendance area served by the project. There are up to 5 points available for an adequate description showing that the district has considered alternatives to the proposed project for housing unhoused students.
28. In an effort to support the project, as submitted, as the best possible solution to school facility needs, districts needs to consider a full range of options during planning and project development. Options should address the specific scope of the project and the delivery of the project (phasing of the work, in-house labor, etc.). For example, projects that propose construction of a new school should discuss other options such as renovation of the existing building or acquisition of alternative facilities and provide an explanation as to why these options were not selected. A project that proposes roof replacement should discuss the merits of different roofing materials, the addition of insulation, or even altering the roof slope and provide an explanation as to why these options were not selected. If the proposed project will add new or additional space, districts must consider

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service area boundary changes and any space available in adjacent attendance areas that are connected by road. In districts that contain adjacent attendance areas, at least one of the options considered must be an evaluation of potential boundary changes. Scoring in this area will be related to factors such as: the range of options, the rigor of comparison, the viability of options considered, and the quality of data supporting the analysis of the option. Options also need to consider the results of cost benefit analysis, life cycle cost analysis, and value analysis as necessary. There are up to 25 points available for a comprehensive discussion on the options considered by the district that would accomplish the same goals as the proposed project.

29. **Operational Cost vs. Project Cost:** Information (and evaluation points) related to operational costs is not limited to Category E projects. The project cost and its impact on operational costs is an important consideration for any project. The project description should include a discussion of ways in which the completion of the project would reduce current operational costs. Considerations could cover energy costs, costs related to wear-and-tear, maintenance of existing facilities costs, and costs incurred by current functional inadequacies at the facility and attendance area level. For new facilities, consideration should be given to design choices that will provide periodic and long-term savings in the operation and maintenance of the facility.

Although the addition of square footage is certain to increase overall operational costs, project descriptions for this category of project should include information on methods and strategies used to minimize operational costs over the life of the building. This can include cost benefit analyses that were accomplished on building systems and materials, etc. There are up to 30 points possible for a full and complete description of the costs of the project including life-cycle costs and cost benefit analysis.

FACILITY MANAGEMENT

30.

AS 14.11.011(b)(1) and 4 AAC 31.011(b)(2) require each school district to include with this application a description of its preventive maintenance program, as defined by AS 14.11.011(b)(4), AS 14.14.090(10), and 4 AAC 31.013. Refer to Appendix D for details. The scoring criteria for this area now reflect efforts beyond just preventive maintenance. For each element of a qualifying plan outlined in 4 AAC 31.013, documents, including reports, narratives and schedules have been identified for nine separate assessments. These documents will establish the extent to which districts have moved beyond the minimum eligibility criteria and have tools in place for the active management of all aspects of their facility management. The documents necessary for each assessment are listed below. They are grouped according to the five areas of effort established in statute and are annotated as to the type of evaluation (i.e., subjective-evaluative or objectiveformula-driven). A district should provide any or all of the documents they have available. Refer to the Rater's Guide for additional information on scoring. There are up to 55 points possible for a clear and complete reporting of the district's maintenance program.

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Maintenance Management

Assessment #1 – Maintenance management narrative (SubjectiveEvaluative) [up to 5 points available]:

Provide a narrative description of the effectiveness of your work order based maintenance management system.

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

Assessment #2 – Maintenance Labor Reports (ObjectiveFormula-Driven) [up to 15 points available]:

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

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

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

These reports will demonstrate a district's ability to manage maintenance activities related to the level and scope of labor requirements.

Assessment #3 – PM/corrective maintenance reports (ObjectiveFormula-Driven) [up to 10 points available]:

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

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

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

Assessment #4 – 5-year average expenditure for maintenance (ObjectiveFormula-Driven) [up to 5 points available]:

The 5-year average expenditure for maintenance divided by the 5-year average insured replacement value, district wide. [This assessment is calculated based on information identified in application question #7 and from district insurance records submitted separately to the department. No information need be submitted with the application for this Assessment.]

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Energy Management

Assessment #5 – Energy Management Narrative (SubjectiveEvaluative) [up to 5 points available]:

Provide a narrative description of the district's energy management program and energy reduction plan.

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

Custodial Program

Assessment #6 – Custodial Narrative (SubjectiveEvaluative) [up to 5 points available]:

Provide a narrative description of the district's custodial program and evidence to show it was developed using data related to inventories and frequency of care.

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

Maintenance Training

Assessment #7 – Maintenance Training Narrative (SubjectiveEvaluative) [up to 5 points available]:

Provide a narrative description of the district's training program including but not limited to: identification of training needs, training methods, and numbers of staff receiving building-system-specific training in the past 12 months. In addition to the narrative description, provide a copy of the district's training log for the past year. The training log should include name of the person trained, the training received, and the date training was received.

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

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Capital Planning (Renewal & Replacement)

Assessment #8 – Capital Planning Narrative (SubjectiveEvaluative) [up to 5 points available]:

Provide a narrative giving evidence the district has a process for developing a long-range plan for capital renewal.

Discuss the district's process for identifying capital renewal needs. Renewal and replacement schedules can form the basis for this work, but building user input should also be considered. It is important to move the capital planning process from general data on renewal schedules to actual assessments of conditions on site. This helps to validate the process and allows the district to create capital projects that reflect actual needs. A final step would be to review the systems needing replacement and to organize the work into logical projects (e.g., if a fire alarm and roof are confirmed to be in need of renewal, they may need to be placed in separate projects versus renewal of a fire alarm and lighting which could be effectively grouped in a single project).

ATTACHMENTS

31. The attachments checklist is provided for your and the department's convenience to identify additional materials that are referenced in support of the project. Please check to see that your application is complete and indicate additional attachments the department should reference while evaluating the project.

CERTIFICATION

32. Please be sure the application is signed by the appropriate official. Unsigned applications cannot be accepted for ranking.

Application packages should be submitted to:

Alaska Department of Education & Early Development
Division of School Finance, Facilities
801 W. 10th Street, Suite 200
P.O. Box 110500
Juneau, AK 99811-0500

For further information contact:

Sam Kito III, P.E., School Facilities Engineer
(907) 465-6906

Alaska Department of Education & Early Development
 APPENDIX A: CAPITAL IMPROVEMENT PROJECT PHASES
 Adopted by the Bond Reimbursement & Grant Review Committee
 April 16, 2007

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

PHASE I-PLANNING (10 points possible)

1. Select architectural or engineering consultants (if needed)(4 AAC 31.065) - (as required)
2. Prepare a school facility appraisal (as required) (see application question 16)
3. Prepare a facility condition survey (as required) (see application question 16)
4. Identify need category of project - **(Required)**
5. Verify student populations and trends - **(Required)**
6. Complete education specifications (design the educational program - 4AAC 31.010) - **(Required)**
7. Identify site requirements and potential sites - **(Required)**
8. Complete concept design studies and planning cost estimate - **(Required)**

PHASE IIA - SCHEMATIC DESIGN (10 points possible)

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

PHASE IIB-DESIGN DEVELOPMENT (10 points possible)

1. Complete suggested elements of planning/design not finished in the previous phases - **(Required)**
2. Review and confirm planning (4AAC 31.030)
3. Accomplish a condition survey relevant to scope - **(Required if project includes renovation)**
4. Obtain option to purchase or lease site at an agreed upon price and terms - **(Required)**
5. Complete design development documents - **(Required)**
6. Prepare proposed schedule and method of construction
7. Prepare revised cost estimate appropriate to the phase - **(Required)**

PHASE III-CONSTRUCTION

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

Alaska Department of Education & Early Development
 APPENDIX B: CATEGORIES OF GRANTS
 Adopted by the Bond Reimbursement & Grant Review Committee
 April 16, 2007

AS 14.11.013(a)(1)- annually review the six-year plans submitted by each district under [AS 14.11.011](#) (b) and recommend to the board a revised and updated six-year capital improvement project grant schedule that serves the best interests of the state and each district; in recommending projects for this schedule, the department shall verify that each proposed project meets the criteria established under [AS 14.11.014](#) (b) and qualifies as a project required to:^{2, 3}

- A. "Avert imminent danger or correct life threatening situations." This category is generally referred to as, "Health and Life Safety." A project classified under "A" must be documented as having unsafe conditions that threaten the physical welfare of the occupants. Examples might be that seismic design of structure is inadequate; that required fire alarm and/or suppressant systems are non-existent or inoperative; or that the structure and materials are deteriorated or damaged seriously to the extent that they pose a health/life-safety risk. The district must document what actions it has taken to temporarily mitigate a life-threatening situation.
- B. "House students who would otherwise be unhoused." This category is referred to as "Unhoused Students." A project to be classified under "B" must have inadequate space to carry out the educational program required for the present and projected student population. Documentation should be based on the current Department of Education & Early Development Space Guidelines. (Refer to 4 AAC 31.020) This category corresponds to category A under AS 14.11.100(j) used for review of debt reimbursement projects.
- C. "Protection of the structure of existing school facilities." This category is intended to include projects that will protect the structure, enclosure, foundations and systems of a facility from deterioration and ensure continued use as an educational facility. Work on individual facility systems may be combined into one project. However, the work on each system must be able to be independently justified and exceed \$25,000. The category is for major projects, which are not a result of inadequate preventive, routine and/or custodial maintenance. An example could be a twenty year old roof that has been routinely patched and flood coated, but is presently cracking and leaking in numerous locations. A seven year old roof that has numerous leaks would normally only require preventive maintenance and would not qualify. In addition, no new space for unhoused students is permitted in this category, limiting its ability to be combined with other project types.
- D. "Correct building code deficiencies that require major repair or rehabilitation in order for the facility to continue to be used for the educational program." This category, Building Code Deficiencies, was previously referred to as "Code Upgrade." The key words are "major

² Projects can combine work in the different categories with the majority of work establishing the project's type. For the purpose of review and evaluation, projects which include significant work elements from categories other than the project's primary category will be evaluated as **mixed scope** projects [4 AAC 31.022(c)(8)].

³ Projects will be considered for replacement-in-lieu-of-renewal when project costs exceed 75% of the current replacement cost of the existing facility, based on a twenty year life cycle cost analysis that includes disposition costs of the existing facility.

