

# Agenda

## Bond Reimbursement and Grant Review Committee Meeting Agenda

July 21, 2008

9:00 am to 4:15 pm

Fairbanks North Star Borough School District

School Board Meeting Room

520 Fifth Avenue

Fairbanks, Alaska

Chair:

Eddy Jeans

Wednesday, July 21<sup>st</sup>

### Agenda Topics

8:45 – 9:00 AM

#### Committee Preparation

- Arrival, Packet Review

9:00 – 9:15 AM

#### Review and Approval of Agenda and Minutes

- New Business, Additions to the Agenda

9:15 – 10:30 AM

#### Staff Briefing

- Preventive Maintenance Update (PM State of the State)
- Debt Reimbursement Funding Status (HB 13)
- Annual School Construction Report
- Recent project update (slide show)

10:30 – 10:45 AM

#### BREAK

10:45 – 12:30 PM

#### Staff Briefing (Continued)

- A/E Services Manual Update
- Regulation Update Project

12:30 – 1:30 PM

#### LUNCH

1:30 – 3:00 PM

#### Space Guidelines Discussion (continuing)

- Career Technical Educational space

#### Publications Update

- Integrated Facility Management Guide

3:00 – 3:15 PM

#### BREAK

3:15 – 3:30 PM

#### Staff Goals and Objectives

4:15 PM

#### Adjourn

**By:** Sam Kito III, P.E.

**Date:** July 21, 2008

**Phone:** 465-6906

**File:** 2008-07-21 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**

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### **Staff Briefing**

#### ***Preventive Maintenance Update (PM State of the State)***

The department continues to work through the second round of reviews of school district Preventive Maintenance programs since the implementation of the state's Preventive Maintenance requirement. Don Carney, staff in the School Facilities Section is the department's Building Management Specialist, and is responsible for verifying district compliance with the Preventive Maintenance statute. Mr. Carney has taken a position with the Mat-Su Borough School district, and the department wishes Mr. Carney the best in his new venture.

As a result of Mr. Carney's resignation, Mr. Kito assisted Mr. Carney in his review of the Anchorage School district, and will be working on other PM reviews until the department is able to fill Mr. Carney's position.

The department continues to work with SERRC and some of the districts that are out of compliance. Our goal is to get them into compliance before August 1 so they can participate in the CIP process

Mr. Carney has visited 4 school districts since April 2008. All of the districts reviewed since April have been certified as compliant.

Almost all districts reviewed by Mr. Carney have experienced significant reductions to maintenance and custodial staff, reductions in funding, and decreased performance expectations.

Reduction in maintenance and custodial staffing continues to be a major concern. The list of deferred maintenance projects continues to grow. Recent site visits revealed many very critical building needs that are being deferred due to a lack of staff and financial resources to address the problems. Many complain about the small amount of state funding compared to the amount requested through the CIP process.

The department has seen significant turnover in school district maintenance management staff throughout the state. This takes a huge toll on the continued implementation and utilization of district maintenance programs and stability of district maintenance funding.

The site visit schedule for the remainder of the year includes 12 district visits, Yukon-Koyukuk, Iditarod Area, Bering Strait, St. Marys, Lower Yukon, Lower Kuskokwim, Yupit and Kashunamiut. This will complete the second round of site visits.

As stated previously, the third round of site visits will begin in January of 2009. Beginning in 2009, the department intends to implement a rotating schedule for periodic site visits that will spread the site visit travel out over a five year period. The revised travel schedule should provide the department with more opportunity to work with districts that are found out of compliance with the program.

### ***Debt Reimbursement Funding Status (HB 13/HB373)***

As of Tuesday July 15<sup>th</sup>, 2008, the total bond amount requested under House Bill 13/373 was \$257,110,368. The total amount approved by the department was \$241,234,917. The total voter approved amount was \$219,502,248. The amount for projects that are both voter and EED approved is \$208,353,101. The amount of EED authorized funding awaiting voter approval is \$32,881,816. There is \$8,706,000 that is EED approved, but not approved by voters.

### ***Annual School Construction Report***

The attached reports provide information on project funding history (CIP funding history FY99-09), and recently funded projects (Funded Projects FY07-FY09).

### ***Recent Projects Update***

The slide show contains pictures of projects underway or recently completed.

### ***A/E Services Manual***

The A/E Services Manual is nearing completion. A copy is attached for the committee's review.

### ***Regulation project update***

The Facilities Section is proposing that the department move forward with a regulation project that will primarily update outdated provisions of the Facilities regulations.

## **Career Technical Educational Space**

The department is interested in keeping the discussion open on the Career Technical Educational space discussion. Staff has not done any work on this issue since the last BR/GR meeting, but will consider working on specific requests.

## **Publications Update**

**Integrated Facility Management Guide** – This document is in draft form. Staff continues to work on the document, and is approximately 60% through completion of the first draft. The guide was previously presented to the BR&GR committee, but it appears as though little work was done between 2005 and the present. This document was originally envisioned as a complete rewrite of the Preventative Maintenance Handbook with a re-focus on overall management of district facilities, not only preventative maintenance issues. The Facilities Section continues to work on this document.

**A/E Services Manual** – The A/E Services Manual project was started a number of years ago, and is approximately 90% complete. The manual will provide school districts with guidance for selecting Architectural and Engineering consultants, and is a vital component of the reference documentation cited by the department in our project agreement.

**Outdoor facilities** – The facilities section has received applications for consideration of funding for outdoor facilities. When considering elementary schools, it is generally accepted that a playground and associated equipment are eligible to be considered for funding in conjunction with a school project. Because of the variety and function of outdoor facilities for middle and high schools, and the high cost of many such facilities, the facilities section plans to review statutes and regulations, and develop recommendations for the BR and GR Committee.

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

In addition to the above publications, staff is working on a sustainable schools supplement to the Educational Specifications (copy attached). This document can be used by school districts when developing an Educational Specification for school construction projects. Many of the items have been taken from the LEED for Schools program, but some are specific to education facilities in Alaska.

Application Scoring – Staff will continue a review of the application scoring process and report back to the committee in December.

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

Database review – The Facilities Section currently operates with six separate, but interlinked databases that were developed over a long period of time. The goal of staff is to review these databases, and research the feasibility of incorporating them into one secure, integrated database.

Online application submittal –Research the possibility of developing an online CIP Application. Data entry online for the CIP process has the potential to save a significant amount of staff time during CIP review time and will allow staff to concentrate on reviewing the substance of applications more thoroughly.



# PM State-of-the-State

## Report of EED Assessments & Related Data

AS Of 07/18/2008

District	Date of Last Visit	Maintenance Management	Energy	Custodial	Training	R & R Schedule	Maint. Program	Status	Program Name
Alaska Gateway	5/10/2007	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Aleutian Region	8/31/2005	N	N	Y	N	Y	S	2 of 5	D
Aleutians East	5/25/2005	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Anchorage	7/17/2008	Y	Y	Y	Y	Y	C	5 of 5	Maximo
Annette Island	2/27/2006	Y	Y	Y	Y	Y	I	5 of 5	School Dude
Bering Strait	6/19/2001	Y	Y+	Y+	Y++	Y	C	5 of 5	TMA
Bristol Bay Borough	2/27/2008	Y	Y	Y	Y	Y	C	5 of 5	QQuest
Chatham	7/11/2007	N	Y	Y	N	Y	S	3 of 5	Maximo*
Chugach	1/16/2008	N	Y	Y	Y	Y	S	4 of 5	Maximo*
Copper River	5/7/2007	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Cordova	4/20/2005	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Craig City	6/25/2007	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Delta/Greely	5/9/2007	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Denali Borough	3/21/2005	Y	Y	Y	Y	Y	C	5 of 5	Quick Time
Dillingham City	4/10/2006	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Fairbanks	7/15/2008	Y	Y	Y	Y	Y	C	5 of 5	JW Edward
Galena	7/19/2007	Y	Y	Y	N	Y	S	4 of 5	Maximo*
Haines	4/3/2006	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Hoonah City	6/15/2007	N	N	N	N	Y	S	1 of 5	Maximo*
Hydaburg City	6/26/2007	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Iditarod Area	7/26/2001	Y	Y	Y	Y	Y	I	5 of 5	School Dude
Juneau	1/10/2006	Y	Y	Y	Y	Y	C	5 of 5	Maximo
Kake City	11/9/2005	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Kashunamiut	5/16/2002	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Kenai Peninsula	1/14/2008	Y	Y-	Y	Y	Y	C	5 of 5	ACT 1000
Ketchikan	1/25/2006	Y	Y	Y	Y	Y	I	5 of 5	School Dude
Klawock City	7/27/2007	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Kodiak Island	1/10/2005	Y	Y	Y	Y	Y	C	5 of 5	Quest
Kuspuk	4/7/2005	Y	Y	Y	Y	Y	D	5 of 5	D
Lake & Peninsula	2/25/2008	Y	Y	Y	Y	Y	C	5 of 5	Manager Plus
Lower Kuskokwim	4/11/2002	Y	Y	Y	Y	Y	C	5 of 5	?
Lower Yukon	5/14/2002	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Mat-Su Borough	12/10/2006	Y	Y	Y	Y	Y	D	5 of 5	C
Nenana City	3/23/2005	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Nome City	1/28/2007	Y	Y	Y	Y	Y	S	5 of 5	Maximo*



# PM State-of-the-State

## Report of EED Assessments & Related Data

As Of 07/18/2008

District	Date of Last Visit	Maintenance Management	Energy	Custodial	Training	R & R Schedule	Maint. Program	Status	Program Name
<b>North Slope Borough</b>	7/17/2007	Y	Y	Y	N	Y	C	4 of 5	Maximo
Northwest Arctic	3/26/2006	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Pelican City**	5/22/2008	Y	Y	Y	Y	Y	I	5 of 5	School Dude
Petersburg City	1/23/2006	Y	Y	Y	Y	Y	I	5 of 5	School Dude
Pribilof Island	8/27/2005	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Sitka City Borough	2/26/2007	Y	Y	Y	Y	Y	I	5 of 5	School Dude
Skagway City**	05/28/2008	Y	Y	Y	Y	Y	I	5 of 5	School Dude
Southeast Island**	6/28/2007	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Southwest Region	4/11/2006	Y	Y	Y	Y	Y	I	5 of 5	Maximo*
St Marys	7/9/2001	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Tanana City	3/9/2005	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Unalaska City	5/23/2005	Y	Y	Y	Y	Y	D	5 of 5	<b>D</b>
Valdez City	12/17/2007	Y	Y	Y	Y	Y	C	5 of 5	Micro-Main
Wrangell City	1/24/2006	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Yakutat City	4/18/2005	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Yukon Flats	3/11/2005	Y	Y	Y	Y	Y	S	5 of 5	Maximo*
Yukon-Koyukuk	3/0/2001	Y	Y	Y	Y	Y	C	5 of 5	mpulse
Yupitit	5/9/2002	Y+	Y	Y	Y	Y	S	5 of 5	Maximo*
<b>In Compliance</b>		49	51	52	48	53		47	