Alaska Department of Education & Early Development
 APPENDIX B: CATEGORIES OF GRANTS
 Adopted by the Bond Reimbursement & Grant Review Committee
 April 16, 2007

repair." A "D" project corrects major building, fire, mechanical, electrical, environmental, disability (ADA) and other conditions required by codes. Work on individual facility systems may be combined into one project. However, the work on each system must be able to be independently justified and exceed \$25,000. An example could be making all corridors one hour rated. Making one or two toilet stalls accessible would not fit this category. In addition, no new space for unhoused students is permitted in this category, limiting its ability to be combined with other project types. This category corresponds to category B under AS 14.11.100(j) used for review of debt reimbursement projects.

- E. "Achieve an operating cost saving." This category is intended to improve the efficiency of a facility and therefore, save money. Examples that might qualify are increasing insulation, improving doors and windows, modifying boilers and heat exchange units for more energy efficiency. The project application must include an economic analysis comparing the project cost to the operating cost savings generated by the project. In addition, no new space for unhoused students is permitted in this category, limiting its ability to be combined with other project types. This category corresponds to category C under AS 14.11.100(j) used for review of debt reimbursement projects.
- F. "Modify or rehabilitate facilities for purpose of improving the instructional unit." Category "F", Improve Instructional Program, was previously referred to as "Functional Upgrade." This category is limited to changes or improvements within an existing facility such as, modifications for science programs, computer installation, conversion of space for special education classes, or increase of resource areas. It also covers improvements to outdoor education and site improvements to support the educational program. This category corresponds to category D under AS 14.11.100(j) used for review of debt reimbursement projects.
- G. "Meet an educational need not specified in (A)-(F) of this paragraph, identified by the department." Any situation not covered by (A)-(F), and mandated by the Department of Education. (Currently, there are no such mandates.)

Alaska Department of Education & Early Development
 APPENDIX C: PROJECT COST ESTIMATE
 Adopted by the Bond Reimbursement & Grant Review Committee
~~April 14, 2010~~ April 20, 2012

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

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

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

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

Recommended: 6-10% (Renovation might run 2% higher)

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

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

Recommended: 0-10% of construction cost or between \$1700 - \$3050 per student depending on school size and type.

District Administrative Overhead includes an allocable share of district overhead costs, such as payroll, accounts payable, procurement services, and preparation of the six year capital improvement plan and specific project applications. In-house construction management should be

Alaska Department of Education & Early Development
 APPENDIX C: PROJECT COST ESTIMATE
 Adopted by the Bond Reimbursement & Grant Review Committee
~~April 14, 2010~~April 20, 2012

included as part of this line item. The total of in-house construction management costs and Construction Management by Consultant should not exceed 5% of the construction budget.
 Recommended: 2-9%

Percent for Art includes the statutory allowance for art in public places. This may fund selection, design/fabrication and installation of works of art. One percent of the construction budget is required except for rural projects which require only one-half of one percent. For this category projects are rural if they are in communities under 3000 or are not on a year-round, publicly-maintained road system and have a construction cost differential greater than 120% of Anchorage as determined in the Cost Model for Alaskan Schools. The department recommends budgeting for art.

Project Contingency is a safety factor to allow for unforeseen changes. Standard cost estimating by A/E or professional estimators use a built in contingency in the construction cost of $\pm 10\%$. Because that figure is included in the construction cost, this item is a project contingency for project changes and unanticipated costs in other budget areas
 Recommended: 5% Fixed

Total Project Request is the total project cost, as a percent of the construction cost, except in extreme cases, should average out close to the same for all projects, and when the variables of land cost and site investigation are omitted. This item is the best overall gauge of the efficiency of the project.
 Recommended: Not to exceed 130%

Alaska Department of Education & Early Development
APPENDIX D: DEFINITIONS OF MAINTENANCE
Adopted by the Bond Reimbursement & Grant Review Committee
April 18, 2001

Component

A part of a system in the school facility.

Component Repair or Replacement

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

Custodial Care

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

Deferred Maintenance

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

Major Maintenance

Facility renewal that requires major repair or rehabilitation to protect the structure and correct building code deficiencies, and shall exceed \$25,000 per project, per site. It must be demonstrated, using evidence acceptable to the department that (1) the district has adhered to its regular preventive, routine and/or custodial maintenance schedule for the identified project request, and (2) preventive maintenance is no longer cost effective.

Preventive Maintenance

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

Renewal or Replacement

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

System(s)

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

Alaska Department of Education & Early Development
 APPENDIX E: WAIVER OF PARTICIPATING SHARE/IN-KIND CONTRIBUTIONS
 Adopted by the Bond Reimbursement & Grant Review Committee
 April 23, 1999

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

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

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

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

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

3. All waiver requests require sufficient documentation.

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

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

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

Alaska Department of Education & Early Development
 APPENDIX F: Type of Space Added or Improved
 Adopted by the Bond Reimbursement & Grant Review Committee
 April 18, 1997

Category A - Instructional or Resource

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

Category B - Support Teaching

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

Category C - General Support

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

Category D - Supplementary

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

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

Date _____

District _____ Project _____

Is the project eligible? Yes No

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

Primary Application Question(s)		Yes	No
A	All	The application is complete and all questions are fully answered - AS 14.11.013 (c)(3)(A)	
B	#3	The district's CIP-6 year plan has been submitted - AS 14.11.011(b)(1)	
C	#4	The district has an auditable fixed asset inventory system - AS 14.11.011(b)(1)	
D	#5	Evidence of replacement cost property insurance - AS 14.11.011(b)(2)	
E	#11	If the district has requested a waiver of participating share, is the request attached? (If not applicable, leave blank) - AS 14.11.008(d)	
F	#6	Evidence that project should be a capital improvement project and not preventive maintenance or custodial care - AS 14.11.011 (b)(3)	
G	#17	Evidence that project meets the criteria of one of the A-F categories - AS 14.11.013 (a)(1)	
H	#17	A detailed scope of work, project budget and documentation of need - AS 14.11.011 (b)(1)	
I	#17 & 18	The scope of work should include all information requested in the application instructions and should include life cycle cost analysis, cost benefit analysis or any other quantifiable analysis which demonstrates that the project is in the best interest of the district AND the state - AS 14.11.013 (c)(3)(C)	
J	#19, 20, 21, 22, 23, 24	For projects requesting additional space, evidence of space eligibility based on supported 2-year and 5-year-post-occupancy student population projection data - 4 AAC 31.021(c)(1)&(c)(3)	
K	#17, 26, 27, & 28	Evidence that the existing facility can not adequately serve or that alternative projects are in the best interest of the state – AS 14.11.013 (c)(3)(B)	
L	#27 & 28	Evidence that the situation can not be relieved by adjusting service area boundaries and transportation - 4 AAC 31.021(c)(2) & AS 14.11.013 (b)(6)	
M	#31 & 32	EED certification that the school district has a facility management program that complies with 4 AAC 31.013 and a description of the district's preventive maintenance program - AS 14.11.011 (b)(1)	
N	#6b	<u>Adequate documentation supporting the project request – AS 14.11.013(c)(3)(A) and 4 AAC 31.022(d)(1)</u>	



Guidelines for Raters of the CIP Applications

Introduction

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

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

Base Philosophy

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

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

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

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

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



Subjective-Evaluative Rating Guidelines

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

Effectiveness of Maintenance & Facilities Management Program (Application Question 30; Points possible: 25)

<p>Maintenance Management Narrative (Points possible: 5)</p> <ul style="list-style-type: none"> • Does the described program address preventive maintenance as well as routine? • How well does the program work for each individual school? • Does the program address all building components? Mechanical, electrical, structural, architectural, exterior/civil? • Is there evidence supplied which demonstrates that the program is effective? • Who participates in the program and how does it function?
<p>Energy Management Narrative (Points possible: 5)</p> <ul style="list-style-type: none"> • Is the district engaged in reducing energy consumption in its facilities? • Is a comprehensive set of methods being used? • Is the program districtwide in scope? • Is the program achieving results? • Is there a method for reviewing and monitoring energy usage?
<p>Custodial Narrative (points possible: 5)</p> <ul style="list-style-type: none"> • Is the district's custodial program complete? • Is custodial program based on quantities from building inventories and frequency of care based on industry practice? • Has the district customized its program to be specific to each facility? • Is the program districtwide in scope? • Is the program achieving results?
<p>Maintenance Training Narrative (Points possible: 5)</p> <ul style="list-style-type: none"> • Does the program address training and on-going education of the maintenance staff? • Are maintenance personnel being trained in specific building systems? • Are training schedules attached? • How is Training Recorded? • How is effectiveness measured?
<p>Capital Planning Narrative (Points possible: 5)</p> <ul style="list-style-type: none"> • Does the district have a process for identifying capital renewal needs? • Are component/subsystem replacement cycles identified and used? • Does the system involve building occupants and users? • Are renewal schedules comprehensive and vetted for credibility? • Are systems up for renewal grouped into logical capital projects?

Emergency (Application question 14; Points possible: 50)

Revised: April ~~1420~~, 2001 ~~2012~~



- If the district doesn't declare the project an emergency: NO points!
- Consider the 'level of threat' to both people and property in assessing the emergency.
- Consider how well points noted in instructions are addressed.
- Consider the 'immediacy' of the emergency (how time critical is it?).
- Consider the "nature" of the emergency.
- Consider information provided in all portions of the application in assessing the emergency.
- Scoring should be weighted in the case of mixed-scope projects (i.e., does the project address emergency and non-emergency conditions?)

Seriousness of Life Safety and Code Conditions (Application Questions 14 and 17; Points possible: 50)

- Consider the documentation provided: how specific?, source/author?, reasonable categories?
- Consider information provided on type and nature of code violations. How specific?
- Mandatory or optional? Especially consider this in light of code condition comparisons between standards for new buildings and the requirements for older buildings.
- Does the project provide relief from life safety & code conditions for facilities affected by the project?
- Seriousness of emergency conditions?
- Seriousness of code conditions?
- Scoring should be weighted in the case of mixed scope projects.
- Life safety description should provide relationship to definitions provided in Appendix B.

Existing Space (Application Question 26; Points possible: 40)

- This score should be adjusted for mixed scope projects (i.e., does the project only involve improvements to inadequate space or does it also incorporate work in adequate spaces?)
- Rating should consider the adequacy of the space in terms of both form and function.
- There should be a balance between consideration of educational adequacy of physical arrangement versus functional factors.
- Points are awarded based on the inability of existing space to adequately serve the educational program. No points for code violations!
- Mandated programs can receive 40 points maximum, existing local programs can receive 20 points maximum, and new local programs can receive 15 points maximum (should be spelled out in the application).