**Legend**

- N = Not in compliance
- Y = In full compliance
- NP = Not participating
- U = Undecided
- S = Plan to use SERRC to comply
- I = Commercial IMMS
- C = Commercial CMMS
- D = In-house District Program

Have had reassessment and are compliant

Have had reassessment and are non compliant

\*\* = reexamine in 6 months

**State of Alaska**  
**Department of Education and Early Development**  
**Capital Improvement Projects**  
**HB13/HB373 Debt Reimbursement Program - Effective 10/1/2006 - 11/30/2010**

<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>
<b>Anchorage</b>										
	DR-07-110	Clark Middle School Replacement	2/6/2007	\$65,000,000	\$65,000,000	65,000,000	60%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2007 Anchorage projects voter approved April 3, 2007
	DR-07-111	Districtwide Code/Hazardous Materials/ADA Projects	2/6/2007	\$1,265,000	\$1,265,000	\$1,265,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-07-112	Districtwide Roof Replacement and Repairs	2/6/2007	\$1,950,000	\$1,950,000	\$1,950,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-07-113	Districtwide Security System Upgrades	2/6/2007	\$890,000	\$890,000	\$890,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-07-114	Emergency Communication Systems-2 High Schools	2/6/2007	\$650,000	\$650,000	\$650,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-07-115	Districtwide Building Renewal Projects	2/6/2007	\$4,110,000	\$4,110,000	\$4,110,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-07-116	Districtwide Electrical Projects	2/6/2007	\$2,190,000	\$2,190,000	\$2,190,000	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-07-117	Districtwide Mechanical Projects	2/6/2007	\$5,845,000	\$5,845,000	\$5,845,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-07-118	Traffic Safety Upgrades, 3 Elementary Schools	2/6/2007	\$3,100,000	\$3,100,000	\$3,100,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-08-103	Chester Valley Addition and Renewal	1/17/2008	\$16,500,000	\$16,500,000	16,500,000	60% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2008 Anchorage projects voter approved April 1, 2008
	DR-08-104	Sand Lake Addition and Renewal	1/17/2008	\$17,500,000	\$17,500,000	17,500,000	60% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-08-105	Girdwood K-8 School Design	1/17/2008	\$300,000	\$300,000	\$300,000	60% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-08-106	Code Hazmat, 2 Schools	1/17/2008	\$465,000	\$465,000	\$465,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-08-107	Roof Replacement, 2 Schools	1/17/2008	\$950,000	\$950,000	\$950,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-08-108	Traffic Safety Upgrades, 2 Schools	1/17/2008	\$600,000	\$600,000	\$600,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-08-109	Electrical Upgrades, 8 Schools	1/17/2008	\$1,475,000	\$1,475,000	\$1,475,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-08-110	Mechanical Upgrades, 5 Schools	1/17/2008	\$1,950,000	\$1,950,000	\$1,950,000	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 Apprvd Amt</i>	<i>Rate</i>	<i>EED Apprvd</i>	<i>Voter Apprvd</i>	<i>Comments</i>
	DR-08-111	Building Renewal, 7 Schools	1/17/2008	\$1,240,000	\$1,240,000	\$1,240,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	DR-08-112	Track Improvements, 3 Schools	1/17/2008	\$2,250,000	\$2,250,000	\$2,250,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	DR-08-113	Emergency Communications Systems, 3 Schools	1/17/2008	\$480,000	\$480,000	\$480,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<b>Anchorage Totals:</b>				<b>\$128,710,000</b>	<b>\$128,710,000</b>	<b>\$128,710,000</b>				
<b>Dillingham City</b>										
	DR-08-101	Dillingham Elementary/Middle/High School Addition/Upgrade	8/28/2007	\$1,257,551	\$1,257,551	\$1,257,551	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	DR-08-101	Dillingham Elementary/Middle/High School Upgrade	8/28/2007	\$14,433,697	\$13,843,697	13,843,697	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		One project agreement
<b>Dillingham City Totals:</b>				<b>\$15,691,248</b>	<b>\$15,101,248</b>	<b>\$15,101,248</b>				
<b>Fairbanks</b>										
	DR-07-104	Barnette Elementary Renovation, Phase 2	11/17/2006	\$6,591,000	\$6,591,000	\$6,591,000	70% <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	DR-07-105	Ryan Middle School Renovation, Phase 1	11/17/2006	\$1,800,000	\$1,800,000	\$1,800,000	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 Apprvd Amt</i>	<i>Rate</i>	<i>EED Apprvd</i>	<i>Voter Apprvd</i>	<i>Comments</i>
<b>Fairbanks</b>				<b>\$8,391,000</b>	<b>\$8,391,000</b>	<b>\$8,391,000</b>				
<b>Totals:</b>										
<hr/>										
<b>Juneau City Borough</b>										
	DR-03-125	New Juneau High School, Amendment #2	3/30/2007	\$17,100,000	\$17,100,000	17,100,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Amendment #2
	DR-06-111	Glacier Valley Elementary Renovation	9/14/2007	\$7,100,000	\$7,100,000	\$7,100,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Amends DR-06-111 (DR-00-009)
	DR-08-100	Harborview Elementary Renovation	9/14/2007	\$15,300,000	\$15,300,000	15,300,000	70%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	DR-08-102	Thunder Mountain High School Pool	6/26/2007	\$19,800,000	\$19,800,000	\$8,650,853	60%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Juneau City Borough</b>				<b>\$59,300,000</b>	<b>\$59,300,000</b>	<b>\$48,150,853</b>				
<b>Totals:</b>										
<hr/>										
<b>Ketchikan</b>										
		Schoenbar Middle School Repair/Remediation	8/18/2006	\$8,706,000	\$0	\$8,706,000	70%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Did not receive voter approval.
<b>Ketchikan</b>				<b>\$8,706,000</b>	<b>\$0</b>	<b>\$8,706,000</b>				
<b>Totals:</b>										
<hr/>										
<b>Kodiak Island</b>										

<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-05-110	New Kodiak MS/HS Pool	1/22/2007	\$8,000,000	\$8,000,000	\$8,000,000	60%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Amends previous amount for a total project of \$14,210,000
<b>Kodiak Island Totals:</b>				<b>\$8,000,000</b>	<b>\$8,000,000</b>	<b>\$8,000,000</b>				
<b>Mat-Su Borough</b>										
		Cottonwood Creek Site Circulation & Parking/Safety Improvements	6/10/2008	\$1,500,000	\$0	\$1,500,000	70%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Districtwide Safety & Security Upgrade	6/10/2008	\$19,520,957	\$0	14,236,720	70%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Palmer HS Original Building Roof Replacement	6/10/2008	\$1,791,163	\$0	\$1,791,163	70%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Wasilla HS Fire Hydrant Installation	6/10/2008	\$500,000	\$0	\$500,000	70%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Wasilla HS Site Circulation & Parking/Safety Improvements	6/10/2008	\$1,000,000	\$0	\$1,000,000	70%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>Mat-Su Borough Totals:</b>				<b>\$24,312,120</b>	<b>\$0</b>	<b>\$19,027,883</b>				
<b>Unalaska City</b>										
		Unalaska Jr./Sr. High School Roof Replacement	8/24/2007	\$2,400,000	\$0	\$3,198,515	70%	<input checked="" type="checkbox"/>	<input 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>
		Unalaska Jr./Sr. High School Carpet/Flooring Replacement	8/24/2007	\$600,000	\$0	\$766,704	70%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Unalaska Jr./Sr. High School Kitchen/Energy/Technology Upgrades	8/24/2007	\$1,000,000	\$0	\$1,182,714	70%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>Unalaska City Totals:</b>				<b>\$4,000,000</b>	<b>\$0</b>	<b>\$5,147,933</b>				
<b>Grand Totals:</b>				<b>\$257,110,368</b>	<b>\$219,502,248</b>	<b>\$241,234,917</b>				

**Total of Projects Both Voter and EED Approved: \$208,353,101**  
 (This is a total of the EED Approved Amount.)



**EED Capital Improvement Project Priority Lists  
vs.  
Funded Projects by Fiscal Year (FY92 - FY09)**

FY	CIP Priority	DistrictType	District	Project #	Project Title	Funding	Group Totals
2007	sc1	REAA	Southwest Region	GR-07-022	New Stuyahok K-12 School Replacement	\$27,231,626	
2007	sc2	REAA	Lower Kuskokwim	GR-07-023	Dick R. Kiunya Memorial K-12 Improvement-see FY08 additional funding	\$19,382,855	
2007	sc3	City/Borough	Northwest Arctic	GR-07-024	Noatak K-12 School Replacement-see FY08 additional funding	\$26,501,174	
2007	sc20	REAA	Copper River	GR-07-021	Glennallen Elementary School Replacement	\$10,485,000	
2007	mm1 (08 list)	REAA	Chugach	GR-07-026	Chenega Bay School Roof Renovation	\$740,271	
2007	mm31 (06 list)	City/Borough	Sitka	DR-07-101	Blatchley Middle School Major Maintenance	\$5,384,553	
2007	mm37	City/Borough	Fairbanks	DR-07-104	Barnette Elementary Renovation, Phase 2	\$6,591,000	
2007	mm39 (99 list)	City/Borough	Bristol Bay Borough	GR-07-025	Naknek Sprinkler System & Renovation (Reapprop from GR-02-044)	\$1,204,700	
2007	mm44 (06 list)	City/Borough	Yakutat City	GR-07-019	Yakutat Elementary School Kitchen Upgrade	\$215,809	
2007	mm45 (06 list)	REAA	Yukon/Koyukuk	GR-07-020	Districtwide Sprinkler System Installation	\$4,427,315	
2007	mm46 (06 list)	City/Borough	Aleutians East	GR-07-003	Districtwide Playground Upgrades	\$181,885	
2007	mm47 (06 list)	REAA	Alaska Gateway	GR-07-001	Dot Lake School Mechanical Upgrade	\$1,087,118	
2007	mm48 (06 list)	REAA	Southeast Island	GR-07-018	Thorne Bay House Access Ramp	\$141,415	
2007	mm49 (06 list)	REAA	Iditarod	GR-07-005	Blackwell School Shower & Bathroom Repair, Anvik	\$80,752	
2007	mm50 (06 list)	REAA	Alaska Gateway	GR-07-002	Mentasta School Building Upgrades	\$1,750,189	
2007	mm51 (06 list)	REAA	Kenai Peninsula	GR-07-009	HVAC Controls - Five Schools	\$262,500	
2007	mm52 (06 list)	REAA	Iditarod	GR-07-007	McGrath/Takotna Underground Storage Tank Replacements	\$253,330	
2007	mm53 (06 list)	REAA	Lower Kuskokwim	GR-07-013	Mikelnguut Elitnaurviat Elementary Deferred Maintenance, Bethel	\$4,051,600	
2007	mm54	City/Borough	Fairbanks	DR-07-105	Ryan Middle School Renovation, Phase 1	\$1,800,000	
2007	mm54 (06 list)	REAA	Lower Kuskokwim	GR-07-017	W. Miller Memorial K-12 Deferred Maintenance, Napakiak	\$4,469,941	
2007	mm55 (06 list)	REAA	Aleutians East	GR-07-004	Nelson Lagoon School Siding	\$42,000	
2007	mm56 (06 list)	REAA	Lower Kuskokwim	GR-07-011	Ayaprun K-12 Water System Upgrade, Newtok	\$578,447	
2007	mm57 (06 list)	City/Borough	Sitka	DR-07-102	Keet Gooshi Heen Elementary School Major Maintenance	\$1,775,447	
2007	mm59 (06 list)	REAA	Iditarod	GR-07-008	McGrath School Roof Repair	\$31,948	
2007	mm60 (06 list)	REAA	Lower Kuskokwim	GR-07-016	Rocky Mountain K-12 Deferred Maintenance, Goodnews Bay	\$2,137,601	
2007	mm63 (06 list)	REAA	Lower Kuskokwim	GR-07-014	Nuniwarmiut K-12 Deferred Maintenance, Mekoryuk	\$1,781,736	
2007	mm64 (06 list)	REAA	Lower Kuskokwim	GR-07-010	Akula Elitnaurvik K-12 Deferred Maintenance, Kasigluk	\$1,876,410	
2007	mm68	City/Borough	Kenai Peninsula	DR-07-106	Districtwide Arsenic Remediation	\$1,029,860	
2007	mm68 (06 list)	REAA	Lower Kuskokwim	GR-07-012	Angapak Memorial K-12 Deferred Maintenance, Tuntutuliak	\$1,441,124	
2007	mm69 (06 list)	REAA	Lower Kuskokwim	GR-07-015	Qugcuun Memorial K-12 Deferred Maintenance, Oscarville	\$213,787	
2007	mm71 (06 list)	REAA	Iditarod	GR-07-006	Innoko River School Water Damage & Floor Repair, Shageluk	\$63,700	
2007	various	City/Borough	Fairbanks	DR-07-103	Districtwide Major Maintenance - 2006	\$14,737,000	
2007	mm120 (08 list)	City/Borough	Anchorage	DR-07-118	Traffic Safety Upgrades, 3 Elementary Schools	\$3,100,000	
						<b>2007 Ranked Project Total</b>	<b>\$145,052,093</b>
2007	Not a ranked project	City/Borough	Kenai Peninsula	DR-07-107	Nikolaevsk Re-roof	\$675,000	
2007	Not a ranked project	City/Borough	Kenai Peninsula	DR-07-108	McNeil Canyon Elementary School Re-roof	\$583,140	
2007	Not a ranked project	City/Borough	Kenai Peninsula	DR-07-109	Soldotna Elementary School Window Replacement	\$300,000	
2007	Not a ranked project	City/Borough	Anchorage	DR-07-110	Clark Middle School Replacement	\$65,000,000	

**EED Capital Improvement Project Priority Lists  
vs.  
Funded Projects by Fiscal Year (FY92 - FY09)**



FY	CIP Priority	DistrictType	District	Project #	Project Title	Funding	Group Totals
2007	Not a ranked project	City/Borough	Anchorage	DR-07-111	Districtwide Code/Hazardous Materials/ADA Projects	\$1,265,000	
2007	Not a ranked project	City/Borough	Anchorage	DR-07-112	Districtwide Roof Replacement and Repairs	\$1,950,000	
2007	Not a ranked project	City/Borough	Anchorage	DR-07-113	Districtwide Security System Upgrades	\$890,000	
2007	Not a ranked project	City/Borough	Anchorage	DR-07-114	Emergency Communication Systems-2 High Schools	\$650,000	
2007	Not a ranked project	City/Borough	Anchorage	DR-07-115	Districtwide Building Renewal Projects	\$4,110,000	
2007	Not a ranked project	City/Borough	Anchorage	DR-07-116	Districtwide Electrical Projects	\$2,190,000	
2007	Not a ranked project	City/Borough	Anchorage	DR-07-117	Districtwide Mechanical Projects	\$5,845,000	
<i>2007 Unranked Project Total</i>							<b>\$83,458,140</b>



**EED Capital Improvement Project Priority Lists  
vs.  
Funded Projects by Fiscal Year (FY92 - FY09)**

FY	CIP Priority	DistrictType	District	Project #	Project Title	Funding	Group Totals
2008	sc4 (07 list)	REAA	Lower Yukon	GR-08-001	Russian Mission K-12 School Replacement-see FY08 additional funding	\$18,485,899	
2008	sc5 (07 list)	REAA	Southeast Island	GR-08-002	Howard Valentine K-12 School Replacement, Coffman Cove-see FY08 add'l funding	\$5,332,854	
2008	sc6 (07 list)	REAA	Yukon Flats	GR-08-003	Arctic Village K-12 School Replacement-see FY08 additional funding	\$11,802,818	
2008	sc7 (07 list)	REAA	Bering Strait	GR-08-004	St. Michael K-12 School Replacement	\$22,488,568	
2008	sc8 (07 list)	REAA	Bering Strait	GR-08-005	Savoonga K-12 School Replacement	\$31,588,897	
2008	sc1 (08 list)	REAA	Lower Kuskokwim	GR-07-023	D.R. Kiunya Memorial K-12 Improvement, Kongiganak additional funding	\$5,645,676	
2008	sc3 (08 list)	City/Borough	Northwest Arctic	GR-07-024	Noatak K-12 School Replacement additional funding	\$7,109,000	
2008	sc5 (08 list)	REAA	Yukon Flats	GR-08-003	Arctic Village K-12 School Replacement additional funding	\$3,276,004	
2008	sc6 (08 list)	REAA	Southeast Island	GR-08-002	Howard Valentine K-12 School Replacement, Coffman Cove additional funding	\$1,923,207	
2008	sc10 (08 list)	REAA	Lower Yukon	GR-08-001	Russian Mission K-12 School Replacement additional funding	\$5,082,761	
2008	sc21 (08 list)	REAA	Lower Kuskokwim	GR-06-012	Kilbuck Elementary Replacement School, Bethel additional funding	\$6,152,451	
2008	mm3 (08 list)	City/Borough	Saint Mary's	GR-08-007	St. Mary's School Complex Renovation Project	\$12,969,277	
2008	mm5 (08 list)	REAA	Lower Kuskokwim	GR-03-049	Bethel Region HS Deferred Maintenance additional funding	\$4,458,824	
2008	mm7 (08 list)	REAA	Yukon Flats	GR-06-020	Fort Yukon Gym Renovation additional funding	\$1,442,554	
2008	mm22 (08 list)	City/Borough	Juneau City Boroug	DR-08-100	Harborview Elementary Renovation	\$15,300,000	
2008	mm12 (08 list)	City/Borough	Anchorage	DR-08-103	Chester Valley Addition and Renewal	\$16,500,000	
2008	mm9 (08 list)	City/Borough	Anchorage	DR-08-104	Sand Lake Addition and Renewal	\$17,500,000	
2008	sc40 (09 list)	City/Borough	Anchorage	DR-08-105	Girdwood K-8 School Design	\$300,000	
<i>2008 Ranked Project Total</i>							<b>\$187,358,790</b>
2008	Not a ranked project	City/Borough	Dillingham	DR-08-101	Dillingham Elem/Middle/HS Addition/Upgrade	\$15,101,248	
2008	Not a ranked project	City/Borough	Juneau City Boroug	DR-08-102	Thunder Mountain High School Pool	\$8,650,853	
2008	Not a ranked project	City/Borough	Anchorage	DR-08-106	Code Hazmat, 2 Schools	\$465,000	
2008	Not a ranked project	City/Borough	Anchorage	DR-08-107	Roof Replacement, 2 Schools	\$950,000	
2008	Not a ranked project	City/Borough	Anchorage	DR-08-108	Traffic Safety Upgrades, 2 Schools	\$600,000	
2008	Not a ranked project	City/Borough	Anchorage	DR-08-109	Electrical Upgrades, 8 Schools	\$1,475,000	
2008	Not a ranked project	City/Borough	Anchorage	DR-08-110	Mechanical Upgrades, 5 Schools	\$1,950,000	
2008	Not a ranked project	City/Borough	Anchorage	DR-08-111	Building Renewal, 7 Schools	\$1,240,000	
2008	Not a ranked project	City/Borough	Anchorage	DR-08-112	Track Improvements, 3 Schools	\$2,250,000	
2008	Not a ranked project	City/Borough	Anchorage	DR-08-113	Emergency Communication Systems, 3 Schools	\$480,000	
<i>2008 Unranked Project Total</i>							<b>\$33,162,101</b>



**EED Capital Improvement Project Priority Lists  
vs.  
Funded Projects by Fiscal Year (FY92 - FY09)**

FY	CIP Priority	DistrictType	District	Project #	Project Title	Funding	Group Totals
2009	sc1	City/Borough	Mat-Su	GR-09-001	Susitna Valley HS Replacement	\$19,099,558	
2009	sc2	REAA	LYSD	GR-09-002	Marshall K-12 School Replacement	\$35,554,900	
2009	sc3	REAA	LKSD	GR-09-003	Chaptnguak K-12 Renovation and Addition, Chefornak	\$44,182,623	
2009	sc4	City/Borough	Northwest Arctic	GR-09-004	Kobuk K-12 Renovation/Addition	\$7,583,993	
2009	mm21	City/Borough	Juneau City Borough		Auke Bay Elementary School Renovation	\$10,855,000	
2009	mm10	City/Borough	Northwest Arctic	GR-09-005	Deering K-12 School Improvements, Phase 2	\$871,196	
2009	mm20	City/Borough	Fairbanks	GR-09-006	Fairbanks District-wide Fuel Oil Tank Replacement	\$2,486,777	
2009	mm16	City/Borough	Juneau City Borough		Gastineau Elementary School Renovation	\$6,461,000	
2009	mm17	City/Borough	Hoonah City	GR-09-007	Hoonah School District Pool and Boiler Room Roof Replacement	\$930,140	
2009	mm19	REAA	Lower Yukon	GR-09-008	Ignatius Beans K-12 School Improvement, Mountain Village	\$11,706,209	
2009	mm14	City/Borough	Klawock City	GR-09-009	Klawock K-12 School Gym Structural Repairs	\$1,237,657	
2009	mm18	City/Borough	Klawock City	GR-09-010	Klawock K-12 School Renovation	\$1,026,329	
2009	mm12	REAA	Annette Island	GR-09-011	Leask MS Major Maintenance	\$2,016,124	
2009	mm22	City/Borough	Tanana City	GR-09-012	Maudry J. Sommers K-12 School Major Maintenance	\$7,064,889	
2009	mm13	REAA	Annette Island	GR-09-013	Metlakatla HS Renovation	\$8,910,015	
2009	mm6	City/Borough	Nome	GR-09-014	Nome-Beltz Junior/Senior High Buildings D & E Roof Replacement	\$1,503,123	
2009	mm7	City/Borough	Petersburg	GR-09-015	Petersburg Elementary School Roof Replacement	\$900,582	
2009	mm3	REAA	Lower Yukon	GR-09-016	Pitka's Point K-8 School Emergency Structural Remediation	\$841,575	
2009	mm8	City/Borough	Ketchikan	GR-09-017	Playground Safety Upgrades-Houghtaling, Valley Park & Pt. Higgins Schools	\$583,322	
2009	mm1	City/Borough	Ketchikan	GR-09-018	Schoenbar Middle School Repair and Remediation	\$5,669,235	
2009	mm5	City/Borough	Northwest Arctic	GR-09-019	Shungnak K-12 School Improvements, Phase 5	\$3,408,817	
2009	mm15	REAA	Southeast Island	GR-09-020	Thorne Bay K-12 School Structural Repairs	\$517,440	
2009	mm4	REAA	Yupit	GR-09-021	Tuluksak K-12 School Power Generation	\$559,462	
2009	mm23	REAA	Bering Strait	GR-09-022	Unalakleet HS Renovation	\$12,042,418	
2009	mm2	REAA	Chugach	GR-09-023	Whittier K-12 School Roof Renovation	\$1,773,414	
2009	mm1	City/Borough	Ketchikan	GR-09-024	Schoenbar MS Repair & Remediation addl participating share	\$436,095	
2009	mm8	City/Borough	Ketchikan	GR-09-025	Playground Safety Upgrades addl participating share	\$44,871	
2009	mm14	City/Borough	Klawock City	GR-09-026	Klawock K-12 Gym Structural Repairs addl participating share	\$353,617	
2009	mm18	City/Borough	Klawock City	GR-09-027	Klawock K-12 School Renovation addl participating share	\$293,237	
						<i>2009 Ranked Project Total</i>	<i>\$188,913,618</i>