Cost or Cost Estimate (Application Questions 18; Points possible: 30)

- Check to assure that the estimate matches the proposed project scope.
- Check for double entries, especially for factored items.
- Primary evaluation should test both the “reasonableness” and the “completeness” of the cost estimate (i.e., How well can this estimate be used to advocate for this project?)
- Rating considers the full range of estimates: from conceptual to detail design to actual construction costs. It should be noted that because this scoring element covers the full range of estimate possibilities, it is anticipated that conceptual estimates score less than more detailed construction estimates and actual construction cost documentation.
- Review and evaluate backup for cost estimate or actual construction costs.
- Check percentages and justification (**with backup**) when percentages exceed EED guidelines.
- Check cost after adjustment for geographic factor.
- Review cost benefit analysis and life cycle cost analysis. Note if these are not present. Note specific deficiencies.

Relationship of the Project Cost to the Annual Operating Cost (Application question 29; Points possible: 30)

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



Alternative Facilities (Application question 27; Points possible: 5)

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

Options (Application Question 28; Points possible: 25)

- Consider how completely this topic is addressed.
- Was the option to phase the project considered?
- Should consider boundary changes where applicable.
- For equipment: was a re-conditioned or re-built option considered in lieu of new.
- For over-crowding, was double shifting considered? If not, why not?
- Were the options considered viable alternatives?
- The rating of this scoring element should consider the range of options considered and the rigor of the comparison to each other.
- Scoring should increase in accordance with the amount of detailed information; graduated into three levels of: 1. unsupported narrative 2. well supported narrative and 3. detailed cost analysis.

~~Adequacy of Documentation (Points possible: 30)~~

- ~~• This score should be the last score awarded.~~
- ~~• Consider all attachments in evaluating this element.~~
- ~~• Points awarded for this element should reflect how well information needed to assess each of the other scoring elements was provided.~~
- ~~• Consideration should be given to congruency between documents supporting an application.~~
- ~~• Consideration should be given to how well documents and submittals responded to both the letter and the intent of questions.~~

Objective-Formula-Driven Rating Form (continued)

Max Points		School Construction A, B, F	Major Maintenance C, D, E
30	<p>9. Preventive Maintenance (Question 30)</p> <p>A. Maintenance Management Program</p> <ul style="list-style-type: none"> 1. Detailed summary reports of maintenance labor parameters 15 points 2. Detailed summary reports of PM/corrective maintenance parameters 10 points 3. The 5-year average expenditure for maintenance divided by the 5-year average insured replacement value, district wide. 5 points <p>If % ≤ 4, then (% x 1.25) If % > 4, then 5</p>		
270	Total Points		

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

Subjective-Evaluative Rating Form

Adopted by the Bond Reimbursement and Grant Review Committee

April ~~14~~20, ~~2010~~2012

School District _____
 School Name _____
 Project Title _____
 Fund _____ Category _____
 Phase _____ Maximum Points _____
 Rater _____ Date _____

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

Max Points		School Construction A, B, F	Major Maintenance C, D, E
25	1. Effectiveness of preventive maintenance program (Question 30) A. Maintenance Management Narrative = 5 points maximum B. Energy Management Narrative = 5 points maximum C. Custodial Narrative = 5 points maximum D. Maintenance Training Narrative = 5 points maximum E. Capital Planning Narrative = 5 points maximum		
50	2. Emergency (Question 14)		
50	3. Seriousness of life/safety and code conditions (Questions 14 & 17)		
40	4. Existing space fails to meet or inadequately serves existing or proposed elementary or secondary programs (Question 26) A. Mandated Program = 40 points maximum B. Local existing program = 20 points maximum C. New approved local program = 15 points maximum		
30	5. Reasonableness & completeness of cost or cost estimate (Question 18)		
30	6. Relationship of the project cost to the annual operational cost savings (Question 29)		
5	7. Thoroughness in considering use of alternative facilities to meet the needs of the project (Question 27)		
25	8. Thoroughness in considering a full range of options for the project (Question 28)		
30	9. Adequacy of documentation (All questions)		
285 <u>25</u>	Total Points		

Comparative Analysis of Prescriptive, Performance-Based, and Outcome-Based Energy Code Systems

May 2011



Mission Statement
To provide Alaskans access
to safe, quality, affordable
housing.

Notification

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Primary Authors

Katie Spataro, Research Director, Cascadia Green Building Council

Marin Bjork, Research Manager, Cascadia Green Building Council

Mark Masteller, Alaska Director, Cascadia Green Building Council

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Report to Alaska Housing Finance Corporation
Related to Contract #02/10-01, Deliverable F.1
Commercial-Sector Energy Efficiency Training Services

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I. BACKGROUND AND INTRODUCTION

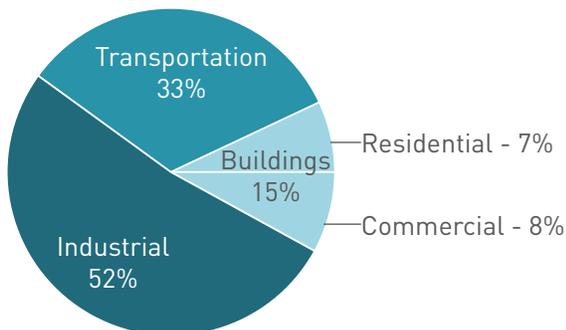
BACKGROUND

ENERGY USE IN ALASKA

Alaska is noteworthy when it comes to both energy supply and consumption. It is the second largest oil producing state, has the coldest temperatures, and uses the most energy per capita in the United States.¹ According to 2005 Department of Energy data, Alaska consumed 0.8% of all the energy used in the U.S. while only representing 0.2% of the total population. Alaska residents also pay some of the highest prices for their energy.

Residential and commercial buildings consume 15% of Alaska's total energy, though they account for 81% of the state's total electricity use.^{2,3} Energy conservation and efficiency is the simplest and least expensive action Alaska can take to reduce utility bills and dependence on fossil fuels while subsequently shrinking carbon dioxide and greenhouse gas emissions.⁴

Alaska Energy Use



Source: US DOE, Alaska Energy Summary

STATE ENERGY POLICIES

In 2008, AHFC commissioned a report to identify energy efficiency opportunities in Alaska⁵ which directly influenced the future adoption of the state's energy policies. Many of the report's recommendations were included in House Bill 306, passed in July 2010, outlining goals to improve statewide energy efficiency, decrease energy use in public buildings, protect public interest, and foster the state's economic prosperity.⁶

Senate Bill 220, signed into law June 16, 2010, calls for 25% of all public facilities to be retrofitted to meet or exceed current ASHRAE 90.1 standards. The bill authorized AHFC to develop a revolving loan

ALASKA ENERGY EFFICIENCY REVOLVING LOAN FUND

In 2010, House Bill 306 set forth state energy policy to increase efficiency 15% by 2020.

Senate Bill 220 authorized AHFC to provide loans for energy efficiency improvements to public buildings including school district, university and municipal buildings. The loans are funded by the State Energy Program's American Recovery and Reinvestment Act (ARRA) of 2009.

The \$250 million revolving fund will finance projects seeking energy savings. AHFC will require larger loans to set up Energy Performance Contracts to ensure that savings from energy efficiency improvements are used to pay back loans.

Loans will be structured to finance retrofits demonstrating a payback for building owners within 15 years. Interest rates will be locked-in at closing.

AHFC is currently evaluating the appropriate methodology for benchmarking energy performance requirements of buildings eligible for retrofit funding.

1 US Dept. of Energy, 2011

2 Information Insights, 2008

3 US Dept. of Energy, 2010

4 Ibid.

5 Information Insights, 2008

6 State of Alaska, 2010

program to finance energy audits and energy efficiency retrofits to existing public buildings which include University of Alaska, state and municipal facilities, and regional educational attendance areas. SB 220 also requires the Office of Management and Budget to assist state agencies in developing a standardized method for collecting and storing building energy consumption data.

ALASKA'S ENERGY EFFICIENCY STANDARDS

In absence of a statewide energy code, Alaska relies on Building Energy Efficiency Standard (BEES) to guide efficiency requirements for new construction projects that receive state financing through AHFC. Residential BEES was adopted in 1992, but it was not until March 2011 that BEES was adopted for commercial buildings. The current version of BEES is based on the International Energy Conservation Code (IECC) 2009 and ASHRAE 62.2 2010 with Alaska specific amendments. It defines standards for thermal resistance, air leakage, moisture protection, and ventilation across Alaska's four distinct climate zones: Southeast, Southcentral, Interior & Western and Arctic Slope. AHFC will require commercial BEES as the minimum standard for all public facilities that receive funding through the revolving loan program. However, AHFC is interested in evaluating alternative code standards for benchmarking energy performance that may encourage even greater energy savings.

PURPOSE

The purpose of this report is to provide an overview of three different compliance pathways for energy codes: prescriptive, performance-based and outcome-based standards. This report is intended to serve as a resource for AHFC staff in the development of program policies and procedures for the retrofit revolving loan program. In addition to comparing the three code types and their implications for public buildings, it provides recommendations to AHFC in establishing benchmarks to best elicit maximum energy savings from retrofit funding.

Objectives

- Compare prescriptive, performance-based and outcome-based energy code systems and their ability to predict and measure actual building performance based on existing research and literature.
- Analyze various code systems as they relate to existing buildings.
- Provide recommendations for instituting a "code" standard for AHFC energy retrofit projects.

METHODOLOGY

The research methodology employed in the drafting of this report included an extensive literature review of the three different types of energy codes. Emphasis was placed on evaluating studies that have looked at measuring actual energy performance of commercial buildings approved under the various code systems and comparing expected and actual performance. Phone interviews were conducted with leaders in the field of energy codes and building performance which included staff from New Buildings Institute, Preservation Green Lab, the Cold Climate Housing Research Center and Cook Inlet Housing Authority. A list of interviewees can be found in Appendix A.

This report does not evaluate any specific local, state or national energy codes, but rather compares prescriptive, performance-based and outcome-based code systems and gives examples of each. The report summarizes findings from the literature review and interview process, and makes recommendations to AHFC on policy development for benchmarking performance of projects earmarked for retrofit funds. For the purposes of this research, the focus was on recommendations for commercial-scale public facilities (schools, government offices, convention centers, etc.), not residential sector development.