## CIP Project Requests and Funding History FY99 to FY09

	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004 (3)	FY2005 (3)	FY2006	FY2007	FY2008	FY2009
<i>Initial List</i>											
<b>CIP Grant Requests</b>											
Total Applications	208	166	161	165	182	190	61	115	150	211	206
Percent of Districts Applying	92%	71%	83%	77%	83%	81%	32%	50%	64%	67%	67%
# Projects Reusing Scores (2)	n/a	13	37	13	30	69	38	4	1	42	34
Major Maintenance	100	68	86	98	115	127	31	71	96	165	152
MM Total \$ (1)	\$150,760,463	\$55,796,786	\$90,987,911	\$131,012,624	\$196,176,220	\$209,559,438	\$26,983,216	\$170,779,501	\$311,992,238	\$590,118,235	\$460,908,444
School Construction	92	69	69	59	58	53	27	38	38	42	45
SC Total \$ (1)	\$594,518,153	\$474,386,684	\$543,301,445	\$478,387,575	\$551,586,781	\$603,149,669	\$337,058,441	\$484,845,703	\$579,137,708	\$639,432,011	\$702,994,549

**Notes:**

1. Total \$ are Eligible Amount (Requested Amount prior to FY99)
2. Regulation implemented effective FY99
3. SLA 02, HB 2003 suspended eligibility for municipal/borough districts over 1,000

### School Construction and Major Maintenance Funding

Grant Funding	\$83,221,209	\$0	\$92,911,000	\$76,065,197	\$170,101,441	\$0	\$5,839,787	\$72,299,030	\$109,429,533	\$137,758,790	\$188,913,618
Debt Reimbursement	\$357,143,000	\$0	\$151,019,000	\$29,045,900	\$228,790,000*	\$307,845,347**	\$163,030,188***	\$89,993,000^		\$208,353,101^^	

**Notes:**

- \* HB2003 debt projects EED & voter approved as of 6/30/03
- \*\* HB2003 debt projects EED & voter approved 7/1/03 - 6/30/04
- \*\*\* HB2003 debt projects EED & voter approved 7/1/04 - 6/30/05
- ^ SB73 debt projects EED & voter approved-final
- ^^ HB13 debt projects EED & voter approved as of 6/30/08

# Recent School Projects

# Glennallen Elementary School























# Mat-Su Career Center







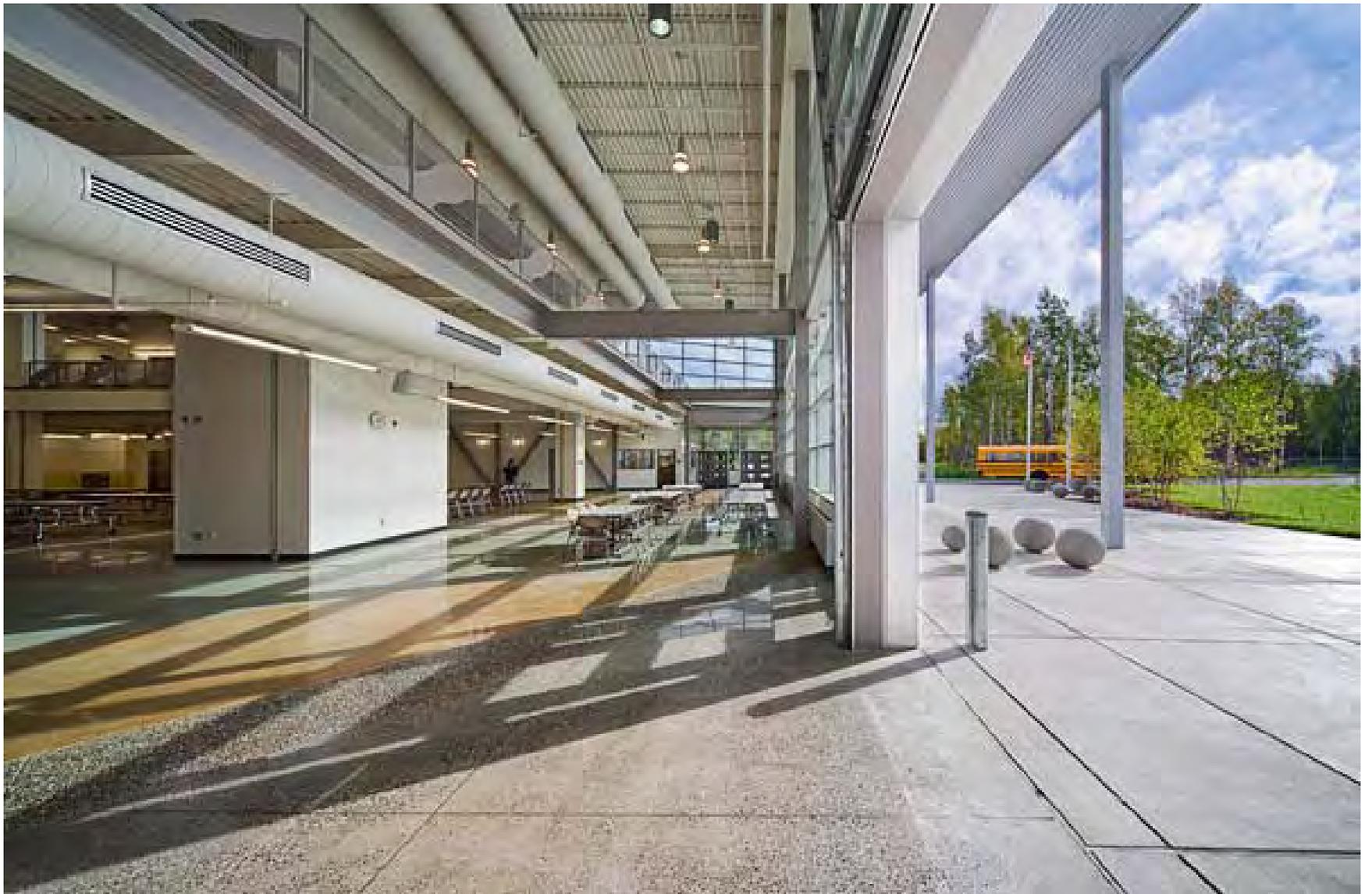












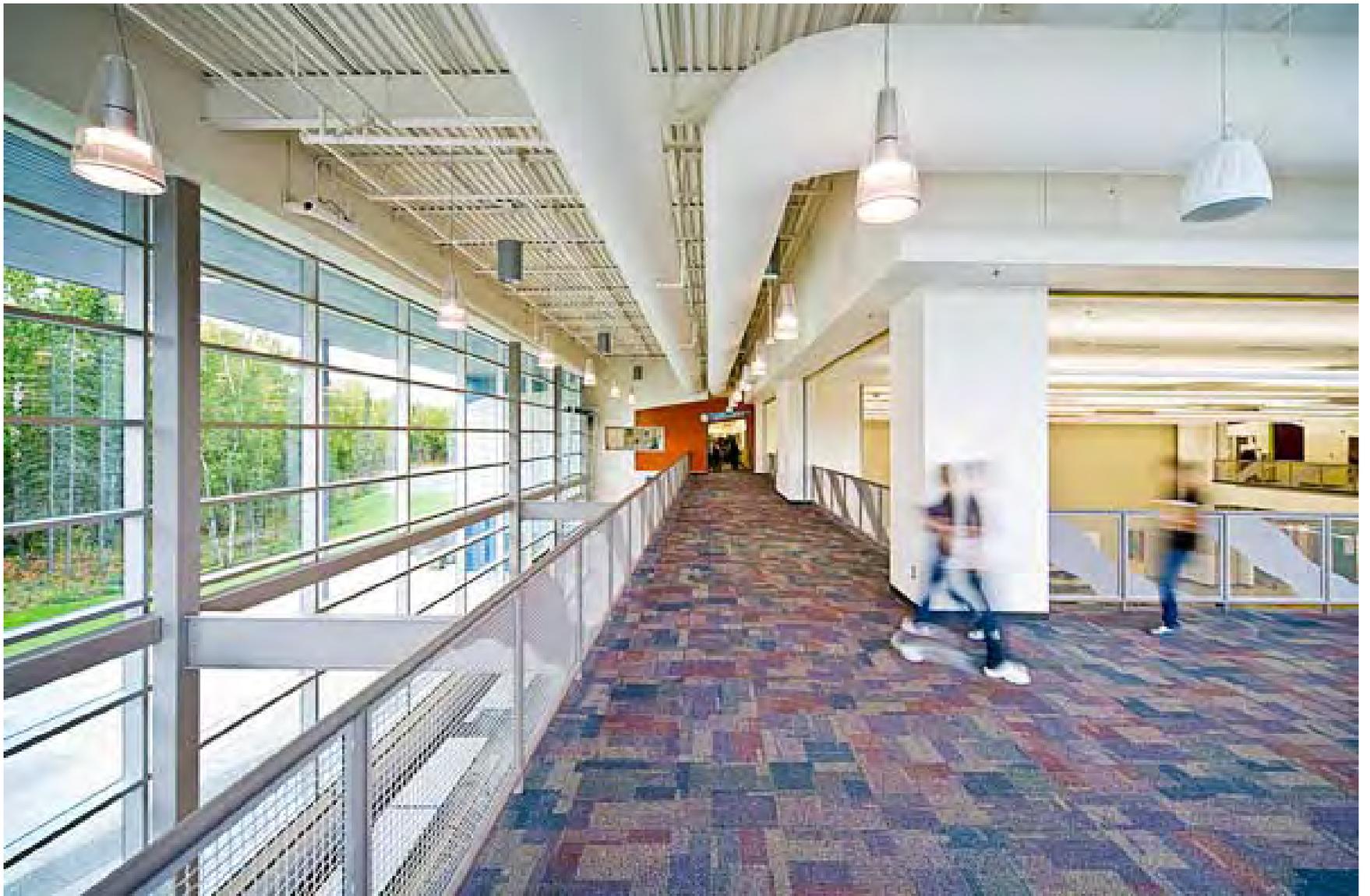












# Galena Site Visit

Galena Interior Learning Center



































# Galena Middle/HS

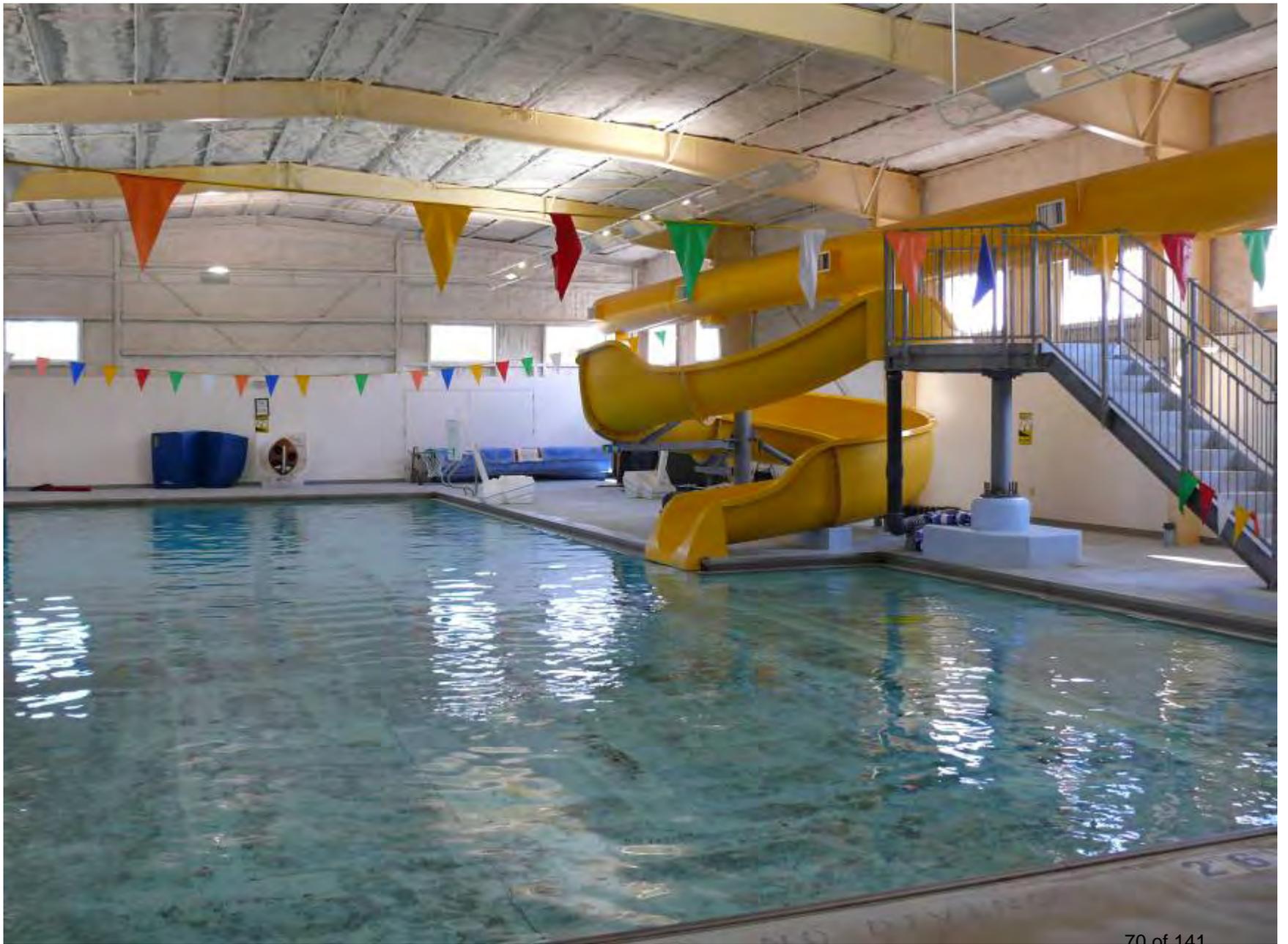












# Regulation

## 4 AAC 31.013. Preventive maintenance and facility management

(2) an energy management plan that includes recording energy consumption for all utilities on a monthly basis for each building; for facilities constructed before 12/15/2004, a district may record energy consumption for utilities on a monthly basis when multiple buildings are served by one utility plant;

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## 4 AAC 31.014. Codes and regulations for school facilities

(1) the Building Code, adopted by 13 AAC 50.020;

Deleted: Uniform

(2) the Electrical Code, adopted by 8 AAC 70.025;

Deleted: National

(3) the Plumbing Code, adopted by AS 18.60.705 (a);

Deleted: Uniform

(4) the Mechanical Code, adopted by 13 AAC 50.023;

Deleted: Uniform

(5) The ASME Boiler and Pressure Vessel Code, adopted by 8 AAC 80.010; and

Deleted: Uniform

(6) the Fire Code, adopted by 13 AAC 50.025.

## 4 AAC 31.020. Guides for planning educational facilities

(a) The following are the basic guides for educational facility planning:

(1) for a school capital project application submitted to the department

(A) repealed (??/??/????);

Deleted: before January 1, 1996, *The Guide for Planning Educational Facilities*, as published by the Council of Educational Facilities Planners, International, 1982 Edition (Revised); and

(B) repealed (??/??/????);

Deleted: on or after January 1, 1996, *The Guide for Planning Educational Facilities*, as published by the Council of Educational Facilities Planners, International, 1991 Edition (Revised)

(C) on or after January 1, 2008, *Creating Connections: The CEFPI Guide for Educational Facility Planning*, as published by the Council of Educational Facilities Planners International, 2004 Edition;

Deleted: The provisions of ¶ (1) subsections (c)(1) - (7), (d), and (e) as they read on and after October 10, 1995 and until April 17, 1998 do not apply to an application for a former school construction grant submitted under this chapter to the department before January 1, 1996; ¶ (2) subsections (c) - (e) and (g) of this section as they read on and after April 17, 1998 do not apply to an application for a former school construction grant submitted under this chapter to the department before January 1, 1996.

(f) repealed (??/??/????)

## 4 AAC 31.022. Annual grant application review and capital improvement grant schedule revision

(c)(2) the percentage by which the number of unhoused students exceeds the design capacity of existing facilities in the attendance area;

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(e) The department will, in its discretion, approve a grant amount as proposed by the school district, reduce the proposed project's budget in the six-year grant schedule prepared under this section, or grant a waiver of all or a part of the required local contribution if requested under 4 AAC [31.021\(a\)](#) . A proposed project's budget will be reduced

(1) if the costs, as determined by the department, are excessive;

(2) if the space proposed exceeds the maximum allowed under 4 AAC [31.020](#), including any approved variances and any adjustments to student population projections that the department considers necessary to best reflect historic populations and reasonable future growth;

(3) ~~repealed (??/??/????)~~

#### 4 AAC 31.060. State financial assistance

(a) A municipality that is a school district, or a regional school board, submitting a capital improvement project request for construction to the department under [AS 14.11.011](#) or 14.11.100 shall make the request on a form prescribed by the commissioner.

(b) In accepting state aid from the department, the municipality or school district receiving the grant or debt reimbursement, shall comply with all pertinent state statutes, codes, standards, and regulations related to construction of a public facility. Further, the recipient shall comply with conditions, requirements, and stipulations in the forms prescribed by the commissioner for the capital improvement project agreement.

(f) State aid under [AS 14.11.100](#) to eligible municipalities will be calculated on the basis of applications received by the deadline imposed by this section and, upon receipt of a notice of payment by the municipality from the bond holder or paying agent, state aid will be issued except for the amount attributable to projects for which

(1) the department has withdrawn its approval under 4 AAC [31.075](#);

(2) ~~repealed (??/??/????)~~; or

#### 4 AAC 31.063. Use of interest earned on bond or grant proceeds

(a) ~~repealed (??/??/????)~~;

(b) ~~repealed (??/??/????)~~;

(c) ~~repealed (??/??/????)~~;

**Deleted:** for a school construction grant application submitted to the department before January 1, 1996, if the nonassignable space in the proposed facility exceeds 25 percent of the total area of the facility, except that the department will, in its discretion, allow a variance of 35 percent for small schools in remote areas if it can be demonstrated that the variance is in the best interests of the state and the school district; repealed

**Deleted:** the local bond election occurred after June 30, 1987 and before July 1, 1988

**Deleted:** Interest on proceeds of bonds approved by municipal voters after July 1, 1986, for which debt retirement under [AS 14.11.100](#) is approved, must accrue to the project. However, if more than one approved project is combined into one bond issue, the interest proceeds may be aggregated to the bond issuance or may accrue to each project in the amount proportionate to that project's share of the bond issuance. Interest proceeds may only be used to ¶  
(1) pay the costs of a project within that bond issue; ¶  
(2) pay accrued interest on the bond issue; ¶  
(3) redeem all or part of the bonds; or ¶  
(4) pay the costs of the bond sale.

**Deleted:** If the money earned as interest on the proceeds of bonds is used to pay the costs of the approved project or additions to the scope of the project approved under 4 AAC [31.030](#), other than costs of change orders, contract amendments, contractor's claims, or other modifications necessary because of unavoidable or unforeseeable circumstances that are not the result of imprudent management, as determined by the commissioner, then the amount that is allowed for debt retirement will be reduced by that amount.

**Deleted:** If the money earned as interest on the proceeds of bonds is used to pay accrued interest, redeem all or part of the bonds, or pay the costs of the bond sale, then the amount which is allowed for debt retirement will be reduced by that amount.

(d) ~~repealed (??/??/????);~~

**Deleted:** The accounts in which the proceeds of bonds are placed are subject to audit under 4 AAC 31.062 and the district shall report, on forms prescribed by the department, the use to which the money is put.