II. TYPES OF ENERGY CODES

ENERGY CODE OVERVIEW

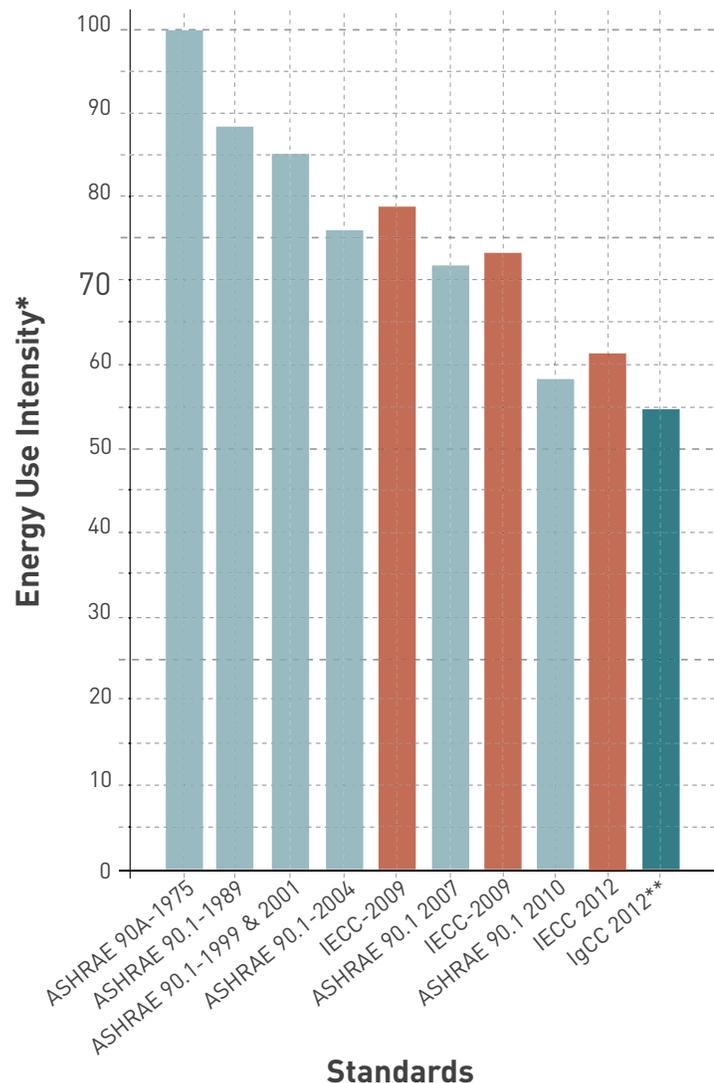
Codes define minimum requirements for reaching specified objectives. Energy codes are used by state and local jurisdictions to mandate and enforce standards for how a building's envelope, mechanical systems, and lighting should be designed and installed.

Most current code systems lack accountability for unregulated plug loads such as computers, monitors, kitchen appliances, water coolers, speakers, fans, space heaters and televisions. These loads can account for 25-30% of a commercial building's total energy use though they can be as high as 70% in some building types.⁷

Like other building codes, states have the authority to mandate and enforce energy codes. The U.S. Department of Energy (DOE) provides guidance for energy code adoption and implementation in the United States. The two models recognized and supported by DOE are the International Energy Conservation Code (IECC) and the American Society of Heating, Refrigerating and Air-Conditioning Engineers 90.1 (ASHRAE 90.1). Each of these standards is updated in three-year cycles to integrate new technologies and incrementally move towards more stringent energy efficiency standards. As these codes are updated with more rigorous energy use reduction goals, they begin to align themselves with the far-reaching end goal of net zero energy. Some jurisdictions, like Austin, Texas and Albuquerque, New Mexico have recently adopted codes that align with the targets established by Architecture 2030 advocating for carbon neutral buildings by the year 2030. Efforts to enforce some of these codes have been stalled by legal action.

The 2012 update of the IECC is expected to take a large leap toward energy reduction in commercial buildings. In October 2010, code officials approved a package of revisions targeted to provide an additional 30% in energy savings over commercial structures built to ASHRAE 90.1-2004 standards.⁸ Specific upgrades include improvements to cooling and daylighting requirements, renewable energy standards, and the addition of a new section

Energy Use Comparisons Across Code Standards



* Energy Use Index (EUI) is total energy consumption in BTUs divided by the gross square footage of the building.

**The IgCC 2012 bar is representative of the intended energy efficiency requirements currently being designed into the code.

7 New Buildings Institute, Summary Paper on Plug Loads, 2010

8 New Buildings Institute, 2010

that requires testing and verification. IECC 2012 will also serve as the baseline standard for the International Green Construction Code (IgCC)—a new national model green code currently under development by the International Code Council.

PRESCRIPTIVE, PERFORMANCE-BASED AND OUTCOME-BASED CODE SYSTEMS

Three methods exist for achieving compliance and enforcement of energy codes: prescriptive, performance-based and, more recently, outcome-based code systems. Prescriptive and performance-based pathways are the current models used by most jurisdictions, with prescriptive being the most common and performance-based an accepted alternative. Ideally, both of these code systems would ensure energy efficiency in buildings, however, research reveals that they tend to be overly optimistic due to the fact that neither one takes into consideration how a building is operated and how it functions over time.⁹ Further, a lack of code enforcement, or enforcement budget, can contribute to the difficulty of predicting how codes relate to actual building performance.

The following sections outline the pros and cons of the different code systems and provide examples of each.

PRESCRIPTIVE CODES

Prescriptive energy codes offer distinct and discrete actions to directly move a building project toward an end goal of higher efficiency. Prescriptive codes contain a menu of options describing minimum or maximum values for various elements in a construction project from which the designer or building owner can choose. Common prescriptive measures include minimum R-values for insulation or wall assemblies, acceptable infiltration rates, and efficiency requirements for mechanical systems such as water heaters and HVAC equipment. Inspectors and code officials are tasked with enforcing code compliance by verifying that items on the list have been included in the project.

BENEFITS

Prescriptive codes are often considered easy to follow because they clearly lay out what is acceptable and require little, if any, analysis on the part of the project designer. Inspectors and code officials also appreciate the predictability of this pathway as they can visually confirm compliance during plan review and site inspections.

Items required on prescriptive lists are usually common, off-the-shelf products that meet code compliance. In fact, increasingly stringent prescriptive codes can help instigate the manufacturing and market demand for higher-performance products that meet or exceed current code standards.

Items on a prescriptive checklist can offer various levels of energy savings. Bundling of items based on building type, age or location can allow designers to choose prescriptive measures that target optimum energy savings. Some codes or standards will bundle items on the list together to attempt to offer the largest return on investment for certain building types.

DRAWBACKS

Prescriptive codes, however, have several shortcomings. First, the process of selecting items off of a list does not encourage a whole building approach to achieving energy savings. As such, opportunities to maximize energy efficiencies are often missed. In cases where building owners are only interested in meeting minimum code compliance, short-term project budgets may drive the selection of prescriptive measures toward those that offer the least expensive initial investment rather than those that might achieve higher energy savings over time.

⁹ Frankel, 2010

Second, prescriptive codes do not require that a prescribed menu item actually function properly over time, nor do they typically require commissioning or testing of systems once installed. The code is set up to assume that all equipment is installed correctly and performs as specified by manufacturers. This is frequently not the case. As an example, economizers are one of the mechanical devices often in need of servicing. According to New Buildings Institute, economizers experience failure or improper functioning 64% of the time.

Prescriptive codes can also fall short simply based on efficiency strategies and energy end uses that are often overlooked. Few prescriptive codes provide credit for effective building orientation and daylighting, thermal mass, natural ventilation, or integration of appliances and mechanical equipment—all of which can contribute significantly to reducing a building's overall energy demand.

Lastly, as energy reduction goals become more stringent, prescriptive codes must be reviewed and updated continually. The updating process for prescriptive codes can be a time consuming and complicated venture for municipalities since the responsibility for evaluating the performance of new and existing prescriptive measures falls within the purview of the public agency. Many jurisdictions fall behind in reviewing and revising their prescriptive codes for this reason.

PRESCRIPTIVE CODES	
PROS	CONS
Familiar <ul style="list-style-type: none"> Commonly used framework Building owners and designers know what is expected 	Incomplete <ul style="list-style-type: none"> Plug and process loads not considered; these unregulated loads can be significant
Simple <ul style="list-style-type: none"> Provides a clear description of accepted energy efficiency measures 	Shallow <ul style="list-style-type: none"> Does not utilize a whole building approach Can encourage selection of items with the least initial cost over system efficiency
Easy <ul style="list-style-type: none"> Compliance is simple to verify by inspectors 	Reductive <ul style="list-style-type: none"> Only includes items that are easily verified
	Overly Optimistic <ul style="list-style-type: none"> Assumes equipment is installed and performs correctly
	Difficult to Update <ul style="list-style-type: none"> As efficiency targets become more stringent, prescriptive codes must be reviewed and updated regularly

EXAMPLES OF PRESCRIPTIVE CODES

Most codes offer a prescriptive path for achieving energy efficiency in buildings.

Commercial BEES

The Commercial BEES, utilized by AHFC, provides a prescriptive compliance pathway for meeting energy efficiency as outlined by IECC 2009, Chapter 5. Alaska-specific amendments to Chapter 5 identify prescriptive measures tailored to the state's unique climate zones, addressing thermal and moisture control issues common in cold climates. IECC tables provide maximum U-factors and minimum R-values for the building envelope including roof and wall assemblies and fenestration. Further clarifications and descriptions are provided for mandatory practices for moisture control, ventilation, air quality, and equipment sizing.

Core Performance

Other energy standards also utilize the simplicity of prescriptive measures such as the New Buildings Institute (NBI) Core Performance protocol for commercial buildings less than 100,000-square feet. NBI took an integrative approach to defining prescriptive measures for achieving 25-30% greater energy efficiency than current model codes. After conducting an extensive analysis of building types and system configurations across various climate zones, NBI developed a bundled list of practical, achievable and affordable prescriptive measures that designers and building owners can use when targeting increased energy efficiency goals. The U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) for New Construction has adopted this prescriptive path as an alternative to modeling for energy credits.¹⁰ The State of Massachusetts also references Core Performance as a prescriptive approach that local jurisdictions within the State can use to meet energy code compliance.