(e) Interest on proceeds of grant money appropriated for approved projects shall be held by the district to pay for project cost overruns, change orders, or other legitimate project costs as stated in (b) of this section. If at the completion of the project, any money earned as interest remains, the district shall transfer that amount to a district capital reserve account for school capital projects.

**History:** Eff. 2/8/86, Register 97; am 7/11/86, Register 99; am 12/19/2002, Register 164

**Authority:** [AS 14.07.060](#)

[AS 14.11.100](#)

[AS 14.11.132](#)

#### **4 AAC 31.085. Disposal of abandoned or obsolete property**

(d) If a municipal government proposes a use for the facility, the department will, in its discretion, convey the facility to the municipality without charge. Removal from state-owned land, of the facility conveyed under this subsection is required, unless the ~~department~~ determines that no state agency has use for the land upon which the facility is located and approves conveyance of the land to the municipality.

**Deleted:** Department

**Deleted:** of Natural Resources

~~(i) If removal of a facility disposed of under (g) of this section is not feasible, the commissioner may determine that it is in the best interest of the state to approve the granting of a long-term lease with the non-profit entity that has been approved for use of the facility.~~

### **Article 3**

#### **General Provisions**

Section

#### **900. Definitions.**

#### **4 AAC 31.900. Definitions**

As used in this chapter and in [AS 14.07](#), [AS 14.08](#), and [AS 14.11](#), unless the context requires otherwise,

(2) "capital equipment" means built-in and movable equipment used to furnish a newly constructed or rehabilitated space; it includes first-time purchase of library books, reference material, and media to furnish a new or renovated library; it does not include supply items such as textbooks and expendable commodities; the term is further defined in the *Guidelines for School Equipment Purchases*, 1997 edition;

(4) "elementary and secondary schools" means,

(A) buildings that have been built or converted predominantly for instruction of students in grades kindergarten through 12, and buildings for the support of that instruction; for purposes of this subparagraph,

(i) elementary students are those in grades kindergarten - 6th; and

(ii) secondary students are those in grades 7th - 12th;

(22) "temporary" as applied to facilities means facilities, typically providing classroom or administrative space, of temporary construction, intended for use for a limited period of time, and installed with minimal site support and without water or sewer services or a foundation of permanent construction;

**Deleted:** for a former school construction grant application that was submitted to the department before January 1, 1996, buildings that have been built or converted predominantly to support instruction of elementary and secondary students as defined in *Alaska Small Elementary Program and Space Guidelines*, 1983 Edition, and *Alaska Small High School Program and Space Guidelines*, 1983 Edition, or, for schools designed to house more than 500 students, buildings that provide not more than 100 gross square feet per student in kindergarten - 8th grade and not more than 150 gross square feet per student in 9th - 12th grade, subject to a variance granted under 4 AAC 31.030(c), and facilities for the support of that instruction; and ¶

(B) for a former school construction grant application submitted to the department on or after January 1, 1996, and before April 17, 1998, buildings that have been built or converted predominantly to support instruction of elementary and secondary students under the guides for educational facility planning and related standards set out in 4 AAC 31.020 or, in the discretion of the department, as defined in *Alaska Small Elementary Program and Space Guidelines*, 1983 Edition, and *Alaska Small High School Program and Space Guidelines*, 1983 Edition, or, for schools designed to house more than 500 students, buildings that provide not more than 105 gross square feet per student in kindergarten - sixth grade and not more than 150 gross square feet per student in 7th - 12th grade, subject to a variance granted under 4 AAC 31.030(c), and facilities for the support of that instruction; and ¶

(C) for a school capital project application submitted to the department on or after April 17, 1998,

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# **Architectural and Engineering Services for School Facility Construction**

*Guidelines for School Districts*

## ACKNOWLEDGEMENTS

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# Introduction

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The construction of an educational facility is a major milestone for a school administrator and the local school board. A construction project, perhaps more than any other act of school officials, affects the structure of the educational program for twenty or thirty years into the future. Policies may change; buildings remain. A well-planned, well-constructed educational facility can serve as a lasting monument to the wisdom and care of the administration and community which planned it. Unfortunately, the converse is also true.

These guidelines have been developed in order to highlight some of the more important administrative and legal aspects of construction projects and the way these may be addressed through the selection of, and contracting for, design services. The purpose of this guide is to assist users in successfully completing school construction projects by emphasizing the need to understand the problems and the need for cooperation by all parties.

To some, who may have great experience and familiarity with administration of construction projects, the following comments may seem obvious. Others may have had little experience in this field and will find the concepts new. In either event, if the guide assists school officials in thinking through the process from the earliest stages, to the completion of the facility, the aim will have been accomplished.

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[For school administrators or districts with limited construction experience, hiring a Construction Manager may be an important component in the overall development of a project. The Construction Management Association of America publishes a document entitled \*An Owners Guide to Construction Management\*, which is available on the internet at:](#)

[http://cmaanet.org/user\\_images/owners\\_guide.pdf](http://cmaanet.org/user_images/owners_guide.pdf)

[A Construction Manager \(CM\) can serve as responsible party for implementation of the project from hiring of consultants to coordination of all team members. A CM can be hired either as an employee of the district, or by consultant contract, however there are statutory limitations on the amount spent for CM by consultant \[14.11.019\(c\)\]<sup>1</sup>.](#)

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<sup>1</sup> [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, district, or regional educational attendance area.](#)

# Getting Started

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There are many documents that discuss the process of completing a building construction project. These documents refer to a project team. Some publications go further and identify the team members and their role in the process. Throughout this guide, sections of some of these documents are quoted or referenced as appropriate.

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One such document, *You and Your Architect*, a publication of the American Institute of Architects (AIA), is pertinent to establishing a starting point for a school district embarking on a school facility project. It states, “the best way to begin a new project is for you - the owner to reflect on what you bring to it.” The document is available on the internet at:

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<http://www.aia.org/SiteObjects/files/youandyourarchitect.pdf>

Following is an excerpt from this document under a chapter entitled, “Getting Started”:

Naturally, every owner starts from a different outlook. Some have had vast experience with design and construction and know what they want and how to go about getting it. Many owners have much less experience. Whatever your situation, it makes sense to begin with some self-examination to assess what you already know about your project and what you will establish with your architect’s help. The questions outlined below can serve as a guide. You don’t need firm or complete answers to these questions at this point. Indeed, your architect will help you think them through. A general understanding of where you are, however, will help you select the best architect for the project.

## ask yourself these questions

- What activities do you expect to house in the project? Do you have specific ideas on how to translate these activities into specific spaces and square footage areas? In any event, an architect with experience in your particular building type can help you immensely to refine your design program (the collection of parameters from which design is derived).
- Has a site been established, or will this decision also be a subject of discussion with the architect and others?
- Have you and those with whom you are talking fixed a construction schedule and budget?
- What are your design aspirations? What thought have you given to the design message and amenities you are seeking in this project?
- What are your overall expectations for the project? What are your motivations, both basic and high-minded, and what role does this project play in achieving your overall goals?
- How do you make decisions? Will a single person sign off on decisions? Do you have a building committee?
- How much information do you need to make decisions?
- Where will the resources come from to create and operate this project? (Your architect can help you considerably here, for instance, to tap into reliable capital assistance or leverage modest first-cost upgrades into enormous life-cycle savings.)
- How much experience do you have in design and construction? Have you done this before? If so, where have you been most successful, and where were you disappointed?

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# The Program for Design (Educational Specifications)

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A program for design, or Educational Specifications as it is referred to in Department of Education & Early Development (EED) regulations, should spell out the district's complete educational requirements. The department has published a guide for developing Educational Specifications, which is available on the internet at:

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<http://www.eed.state.ak.us/Facilities/publications/EdSpec2005Edition.pdf>

By regulation 4 ACC 31.010, EED requires that "the chief school administrator, under the direction of the local school board, be responsible for preparation of educational specifications for all new public elementary and secondary schools, as well as additions and rehabilitations of existing facilities" for which State aid is sought. The specifications must include, at a minimum, the following elements:

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1. The current year and five-year projected elementary and secondary enrollment to be served.
2. A statement of educational philosophy and goals.
3. The activities that will be conducted.
4. The curriculum that will be housed.
5. The anticipated community uses.
6. The specific and general architectural characteristics required.
7. The educational spaces needed, their approximate size in square feet, their recommended equipment requirements, and their spatial relationships to other facility elements.
8. The size, use, and condition of existing school spaces in the facility (additions and rehabilitations only).
9. The recommended site and utility requirements.
10. The proposed budget and method of financing.
11. The technology goals of the curriculum and their facility requirements.

The completed Educational Specifications become the districts blueprint for the design of the school facility.

In many cases, much of the pre-design work for a facility may be accomplished by the district before the selection of the design team. Prior to, or in conjunction with seeking funds, most districts will establish the need for additional or reconfigured space based on enrollment projections, changes in the educational program, review of existing space, and an analysis of alternative facilities or space usage. At a minimum, districts should have a fairly detailed idea of the educational space requirements of the new or remodeled facilities which, in turn, provide estimates of square footage size and potential costs. While it is sometimes advisable to involve an architect in preliminary

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# The Program for Design (Educational Specifications)

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feasibility studies, particularly in the analysis of existing facilities and the determination of square footage, the essential pre-design work revolves around educational rather than architectural considerations.

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Should a district desire other outside assistance at this point of the project, the services of an educational facilities planner or architect familiar with school planning might be beneficial. These professionals can conduct an assessment of need for new or reconfigured space, perform educational feasibility studies, and provide preliminary interpretation of curricular needs into educational specifications.

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The development of educational specifications is the key to a successful school construction or remodeling project. It is during this phase of project planning that everyone concerned with the new space -- teachers, administrators, students, board members, and the community at large -- has the opportunity to present ideas, thoughts and dreams concerning the facility. Well-developed educational specifications ensure that the completed facility will support the planned educational program of the district. The Educational Specifications can also provide the basis for a creative, original design which may make a significant contribution to the learning process. Districts which spend time in conceptualizing the program to be offered in the new space, establishing the relationships between the various educational activities which will be carried out therein, and giving attention to the smallest detail which can maximize the educational value of the envisioned spaces will reap considerable benefits in the design and construction phases of the project, as well as when the building is finally in use. An architect who is trained in conceptualizing and describing educational spaces can be of great help to the district and community in this activity.

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# The Project Team

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An initial project team should consist of individuals and groups with a stake in the outcome of the project, as well as those with the expertise to provide those stakeholders with the information necessary to make sound decisions. There are alternate compositions and names for project teams. However, all stakeholders should have a place on the team. Team members may include representatives from the district administration, the educational specifications committee, the proposed principal and faculty, the students, the parents, community members, and necessary educational and facilities professionals. In addition, a project coordinator is essential for good management and continuity. At the appropriate point, the design team should be added to the project team.