PERFORMANCE-BASED CODES

Performance-based codes contain broad, qualitative energy efficiency goals that require computer modeling to verify compliance. Performance-based codes are sometimes called "Modeled Performance" codes or paths within codes.¹¹ This distinction is made to clarify that building "performance" is not being guaranteed; rather it is predicted based on simulation by designers and energy modelers. Performance-based codes require that a reference building be defined in order to create a baseline energy budget for comparison. The modeling process provides a rating valuation demonstrating both the proposed and the baseline buildings' energy use. Performance-based codes require that new buildings are equal to, or lower than, the baseline reference building.

Performance-based codes are typically expressed in terms of "percent better than" energy use in comparison to a baseline. This is determined through the use of computer modeling software that forecasts building energy consumption based on inputs describing materials, systems, climate, and expected use (eg. occupancy schedules and internal gains). Building data is entered into the appropriate software and components and systems are manipulated until the desired efficiency goal is met. Code officials review energy efficiency results computed by preapproved modeling software to verify compliance.

10 New Buildings Institute, 2007

11 Hewitt, Cohan, Frankel, 2010

BENEFITS

Performance-based codes are a common alternative method to prescriptive codes for creating flexibility within the compliance path. This pathway allows for design innovation and the integration of energy efficiency technologies. It is often perceived as a more expensive option over prescriptive codes due to the cost of energy modeling which frequently requires a trained energy specialist. However, once familiar with modeling software, design teams often prefer the performance-based path because the modeling tool allows them to evaluate various combinations of design strategies, components, and technologies until they arrive at a satisfying solution that provides the greatest energy savings for the least cost.¹² Once a project has been modeled, it is often possible for modeling results to be used concurrently for compliance with tax credits or beyond-code sustainability standards like LEED.

Communicating new targets for the “percent better than” standard is not as arduous or time consuming as updating lists of acceptable materials or efficiency measures. However, as performance-based codes are updated, confusion can arise as to the baseline from which the percent savings is achieved. For instance, early green building projects were recognized for being 40% more efficient than ASHRAE 90.1-1999, though years later these buildings would fail to comply with the most recent updates to ASHRAE standards.¹³

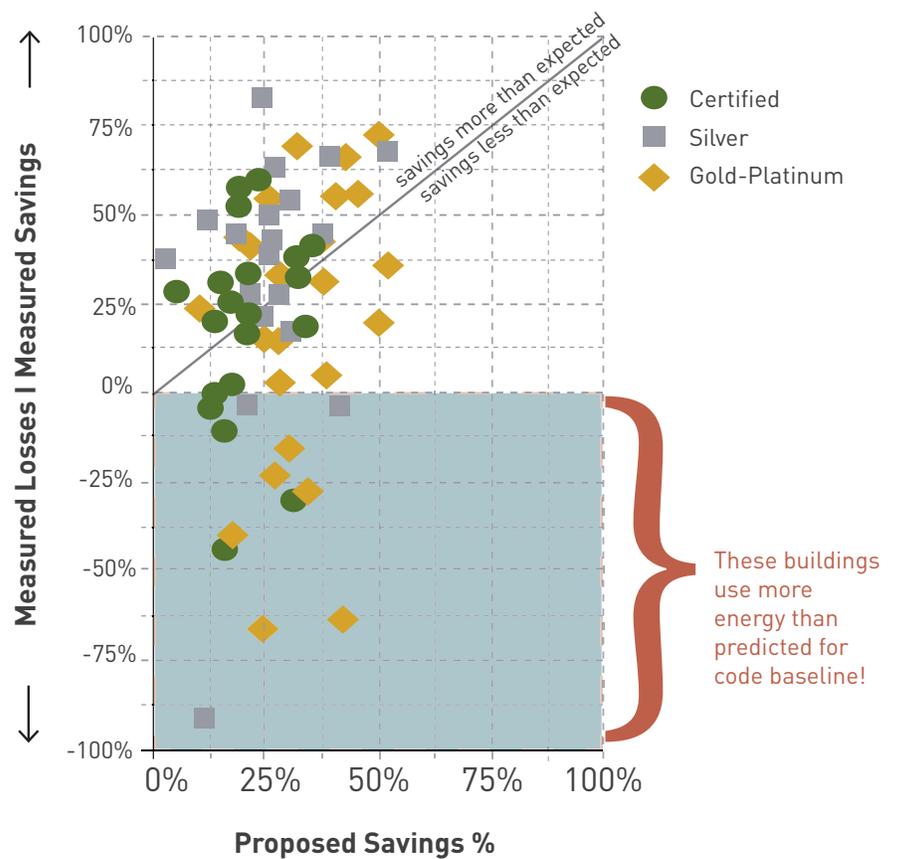
DRAWBACKS

Performance-based codes usually incorporate prescriptive requirements as well, which can be time consuming to update. These mandatory measures are required so that basics such as insulation aren’t completely left out of projects even though the modeling demonstrates that they are not necessary to achieve the targeted energy use.

Performance-based codes present a number of challenges related to how well they are able to predict actual building energy use. One consistent drawback is that modeling results are only as good as the data input. Even accurate data entry does not account for the likelihood that equipment will not always perform as specified by manufacturers, either because the system was faulty or because it was not properly installed.

Another challenge is that modeling software requires that the reference

Measured vs Proposed Savings in LEED Buildings



Source: New Buildings Institute, Energy Performance of LEED® for New Construction Buildings, Turner, Frankel, 2008

12 Harris, et. al, 2010

13 Architectural Energy Corporation. 2009

building used in the comparison reflect the proposed building's design and equipment options. This can make it more challenging for a project that includes passive solar orientation or natural ventilation to demonstrate savings beyond code since these elements must also be modeled in the baseline building.

Like prescriptive codes, performance-based codes typically do not address plug loads. As a result, they also do not accurately account for how occupant behaviors and building management will impact energy use over time. This was reinforced by a 2008 study of LEED-certified buildings that compared actual versus modeled energy performance. The graph on the previous page, *Measured vs Proposed Savings in LEED Buildings*, shows that many projects, even those achieving the highest levels of LEED certification, are performing below their modeled targets and in some cases even below the levels projected by code baseline compliance. This is often the result of inconsistent building operation, unpredictable schedules, variable equipment performance, and other issues, like plug loads, not anticipated in the energy modeling.¹⁴

PERFORMANCE-BASED CODES	
PROS	CONS
Flexible <ul style="list-style-type: none"> • Takes a whole building approach • Supports evaluation of measures that yield the lowest cost and greatest energy savings 	Incomplete <ul style="list-style-type: none"> • Unregulated loads are not considered • Requires significant staff expertise in the building department to review modeling submittals in a meaningful way • No enforcement mechanism to ensure building operates at the energy use level predicted by modeling software
Innovative <ul style="list-style-type: none"> • New technologies are integrated earlier • Allows more flexible approach to design strategies 	Optimistic <ul style="list-style-type: none"> • Assumes equipment is installed and performing correctly
Transparency <ul style="list-style-type: none"> • Clearly stated goals and objectives 	Limited <ul style="list-style-type: none"> • Modeled results are only as good as the data entered
	Expensive <ul style="list-style-type: none"> • Often requires specialty software and a trained energy modeler

EXAMPLES OF PERFORMANCE-BASED CODES

There are many examples of performance-based codes.

AkWarm

BEES offers a performance-based compliance path as an alternative to the prescriptive path for meeting energy efficiency goals. AkWarm has been the software used by AHFC to analyze and rate energy efficiency of residential buildings. The recent adoption of IECC-2009 with Alaska specific amendments also approved AkWarm for simple commercial buildings. To make this software useful for energy audits the software has been updated to address commercial scale envelope construction techniques and materials, electrical loads, and commercial HVAC systems.¹⁵

ASHRAE 90.1 – Appendix G

ASHRAE 90.1 Appendix G is a whole building performance rating methodology designed to recognize performance above and beyond standard 90.1 requirements. This modeling method is designed to demonstrate that buildings using alternative strategies and systems can achieve equivalent energy costs to a building selecting typical prescriptive requirements. Appendix G now includes total energy consumption for all end uses and offers credit for mechanisms like better building orientation, automatic shading devices, occupancy sensors and timers for lighting, and better HVAC systems selection also receives appropriate credit. The results from the Appendix G modeling process can be used to document LEED and energy tax credits.

California Title 24

Another example is California's Energy Code, Title 24, which takes energy modeling a bit further. Known as one of the most advanced and complex performance-based codes, California developed a robust modeling and analysis tool (Alternative Calculation Method) for architects, builders, and code officials. The approved modeling programs simulate a building's thermal behavior by overlaying system impacts such as lighting, thermal mass, infiltration, solar gain, space conditioning, and occupant behavior. The Title 24 performance-based compliance path is especially unique because it considers the importance of when energy is demanded. This time dependent energy use is often referred to as Time Dependent Valuation (TDV). In addition, California's new statewide Green Building Standards Code (CALGreen)—which went into effect in January 2011—requires that a building demonstrate a 15% or greater reduction in energy use when compared to the State's mandatory energy efficiency standards.

Oregon State Whole Building Approach

The 2010 Oregon State Energy Code also offers a modeled compliance path with Section 506 of the Oregon Energy Efficiency Specialty Code (OEESC). The state's whole building approach offers more flexibility in how projects comply with the OEESC. The modeled building must ascertain that anticipated annual energy consumption will be equal to or less than energy consumption of a building following the prescriptive path approach. Energy consumption is measured in annual energy cost dollars in order to provide easy comparison across fuel types. A certified building analyst coordinates the permit process and design changes to comply with ASHRAE 90.1. If any building or system elements do not comply with the prescriptive requirements of the code the applicant must indicate and demonstrate how other system efficiencies will compensate.

OUTCOME-BASED CODES

An emerging alternative to prescriptive and performance-based energy codes is outcome-based codes. This framework considers the whole building's energy use over a consecutive 12-month period including end uses that are currently unregulated. Outcome-based codes will require that buildings not exceed a maximum annual operating energy use. This pathway guarantees that actual energy efficiency is achieved by requiring a one-time reporting for compliance verification, though it may take a few years to obtain a consecutive 12-months of qualifying energy data.

While this pathway has the potential to help buildings achieve energy savings by assuring performance, it is still under development and has yet to be adopted by any jurisdiction. However, outcome-based paths appear well suited to federal, state, and local agencies that own their own buildings since they have long-term commitments to ensure that their buildings function properly over time.¹⁶

An inherent challenge with outcome-based codes is that within current code frameworks, a regulatory agency's power of authority typically ends at the time a certificate of occupancy is issued. To address this, DOE has suggested that a three-stepped fee structure could be useful as a compliance mechanism to inspire energy use reductions during the design and construction phases and to subsequently motivate the appropriate parties to maintain their energy efficient system:

1. a performance bond to keep the building / owner in compliance,
2. a utility cost-based fee to keep the tenant in compliance, and
3. a property tax-based fee to keep the owner / operator in compliance.¹⁷

Building energy disclosure ordinances, already gaining traction in several cities¹⁸, will likely become an essential tool in the adoption of outcome-based code systems.

BENEFITS

Outcome-based codes offer a highly flexible regulatory pathway that will actually address energy use. Utilizing both prescriptive and energy modeling measures, designers can use the most appropriate means to predict and achieve maximum energy efficiency efforts. The use of both of these resources supports design innovation and evokes thoughtful planning so that energy savings are realized.

One of the most important aspects of this compliance path is its inclusion of all energy loads, including currently unregulated plug loads, in the equation for overall energy reduction. Management and maintenance of all systems and loads creates incentives for building operators and managers to understand how, when, and where energy is being used. Metering of all end uses by system¹⁹, along with beneficial sub-metering, can provide guidance for initiating commissioning and calibration regimens, and identify energy offenders in a timely manner. If disclosure and reporting requirements are mandated, realistic energy use targets can be identified. Building labeling programs can also be instituted to reward responsible energy users and help create market-level awareness with potential tenants.

Whole-building metering and mandated disclosure requirements are likely to be helpful tools for maintaining energy efficient buildings over time. Reporting creates a positive feedback loop that encourages system upkeep. It compiles useful data that can be used by building managers in analyzing whole building performance while also providing

¹⁶ State of Alaska, 2008

¹⁷ *ibid.*

¹⁸ Disclosure requirements have been adopted by Washington DC, Seattle, New York City and Austin. Additionally, Washington and California have statewide disclosure requirements.

¹⁹ Hewitt, Cohan, Frankel, 2010

opportunities to educate building occupants about their energy use. In addition, tracking energy use provides essential data that can inform current and future energy codes.

DRAWBACKS

Outcome-based codes rely on regulatory authorities to set the allowable energy use quotient. As building owners and performance contractors adjust to a new set of guidelines for achieving energy efficiency compliance, they will likely offer conservative estimates for energy savings so as not to commit themselves to unattainable levels, thus choosing less risky, more reliable, energy saving strategies. Extra guidance for designers and building owners will be needed to ensure energy efficiency measures are met.

Commissioning and ongoing testing are key components to making sure a building is functioning as intended. Practical performance tests are readily available for cooling, dehumidification, hot water, distribution and envelope and duct leakage systems in larger buildings. However these tests, calibrations, and commissioning efforts are often perceived to be cost prohibitive from the standpoint of conventional code compliance paths. Further, insufficient budgets for managing ongoing systems operations may reduce potential energy savings over time.²⁰

OUTCOME-BASED CODES	
PROS	CONS
Predictable <ul style="list-style-type: none"> • Guarantees energy savings • Metering and sub-metering links occupant behavior to energy use • Performance must be verified 	Liability <ul style="list-style-type: none"> • Building owners, designers, and contractors may be unsure of the extent of energy efficiency savings for which they will be held accountable
Flexible <ul style="list-style-type: none"> • Encourages design innovation • Allows for the use of new technologies 	Investment <ul style="list-style-type: none"> • Maintenance, commissioning, and systems calibration can be perceived to be expensive
Inclusive <ul style="list-style-type: none"> • Accounts for whole building energy uses including currently unregulated plug loads • Inherently considers all passive design strategies 	New <ul style="list-style-type: none"> • Requires a fundamental shift in the way that energy codes function • Owners/developers will require extra guidance from regulatory agencies to ensure energy efficiency measures are met
Qualitative <ul style="list-style-type: none"> • Promotes higher performance design and construction • Offers feedback that can inform building energy improvements and future code revisions 	
Ongoing <ul style="list-style-type: none"> • Calibrates energy codes to actual building performance • Informs new code development 	

EXAMPLES OF OUTCOME-BASED CODES

As of April 2011, no jurisdiction has adopted an outcome-based code as an alternative compliance pathway.

Outcome-Based Pilot Programs

The City of Seattle, WA, and Vancouver BC, Canada, are both studying how best to incorporate outcome-based compliance paths to achieve greater energy efficiency in buildings. The City of Seattle is running a pilot project that began in December 2009 and is intended for enactment in January 2013 in the Seattle Energy Code as an alternative compliance pathway. The City of Seattle's Priority Green Permitting Program partnered with New Buildings Institute and the National Trust for Historic Preservation's Green Preservation Lab to test how the flexibility of the outcome-based performance path can improve the energy efficiency of existing buildings by shifting the code's requirement to overall energy use reduction.

Seattle's outcome-based compliance will be based on meeting actual post-occupancy energy use targets instead of pre-occupancy prescriptive or modeled measures. The initial permit step will include the negotiation of pre-contracted energy rates with utilities, the identification of energy use targets, and the submittal of a compliance bond. Once the building owner demonstrates the ability to operate at or below the pre-negotiated energy use targets the compliance bond will be released. If energy efficiency targets are not met, penalties based on percentage variations from the established target will be applied. The time frame for demonstrating compliance will be flexible as it may take a while for building owners to figure out how to optimally run systems and to streamline tenant energy use.

THE BENEFITS OF AN ENERGY EFFICIENCY PORTFOLIO STANDARD

The Energy Efficiency Portfolio Standard is a useful tool for entities that own and operate numerous buildings, such as municipalities and universities.

Like outcome-based codes, portfolio standards intend to achieve actual energy savings. They set specific performance targets for the entire aggregate of buildings and often set maximum energy use limits for individual buildings as well.

This standard helps to focus energy efficiency efforts on achieving better overall building operation performance for each building while encouraging the identification of "worst offenders" for energy retrofits and upgrades.

Integral to the City of Seattle's outcome-based pilot program is a disclosure ordinance that requires commercial properties to reveal building energy consumption information. Ordinances will be instrumental in helping set appropriate targets and benchmarks. Ideally, public disclosure will allow the public to know how well buildings are performing and provide market reinforcement for energy efficient buildings while motivating conservation of occupant energy use. Tools such as metering and sub-metering will support these efforts and highlight which systems are most in need of improvement.

In January of 2011, Vancouver, BC outlined a number of green building objectives for meeting their 2020 carbon neutral goal for all new buildings. Included on their long-term list was an outcome-based energy code compliance path. The city will create financial incentives and support for contractors and building owners who want to adopt this path early.

The International Green Construction Code

The new International Green Construction Code (IgCC) is being developed by the International Code Council (ICC)²¹ and is intended for publication in 2012. The IgCC is being designed to be at least 30% more efficient than IECC 2006. The code is written

21 In association with cooperating sponsors American Society for Testing and Materials (ASTM), International and the American Institute of Architects (AIA)

in mandatory language to be used by any level of regulatory or governmental agency but is currently used on a voluntary basis. It is hoped that the exposure that comes from the voluntary adoption of these aggressive codes will pave the way for broad adoption in subsequent code revisions.

IgCC Chapter 6 regulates the design, construction, commissioning and operation of buildings for the effective use of energy. The outcome-based compliance path sets maximum CO₂ emission limits and annual net energy use. It also sets peak energy demand limits and requires that the building's Energy Use Intensity (EUI) place the building in the top 10 percent of existing buildings in terms of energy performance. Compliance with this pathway for existing buildings requires verification of energy performance over a continuous 12-month period that will be compared to the 12-months of energy used before the alteration. Metering, monitoring, reporting, and a publicly accessible display will be required in an on-going basis to verify continued compliance.

Net Zero

Net zero energy is consistently referenced by outcome-based standards as the determinant for energy conservation success. Green building standards such as the Living Building Challenge seek substantial reductions of energy use and the negative environmental impacts from the use of fossil fuels.

The Living Building Challenge requires buildings to balance their annual energy use with the amount of energy they can generate onsite. Extreme conservation and system efficiency is essential in the design of these buildings. Buildings must demonstrate that they can achieve net zero energy over a consecutive 12-month period once occupied.

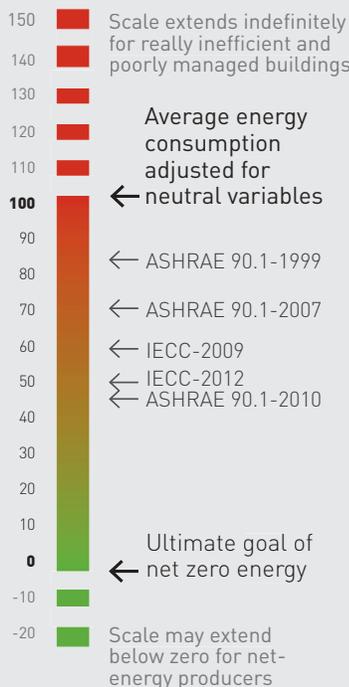
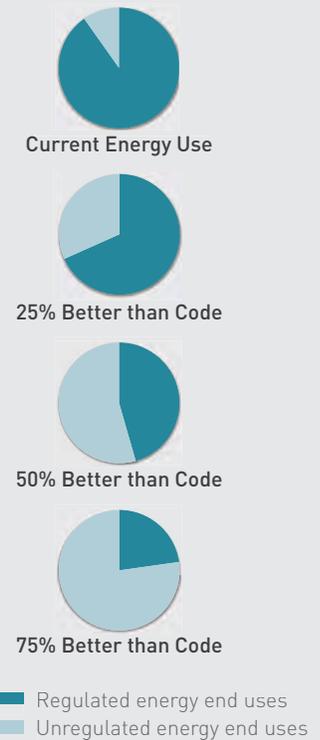
Net zero carbon is the goal of The 2030 Challenge. In June 2006, Edward Mazria authored The 2030 Challenge to call the building and design industry to action to reduce greenhouse gasses produced by commercial buildings. This challenge outlines a series of targets that will result in buildings that release no net carbon into the atmosphere by 2030.

Metrics for Measuring Energy Use

The Problem with “Percent better than” Metrics

Many energy efficiency standards are measured in a relatively simple “percent better than” code metric. This approach selects a code baseline and then sets targets for further reducing energy use beyond that baseline. Confusion can arise over code update cycles and between different standards as it becomes unclear which baseline must be improved upon and which energy end uses are taken into account.