The school district project coordinator should be the lead or chairperson of the project team and the principal contact for the project team with authority for approvals of both design and construction matters. Generally, this position's responsibilities can be handled by an in-house representative with assistance from the design team during construction. However, many districts have found that a professional project manager ([See the Construction Management discussion in the Introduction](#)) can relieve the district of burdensome coordination ~~activities, thus~~ allowing district ~~personnel~~ to focus on educational delivery.

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The project team has overall responsibility for coordination of all aspects of the project from initial needs determination to post-occupancy evaluation. Many of the duties may be assigned to individual project team members or subcommittees. In smaller districts, the team may delegate responsibilities to the project coordinator or the district superintendent, or the school board may assign responsibilities to that individual.

In addition to being the official administrative contact with the design team, the coordinator should be a liaison between other groups and committees providing information such as educational specifications, site information, and educational programming. Beyond the design phase, the project coordinator should serve as the owners representative for the construction contract.

~~Reference should be made to a document listed~~ in Department Of Education & Early Development (EED) regulations as a guideline entitled ~~Guide for Planning Educational Facilities, CEFPI, 1991,~~ specifically the section, "The Planning Professionals." The design team is generally headed by a principal or associate of an architectural firm and consists of members of his firm and consultants. Quoting from the document mentioned above:

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A district should be carefully review proposed services of such a project manager and the architect; traditional services of each can widely overlap. The architect's services are explained in the next chapter. The design team members, besides those who are directly involved in architectural design and coordination as associates of the architect, are normally consultants to the architect who serves as team leader. If a district feels they can best be served by certain named consultants, these should be identified in request for proposal documents as a district choice but not as a requirement. Architects may feel more comfortable with certain consultants based on their past experiences. As prime consultant the architect is responsible for the work of his consultants although they in turn are responsible to him. The architect's consultants, or they may be in-house staff, usually consist of structural, mechanical and electrical engineers. In addition, for some projects, consultants may include civil soils, survey, and utility engineers as well as those with specialties including cost

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# The Project Team

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estimating, acoustics, kitchen/food service, technology, school planning, and construction management or contract administration.

An architect A/E consultant is an important member of the project or planning team, from initial conceptualization of the project through substantial completion of the building itself. It is the architect who has the primary responsibility for translating educational program concepts and needs into educational facilities that are effective learning spaces. An architect must understand the desires of the client as well as the technical aspects of the project; therefore, in selecting an architect, intangible considerations, such as mutual respect, trust and compatibility of working styles, can be as important as technical competence. Dr. Basil Castaldi, a well-known authority on educational facilities planning, states it well:

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In and of itself, however, the employment of an architect does not automatically assure a board of higher authority that he will design a school to satisfy their institutional needs. The architect should be creative, competent, flexible, understanding, perceptive of educational needs, open-minded, aesthetically oriented but cost-conscious, imaginative, practical, and cooperative in spirit.<sup>3</sup>

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Success in selecting an architect, whether an individual or a firm, who can bring the attributes listed above to a school construction project depends in large part on how thoroughly a district conducts pre-selection activities.

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There are times when a district will be looking for the services of on engineering consultant, such as when considering structural, mechanical, electrical, foundation, or site work that may not require the participation of an Architect. In such cases, the district may consider the directions in the following sections of this guideline to apply equally to the selection of and engineering consultant. Therefore, terminology from this point forward will refer to the Architectural/Engineering or A/E consultant.

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# Scope of Services

Districts that wish to obtain the most effective design services will spend time *before* the selection of the A/E consultant in determining the range of services it will need. Certain services are required from the design professional during each phase of the project. In addition, A/E consultants can provide a broad range of supplemental services. These basic and additional services are well described in various publications including a document previously mentioned entitled *You and Your Architect* published by the American Institute of Architects (AIA). Districts are encouraged to review descriptions of services available prior to A/E consultant selection to obtain at least a general idea of those services which may be requested.

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The services that may be required of a design firm can be characterized as “basic,” i.e., those which are performed normally by a design professional in order to move the project through construction, and “additional” or “supplementary”, i.e., services which may be required or desired to enhance or respond to critical issues related to the project.

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Basic design services are described as follows:

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1. **Schematic design services** consist of the preparation of drawings and other documents that serve to illustrate the general scope, scale, and relationship of project components. The documents from this phase of work need to be reviewed and approved by the department before the district authorizes the consultant to proceed to the design development phase [4 AAC 31.030(b)(3)]. Work in this phase incorporates information gathered from the district in the form of Educational Specifications, public meetings, and stakeholder meetings. Typical services include: civil, structural, mechanical and electrical concepts; architectural, interior in landscape design concepts; estimate of probable construction costs based on the schematic design documents; and consultation and review.

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2. **Design development services** consist of the preparation, from the approved schematic design documents, drawings and other documents that serve to fix and describe the size and character of the entire project as to structural, mechanical, and electrical systems, materials and such other essentials as are appropriate. . The documents from this phase of work need to be reviewed and approved by the department before the district authorizes the consultant to proceed to the construction document phase [4 AAC 31.030(b)(4)]. Typical services include: civil, structural, mechanical and electrical design development; architectural, interior and landscape design development; estimate of probable construction costs; and regulatory agency review.

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3. **Construction document services** consist of the preparation, from the approved design development documents, drawings and specifications that provide in detail, the requirements for construction of the entire project. The documents from this phase of work need to be reviewed and approved by the department before the district authorizes the consultant to proceed to the bidding phase [4 AAC 31.030(b)(5)]. Typical services include: complete civil, structural, mechanical and electrical construction documents;

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# Scope of Services

architectural working documents; more detailed estimate of probable costs; and document review/coordination.

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4. **Bid services** consist of the preparation, from the approved construction documents, bid documents for obtaining bids and awarding contracts for construction for approval by the district. Typical services include: preparation of bidding documents; bid procedure; bid evaluation; assistance, with owner's attorney, on construction contract agreements; and analysis of alternatives/substitutions.

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5. **Construction services** consist of providing assistance to the district in its administration of the construction contract commencing with award and terminating following final acceptance of project and contracting agency's approval of the architect's final invoice for all services throughout the construction phase. Typical services include: limited construction observation; shop drawing review; review of contractor pay requests; change order review/approval; testing and inspection coordination; and project close out assistance.<sup>4</sup>

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In addition to the above five basic services areas, the AIA identifies three additional phases of a construction project during which the additional services of an architect may be required:

1. Pre-design, where an architect may be involved with facility programming; space schematics; project budgeting; surveys of existing facilities; economic feasibility studies; and project scheduling.

2. Site analysis, in which architectural services are typically required for site analysis and selection; site development and utilization studies; environmental studies; zoning processing assistance; utility studies; and project budgeting.

3. Post-construction, at which time the architect provides maintenance and operational programming for the electrical and mechanical aspects of the facility; start-up assistance; record drawings; warranty review; and post-construction evaluation.<sup>5</sup>

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Both DOT and AIA identify additional or supplemental services which may be requested of design firms. Such services will vary from project to project, and may include, but are not limited to the following:

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1. perform preliminary energy audits;
2. attend meetings or conduct hearings to facilitate design review and obtain required approvals;
3. provide detailed estimates of construction costs;
4. prepare record prints (As-Built drawings) of significant changes made during the construction process;
5. serve as a member of an Art Advisory Committee to determine the type and site of public art works;
6. determine if a proposed site has historic, prehistoric or archeological value under applicable federal or state statutes;

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# Scope of Services

7. select furnishings, fixtures and equipment;
8. design special furnishings;
9. perform life-cycle costs and cost-benefit analysis;
10. conduct special studies or design special computer applications;
11. prepare specialized or elaborate graphics or models for presentations;
12. provide daily or periodic on-site observations of construction activities.

The “Standard Statement of Services for General Architectural and Engineering Design” of DOT’s Professional Services Agreement provides a more detailed description of both basic and additional services, as does the standard form of contract of the AIA.

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The AIA publishes a *Compensation Management System* which provides a checklist of both basic and supplemental services. The checklist provides a convenient method for districts in determining the scope of architectural services desired. A copy of the AIA checklist from the above referenced document is attached in the appendix. Contract documents may be obtained from:

American Institute of Architects  
1735 New York Avenue  
N.W., Washington, D.C. 20006

or from

Alaska Chapter of American Institute of Architects  
807 B Street,  
Anchorage, AK 99501

Or from

[www.aia.org](http://www.aia.org)

As mentioned earlier, districts should have a fairly firm idea of the scope of services to be requested of the A/E consultant before a designer is selected, particularly where additional services are required.

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# The Selection Process

The means used to select an A/E consultant should depend somewhat on the size and scope of the contemplated project. For small projects with design fees estimated at less than \$50,000 --where costs of obtaining and screening proposals from several firms may exceed the benefits of having multiple proposals -- the district may choose an architect who has performed successfully for the district in the past, or set up a shorter version of the process described below.

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For larger projects, however, it is generally to the district's advantage to use a process which will allow for comparison between several individuals or firms. The discussion which follows focuses on setting up and implementing a comparative selection process which has proven effective in selecting design services for larger school construction projects.

Department Of Education & Early Development (EED) regulations regarding selection are as follow:

**4 AAC 31.065 SELECTION OF DESIGNERS AND CONSTRUCTION MANAGERS.** (a) If a school district determines that it is necessary to engage the services of a private consultant to design or provide construction management for an educational facility with money provided under AS 14.11.011 - 14.11.020, or for a project approved for reimbursement of costs under AS 14.11.100, and the estimated cost of the contract is more than \$50,000, the selection of the consultant shall be accomplished by soliciting written proposals by advertising in a newspaper of general circulation at least 21 days before the proposals are due. The contract shall be awarded to the most qualified offeror, after evaluating the proposals submitted.  
(b) Nothing in this section precludes a school district from retaining the services of a consultant on an as-needed basis under a multi-year contract, if the term of the contract is not more than five years.  
(c) The school district shall provide a procedure for administrative review of complaints by aggrieved offerors which allows them to appeal, within 10 days after the notice of intent to award, requesting a hearing with notice to interested parties, for a redetermination and final award in accordance with law. (Eff. 12/2/83, Register 88; am 8/31/90, Register 115)

Authority: AS 14.11.017 AS 14.11.020 AS 14.11.132

As mentioned previously, selection of design professionals should be undertaken as a qualifications-based process rather than one that is fee-based. The A/E consultant will lead the design effort of the project or planning team and the team will need the most qualified individual or firm, rather than the least expensive.

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The final selection of the A/E consultant or firm is the responsibility of the local school board. However, in most cases, the board will wish to delegate the responsibility for initial screening and review of potential candidates to school district administration, or to a committee such as the project or planning team. It is recommended that the initial screening be conducted by a minimum of three persons. The initial screening process should result in forwarding to the board a "short list" of between three and five candidates for final consideration.

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Education facilities planners can work with the district through the A/E consultant selection phase of the project, including negotiation of architect services fees and contracts. Some planning firms also

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## The Selection Process

offer project management services. During the pre-design period of the project, the district should explore all options for project management services and make its decisions about the use of consultants, prior to bringing on the A/E consultant. If project management is contracted to an outside organization, communication protocols and channels must be clearly identified to avoid confusion or misunderstandings during the life of the project.