Additionally, this type of metric begins to yield diminishing returns since most codes don't account for the plug loads. As the regulated end uses are reduced, the unregulated plug loads become a larger portion of the building's total energy use.



zEPI Scale

The Zero Energy Performance Index (zEPI) articulates a more comprehensive way of labeling energy use in real buildings, and provides logical labels for reducing building energy use.

This metric utilizes a 100 point scale and names net zero energy as the ultimate goal. 100 equals the average energy use for that building type in a specific climate as established by national consumption data. A building's score represents how far it deviates from net zero.

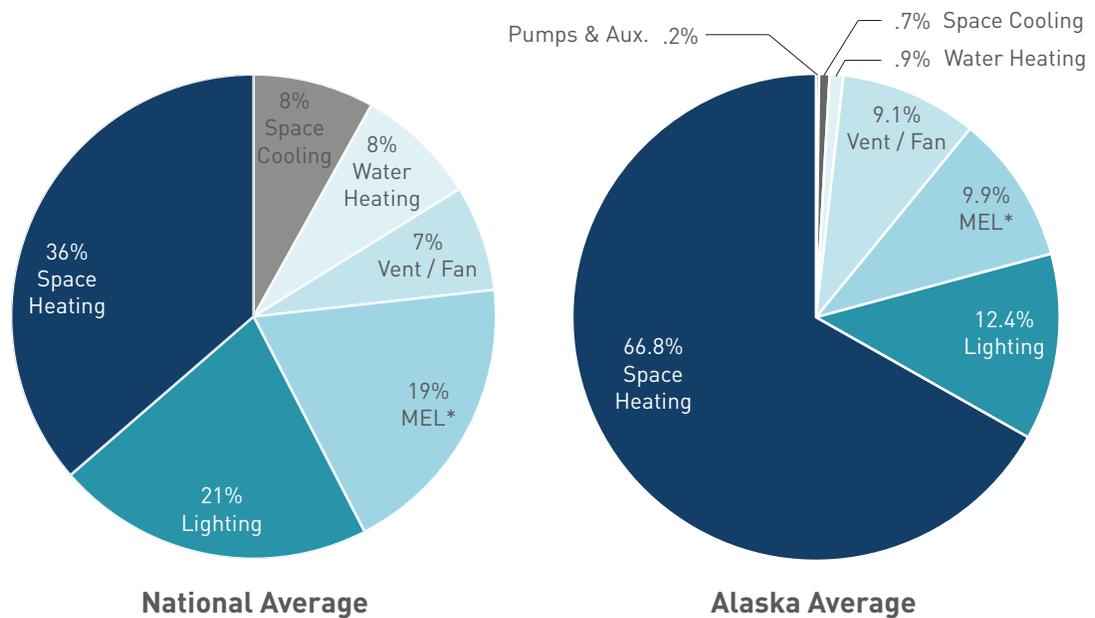
Source: based on the recommended scale by Architectural Energy Corporation, 2009.

III. CONSIDERATIONS FOR EXISTING BUILDINGS

Efforts to improve a building’s energy efficiency will extend the life of the building, increase occupant comfort within the building, and reduce energy costs. While each existing building will have its own challenges and opportunities, some buildings will benefit more than others from energy efficiency retrofits.

CHALLENGES AND OPPORTUNITIES FOR ENERGY UPGRADES IN EXISTING PUBLIC BUILDINGS

Typical Energy Use for a Commercial Office Building



*MEL - Miscellaneous Energy Loads (Plug Loads)

Existing buildings offer unique challenges because they are already in place and because they are already occupied. Retrofits to existing buildings can also be more expensive than new construction due to difficulty accessing some parts of the building. It should be noted that in jurisdictions with energy and building codes, retrofit projects sometimes trigger other building code requirements, such as seismic and ADA upgrades. In these cases scope creep can prompt some building owners to abandon retrofit measures because of insufficient funds.²²

Nationally, lighting and space heating consume the largest portion of commercial building energy use. In Alaska, however, space heating drives building energy use due to cold climate conditions.²³ Upgrading inefficient equipment (especially ventilation systems in a climate where the outside air is often bitter cold), calibrating controls, and improving occupant energy conservation practices are some of the most practical energy improvements existing buildings’ owners can make in Alaska. Smaller buildings can also greatly benefit from building envelope maintenance.

22 Although Alaska currently has no state-wide building code this may be a consideration for the future as state-wide codes become established.

23 Alaska Energy Use data based on information provided by New Buildings Institute and Ecotope from a 2011 prototype modeling analysis.

Building owner reluctance provides one of the biggest barriers to initiating energy efficiency retrofits. First, the building owner knows that energy efficiency measures are much cheaper to incorporate as the building is being constructed. Second, scheduling building retrofits can be tricky as projects must accommodate or find alternative space for existing tenants as projects often overrun their schedule. Third, access to capital may be difficult for a building owner as many of the deeper retrofit strategies have high upfront costs. Many building owners are not aware of how much energy the building consumes and demonstrated savings for energy retrofits can be difficult to find. While the building owner finances most energy retrofits, it is the building tenants that reap the savings. This last barrier is often identified as a “split-incentive.” Metering and sub-metering can help shift the responsibility to the appropriate party.

Code compliance pathways can create a variety of opportunities and challenges for motivating energy efficiency upgrades in buildings.

PRESCRIPTIVE CODES AND EXISTING BUILDINGS

- Prescriptive codes allow existing building owners to select from a menu of energy retrofits, but it can be difficult to choose the strategies that provide the best long-term investment for their building.
- Existing buildings often have physical constraints that can make prescriptive strategies difficult, such as shallower wall cavities that only allow minimum levels of insulation.
- Prescriptive codes don’t offer guidance on how to schedule retrofit activities. For example, building owners should first insulate and seal their building in order to select the most appropriately sized heating system. Scheduling retrofits at the same time as other building renovations can reduce the overall costs involved in a project as well.

PERFORMANCE-BASED CODES AND EXISTING BUILDINGS

- The modeling tools of performance-based codes offer increased flexibility for existing building owners who want to identify the most cost effective energy efficiency retrofits. Modeling is the best tool we have for projecting energy use and analyzing various energy efficiency strategies.
- Performance-based projections require precise building data to model predicted energy use when testing various energy reduction strategies and systems. Even if a building has an as-built plan set, it is often outdated or inaccurate, and existing conditions like insulation levels can be challenging to assess without opening up the walls. It should be recognized that modeling tools are limited by the information and current understanding of building construction, operation, and tenant uses.
- Owners of existing buildings are in a unique position to collect actual energy use data and retroactively review it. Audits and pre-retrofit evaluations can fill in the gaps but they can be perceived as expensive and most building owners don’t understand their value.
- Unless the existing building has been thoroughly audited and system performance accurately recorded, the projections from the modeling effort will not be reflected in the actual energy findings. This can indicate potentially faulty pathways for pursuing energy reductions and miss opportunities for deeper energy retrofits.

OUTCOME-BASED CODES AND EXISTING BUILDINGS

- Outcome-based energy codes are whole-building approaches to energy conservation efforts and use the best aspects of the prescriptive and performance-based tools for selecting the most appropriate energy efficiency improvement strategies for existing buildings.
- The National Trust for Historic Preservation, the City of Seattle, Pacific Northwest National Laboratory, Northwest Energy Efficiency Alliance, and New Buildings Institute are advocating for this energy reduction compliance path for existing buildings.
- Benchmarking and disclosure allow building owners to evaluate their building's performance and identify system problems in a timely manner; this compliance path makes the building itself the energy-use reference point. Metering and sub-metering are essential tools for this path; however, sub-metering can be challenging to install in existing buildings.
- Maintenance, commissioning and re-commissioning, as well as system calibration are important to all buildings once they exist. These maintenance and operation costs can be perceived as expensive but they offer sizeable energy and cost savings over the long-term.

IV. RECOMMENDATIONS FOR ESTABLISHING “CODE” STANDARD FOR AHFC RETROFIT FUNDING

It is recommended that AHFC take a whole building approach supporting energy savings for existing public buildings. Energy and financial savings can be achieved by setting up the AHFC loan program to optimize the most appropriate tools available in each of the compliance paths; prescriptive, performance-based, and outcome-based. Revolving Loan Fund success should be based on actual reductions of overall energy applied across the entire stock of public buildings.

Draw on the flexibility of the outcome-based approach

A whole-building approach allows designers to select the most appropriate and beneficial strategies to achieve actual energy savings. This flexible framework allows designers to accommodate a building’s unique characteristics to achieve overall energy savings.

Require minimum prescriptive measures for energy efficiency

All public building owners should be required to implement a set of minimum requirements to ensure their building is operating at a baseline efficiency level. The prescriptive list should include strategies such as insulation, sealing, commissioning and re-commissioning, as well as metering and sub-metering to ensure systems are functioning correctly and to help track when and where energy is being used in the building. This requirement will also instill confidence with the parties backing the performance bond associated with the retrofit loan.

Initiate an energy use disclosure requirement

Documenting building energy use will be useful in informing retrofit activities. Ongoing disclosure across Alaska’s public building stock can provide AHFC with meaningful data that can be used to set appropriate energy benchmarks and reveal energy use patterns across building type, use, and climate zones. Recurring annual disclosure educates building owners on their building’s energy use patterns and reinforces good building operations and maintenance habits. Lessons learned can also inform future modifications to the loan program.

Incentivize ongoing energy use reduction through variable interest rates

Ongoing annual reporting can provide the data necessary to institute a tiered interest rate on retrofit loans. This incentive can be used to motivate building owners to maintain buildings at their optimal energy efficiency levels. Lower interest rates could be tied to energy reduction success. Monthly loan payments could remain the same but the lower interest rates would enable building owners to pay down the principal more quickly, putting energy savings dollars in their pockets sooner.

Use a portfolio standard to maximize savings across all public buildings

Effectively reduce energy use across all public buildings by setting an energy reduction target that increases over time and sets minimum performance levels for each building. Making the entire portfolio of buildings responsible for achieving the energy reduction goals prioritizes building operations improvements, allows each building to streamline energy efficiency of their equipment and systems, and improves tenant conservation efforts. Owners of public buildings reporting the largest energy use patterns should be urged to take on extensive energy efficiency retrofits to help reduce the overall energy use of the portfolio group.

V. ADDITIONAL RESOURCES/BIBLIOGRAPHY

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ADDITIONAL RESOURCES

ORGANIZATIONS

Alaska Conservation Alliance - <http://www.akvoice.org>

Alaska Energy Authority - <http://www.akenergyauthority.org>

Alaska Energy Efficiency- <http://www.akenergyefficiency.org>

City of Seattle, City Green Building - <http://www.cityofseattle.net/dpd/GreenBuilding/>

Cold Climate Housing Research Center - <http://www.cchrc.org>

New Buildings Institute - <http://www.newbuildings.org>

Northwest Energy Efficiency Alliance – <http://www.neea.org>

PikeResearch - <http://www.pikeresearch.com>

Preservation Green Lab - <http://www.preservationnation.org/issues/sustainability/green-lab>

Rocky Mountain Institute (RMI)– RetroFit Depot - <http://www.retrofitdepot.org>

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VI. APPENDIX A- INTERVIEWEES

INTERVIEWEES

Stuart Brooks, Weatherization Program Manager and a Building Inspector, Cook Inlet Housing Authority

Ric Cochrane, Policy and Research Project Manager, Preservation Green Lab

John Davies, Senior Researcher, Cold Climate Housing Research Center

Mark Frankel, Technical Director, New Buildings Institute

Scott Waterman, State Energy Programs Manager, Alaska Housing Finance Corporation

INSIGHTS

new trends, new techniques
and current industry issues

Model Energy Code Development

By Kenneth E. Bland, P.E.
and Dennis L. Pitts

Kenneth E. Bland, P.E. (kbland@awc.org), is Vice President, Codes & Regulations and Dennis L. Pitts (dpitts@awc.org), is Central Regional Director for the American Wood Council.



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Residential State Energy Code Status AS OF APRIL 1, 2010

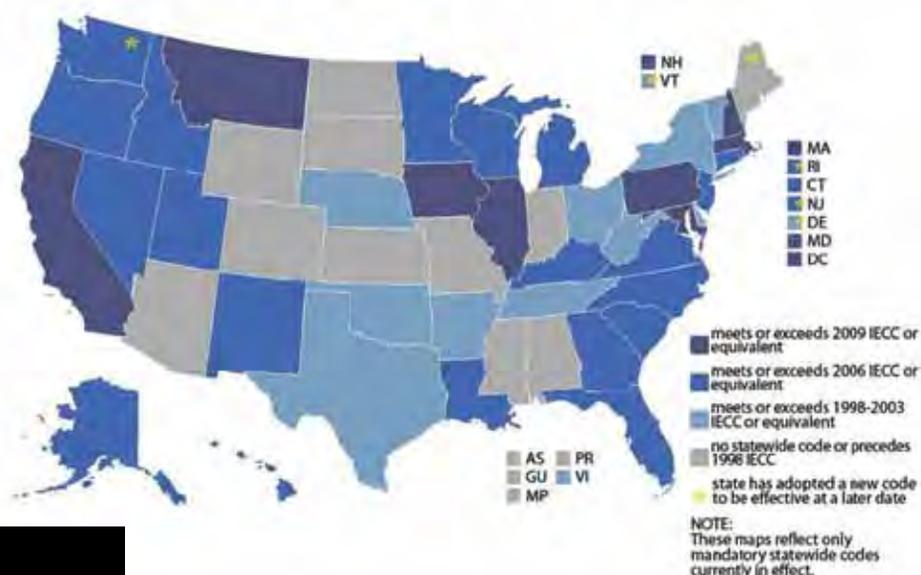


Figure 1: DOE summary for residential state energy code adoptions.

Not since the oil crisis of the 1970s has there been so much attention paid to finding ways to reduce US dependence on foreign oil. In particular, reducing energy to make buildings comfortable and functional has been the target of the US Department of Energy (DOE). It was Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, signed by President Bush on January 24, 2007, that sparked DOE's latest push into energy code development. This article discusses the development of model energy codes and the legislative mandate for DOE to assure their implementation.

Department of Energy Authority

DOE's role in facilitating enactment of energy codes is established by the Energy Conservation and Production Act of 1976 as amended by the Energy Policy Act of 1992 (EPACT). EPACT, among other things, requires DOE to support adoption and enforcement of energy codes in the states.

Historically, DOE did not have many "hooks" to insist that states maintain a current model energy code. However, with passage of the American Recovery and Reinvestment Act of 2009 (ARRA), DOE has funding available for implementation of state codes, but only when states pledge to update to current standards.

EPACT also created the Building Codes Assistance Project (BCAP) as a non-profit organization that advocates on behalf of DOE for adoption, implementation, and advancement of energy codes. BCAP also works with DOE, state energy offices, regional energy efficiency alliances, and various shareholders to educate states, municipalities, and the building community about the benefits of code adoption and enforcement.

Two National Model Energy Codes

There are two national consensus standards that are regularly enacted for implementation of energy efficiency criteria in both new construction and renovation of existing buildings.

- *International Energy Conservation Code (IECC)*, which is developed by the International Code Council (ICC), addresses all buildings, including low-rise residential.
- *ASHRAE 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings*, is developed by the American Society of Heating, Refrigeration, and Air-Conditioning Engineers. It addresses energy-efficient design in all but residences three stories or less in height. Regardless of its official scope, 90.1 is considered to be a commercial building-specific document.

Both are developed and amended in open public forums through somewhat different consensus processes.

DOE Influence in the Process

DOE has used Executive Order 13423, which was intended for government-owned buildings, as the basis for seeking improvement in the energy codes. DOE's goals for low-rise residential structures are based on the 2006 edition of the IECC. DOE's intent for the 2009 code was buildings that would be 17% more energy efficient than those designed under the 2006, and for buildings under the 2012 IECC to be 30% more efficient than the 2006. DOE's plans for the 2015 edition call for a result that is 50% more efficient.

Similar increases in efficiency for ASHRAE 90.1 are envisioned and are contained in a 2007 Memorandum of Understanding (MOU) between DOE and ASHRAE. DOE's goal is to increase the efficiency of 90.1-2010 by 30% over that of 90.1-2004. An increase of 50% for the 2013 edition is planned.

As explained in a 2010 document on their website, *Multi-Year Program Plan – Building Regulatory Programs*, one of DOE's ultimate goals for codes is for "... net-zero energy buildings (NZEB) to be cost-effective alternatives to traditional construction by 2025 which means that NZEB should be required in codes by about the same time."

Two other pieces of rulemaking have increased DOE's influence in the energy codes arena: the States Energy Program (SEP) and the American Recovery and Reinvestment Act of 2009 (ARRA). SEP provides federal assistance to states to share the costs of improved energy efficiency and establish renewable energy programs. SEP funds are applicable across a very broad range of construction, making DOE influential in energy-related decisions to be made by state and local policy makers. SEP's funding in energy efficiency and renewable energy projects within a state generates jobs in local energy, manufacturing, retail, and home services industries. This increases the tax base in the state and indirectly supports other jobs. SEP also funds preparations for natural disasters and recovery from those disasters. The flexibility of SEP allows states to also use the funding to develop new energy infrastructures that are resistant to damage from natural disasters.

ARRA provides financial benefits to improve energy efficiency as part of the Obama administrations' \$787 billion program intended to stimulate the U.S. economy. This act provides SEP with \$3.1 billion that can be used by states in the form of grants, and can be provided as direct funding not requiring matching funds from the states. Additionally, a DOE energy-related grant program was provided with \$3.2 billion. States and local governments can obtain block grants to improve energy efficiency and install renewal energy systems. Nonprofits and governmental agencies may also use these grants.

BCAP, which receives funding from DOE, provides states with energy code advocacy assistance on behalf of DOE and coordinates DOE technical assistance to the states.

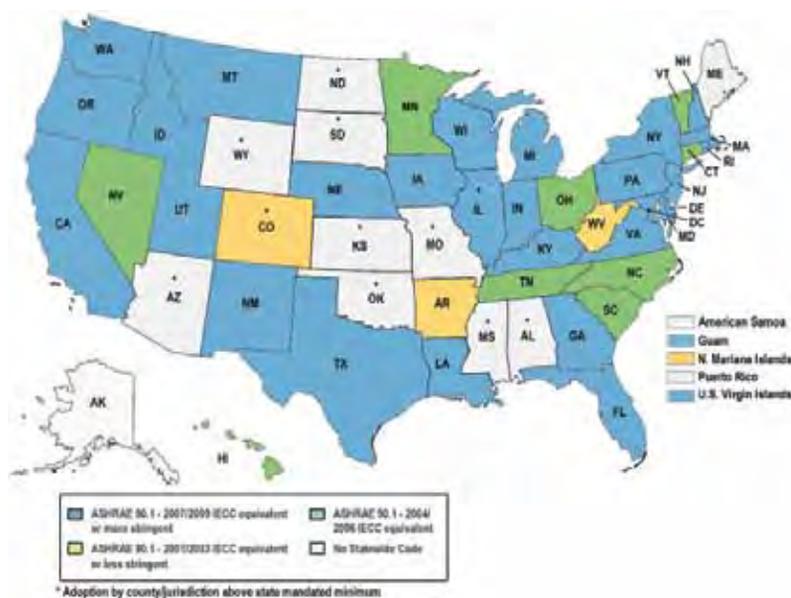


Figure 2: DOE summary for commercial energy code adoptions.

Given the amount of money available through DOE for funding of local and state energy-related projects, it's not surprising that within the last several years DOE has become a major player in the field of energy codes and standards.

Statewide Energy Code Adoption

It is fairly common knowledge, even within DOE, that codes are not being adopted or enforced in a consistent manner. Across the United States many jurisdictions, both state and local, are just now adopting the 2009 IECC. A few states, with laws that make updating to the current edition of the IECC mandatory, will soon start the adoption process for the 2012 IECC. Otherwise, it is expected that states with no mandatory process will enforce the 2009 or an earlier edition of the IECC for the foreseeable future.

DOE's website summarizes the status of code adoption within the United States. For residential code adoption, *Figure 1* provides the DOE overview as of April 2011.

The DOE summary for commercial energy codes, as of April of 2011, shows somewhat similar adoption trends for ASHAE 90.1 (*Figure 2*).

Conclusion

Given the current awareness of energy conservation due to world geopolitical situations and the relatively new field of sustainable building design, it's not surprising that there is a greater interest in energy codes now than in the past. Important to designers is the change in players involved in code writing and adoption. Currently, there is a movement to ratchet up code requirements to such an extent that practicality and cost benefits appear to be ignored. Additionally, DOE's influence in the code arena steadily increases due to federal funding available to states and local jurisdictions. DOE's goals for future editions of the energy codes and standards promise even greater difficulty in complying with the codes using traditional materials and methods of design and construction. ■