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The competitive bid process generally does not apply to the procurement of professional services such as that of an A/E consultant or firm. Districts are free to solicit and choose design services in many different fashions, although city/borough districts may be subject to local ordinances. All districts, though, must exercise prudence in the management of public funds.

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Prior to seeking proposals from interested firms, the following procedures will need to be completed:

1. solicitation of potential applicants, which includes the decision to solicit from a few known firms or to advertise widely; to solicit only from local firms or from a larger geographic area; etc.<sup>2</sup>
2. preparation of project information which will be used by prospective applicants to prepare their presentations. Including the program for design or educational specifications.
3. determination of information to be requested from responding firms, at least in general form. In most cases, the screening criteria will dictate the areas to which firms will respond.
4. determination of screening criteria, which will spell out in some detail the items to be used in the review of proposals; the weights which will be assigned to the various items; treatment of "joint ventures" or multiple-firm proposals; etc.

After initial screening of the responding firms, follow these steps:

1. further review of candidates on the "short list" of firms or individuals who have been rated highest in the initial review. All of the firms on the "short list" should be technically capable of performing the required services. Because of the importance of intangibles, such as rapport, personality, ability to listen, etc., it is strongly recommended that individuals and firms on the "short list" be interviewed by the full school board or the board-designated selection committee. Interview schedules, a list of topics to be covered in the interviews, and a method of evaluating interviewees should be determined prior to inviting selected firms to participate and provided to the short list.

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<sup>2</sup> 4 AAC 31.065 (a) "If ... the estimated cost of the contract is more than \$50,000, selection of the consultant shall be accomplished by soliciting written proposals by advertising in a newspaper of general circulation at least 21 days before proposals are due."

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## The Selection Process

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2. research on responding individuals or firms, which will require follow-up of references given by respondents; actual visits to completed facilities designed by the responding firms may be considered for the top firms identified in the initial screening.

Once the selection procedures have been established, the district will begin to solicit proposals. A knowledgeable consultant can be retained to perform this task, complete the initial screening with the committee, and submit a “short list” to the district. Whoever performs this task should have information on the following areas prepared to send out to all parties interested in presenting a proposal.

1. project summary, or a brief description of the proposed facility, including intended use, location, square footage, and total funds available for both design and construction.
2. community description, which contains information about the location, ethnic and economic background, climate and other pertinent characteristics of the community.
3. description of the educational philosophy and program of the district, including any particular instructional methods, grade groupings or other characteristics which have design implications.
4. site description, including any particular characteristics which will affect design options.
5. funding sources and estimated budget amounts, including information about phasing or other constraints.
6. timeline which indicates the anticipated dates of architect selection, design completion and substantial completion of construction.
7. scope of services initially proposed, which includes any additional services beyond the basic services to be requested.
8. selection procedures, which indicate the events and timeline for the selection process.
9. selection criteria, which detail those areas of experience and capacity which will be weighed in the selection process.
10. description of proposal format, which should speak to any unusual formatting requirements of the school district. In general, firms and individuals should be allowed to format responses in any manner which yields the requested information.
11. deadline for submission, indicating to whom and where the proposals should be sent. The district should also indicate the number of copies required.

### Screening the Applicants

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# The Selection Process

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1. review of written proposals - Once proposals have been received, all proposals should receive an initial review utilizing the rating criteria and weighting system established earlier. A Suggested *Performance Rating Review*, developed by the South East Regional Resource Center, is included in Appendix A. Other checklists or methods which result in a uniform analysis of all submitted proposals can be developed by the district. On the basis of this initial screening, a “short list” of the three to five most qualified firms should be prepared.
2. interviews of “short list” firms or individuals - Experience has shown that a formal interview before the full board or the architect selection committee is the most useful method of evaluating the intangible characteristics which contribute greatly to a good district to A/E consultant working relationship. Interviews should be carefully planned to assist the board or selection committee make judgments on the human relations as well as the technical skills of the persons interviewed. A standard format and a general list of questions determined beforehand will help the interviewers to make the best opportunity of the time allowed and will assure that each firm or individual is asked to respond to the same types of inquiries.
3. reference checks - In addition to participating in an interview, firms and individuals on the “short list” should undergo a background check of references. Much can be learned--and much grief avoided--if the district or its agent takes a little time to call other districts or organizations which have been clients of the firms under consideration. Results of this background check should be given to the board or selection committee along with the firms’ written proposals.

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In some cases, actual visits to other completed facilities which have been designed by the firm(s) under consideration can be helpful. Generally, the facilities of only the top two contenders would be viewed, given the time and travel funds involved. However, if such visits are conducted, information about the effectiveness of the facility should be obtained from the users (teachers, students, maintenance personnel, etc.,) as well as from the administration or the board.

## Selection of Preferred Firm or Individual

Upon completion of the screening activities, the district should list the firms in the order of preference and begin to negotiate a fee with the first choice. If negotiations are not successful, the district can then proceed to negotiate with the next listed firm. If the district cannot decide between two or more firms, the district may request an additional interview or additional written information. However, the district and school board should avoid asking the firms to provide design sketches, models, or other services as part of the selection process.

Although cost considerations are not a part of the design team selection process in the same manner as in a competitive bid situation, the school board may wish to consider fee schedules in coming to a final determination. However, in most cases, only the general fee structure is available for comparison; architects or firms are unlikely to respond favorably to requests for a quote for services until they can fully review the owner’s scope of work. Determination of design costs is usually

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## The Selection Process

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arrived at through negotiations with the successful proposer. Items to be considered in such negotiations are covered in the following section.

# Negotiations

Once an A/E consultant has been selected, negotiations should take place between the district and consultant to identify the scope of services to be provided and the fee that will be paid. It is important for districts to realize that, because selection of design services is usually not governed by laws directed at competitive bid projects, districts have considerable flexibility in negotiating the terms and conditions of a design services contract. In order to make the most of this flexibility, districts are advised to have a well developed idea of the scope of services to be requested well ahead of sitting down to negotiate a contract.

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“Basic services” are described by the Department of Transportation & Public Facilities (DOT), and are similar to those described by the American Institute of Architects (AIA) (Please refer to this manual’s section entitled “Scope of Services”). The basic services are predetermined, so this should provide a starting point for negotiations.

## A. Determining Final of Scope of Services

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The services requested of an architectural firm can be characterized either as “basic,” (i.e. - services performed normally by a design professional in order to move the project through construction); and “additional” or “supplemental,” (i.e. - services required or desired beyond basic services).

The scope of services, proposed compensation, and the contract document should be reviewed and agreed upon. The following sections on compensation and the form of contract should give the owner background for negotiating.

As previously stated, the district should have a fairly firm idea of the scope of services to be requested of the architect before selection, particularly where additional services are required. The scope of services may be modified during the negotiation process, but it should not be left to the architect or architectural firm to determine what will or will not be provided.

## Compensation

The total cost of design services will be dependent on the scope of services required. Once the scope is set, the A/E consultant will indicate the amounts to be charged for basic services broken down by phase (schematic design, for example) and each selected additional service. Charges will include professional fees and expenses, both of which are negotiable. Compensation may be by a single method of payment for all the work required plus other agreed-upon expenses, or it may involve different methods for different elements of work. Districts should be aware of the more common methods of payment utilized for school facility design services: lump sums, specific hourly rates, and professional billing rates, each of which is described below. An additional method, cost per unit of work, is also used by architects. Because it is used only when dealing with apartment building units, hotel rooms, or other identical units, however, it is seldom encountered in educational facility construction.

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1. Lump sum is the method whereby the architect is paid a fixed dollar amount for specific services. The amount includes profit, direct salary costs and indirect costs.

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# Negotiations

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2. Specific hourly rates, whereby the architect is paid fixed hourly rates for each class of employee directly engaged in providing services of indefinite duration. The rates include profit, direct salary costs, and indirect costs.
3. Professional billing rates, an alternative to specific hourly rates, whereby the architect is paid fixed hourly rates for specifically named employees engaged in providing services of indefinite extent, plus a percentage, also referred to as a multiple, for indirect and non-reimbursable direct costs, and for profit.

The following definitions apply to the terms used above:

1. Direct salary costs consist of the actual hourly wage rate for time directly chargeable to the project, plus an allowance for payroll overhead.
2. Payroll overhead consists of all employee-related costs and personnel benefits, including life and medical insurance, sick leave, vacation and holiday pay, social security, workmen's compensation, pension retirement contributions, and other similar employee-related costs. Overtime for non-salaried hourly wage rate employees may be included, if approved in writing by the district.
3. Indirect costs include allowable expenses not directly identified with a single project. Indirect costs include salary and non-salary costs such as general administrative salaries, recruitment of employees, office rents, maintenance and utilities, office supplies, etc. Indirect costs are payable as a multiple or percentage of direct salary costs.

## Determining Reimbursable Expenses

In addition to fees, which cover salaries, profit and indirect costs, most projects require the A/E consultant to provide services which involve additional expenses. Such direct non-salary costs should be identified specifically as reimbursable expenses which will be paid upon receipt of documentation that the expense was incurred. Transportation and per diem are the most common reimbursable expenses. Others include:

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1. cost of subcontracts when these have been identified specifically within the professional services agreement;
2. fees for regulatory approvals paid to authorities having jurisdiction over services provided by the agreement. Such fees include local, state, or federal permitting costs;
3. expenses for telecommunication charges, including telephone, teleconference, fax, etc., incurred in the provision of services under the agreement;
4. expenses for postage and handling of materials required by the agreement;

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# Negotiations

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5. expenses for reproduction of reports, drawings and specifications in excess of that which would normally be required (usually two copies);
6. computer time for special applications required by the district;
7. expenses for producing specialized or elaborate models, promotional materials and presentations required by the district.
8. Other expenses identified in the contract.

As can be seen by the above listing, the amount of reimbursable expenses allowed is generally under the control of the district in that such expenses are triggered by the amount of travel and other activities required by the district. Because such expenses can mount up quickly, districts are encouraged to set a maximum amount for which expenses will be reimbursed in the agreement itself, unless further authorized by the district.

## Determining Amount of Compensation

Determination of final costs of design services will be the result of negotiation on the various fees asked by the design firm, plus the amount of reimbursable expenses to be allowed by the district. Districts can use several methods in estimating the limits of compensation. Perhaps the most common is to use a percentage of construction costs. Compensation for basic services range from 10% of estimated construction costs on small projects to 6% for large projects. Because of the wide range of construction costs throughout the regions of Alaska, the compensation for basic services should be calculated upon an estimated cost for identical work in Anchorage. To this fee can be added extra overhead items such as transportation, weather conditions, staff living and travel expenses, telephone and courier deliveries, etc. as additional or supplemental services. Additional services and reimbursable expenses will vary, depending on the extent of services required. Districts are cautioned that construction costs, not total project costs, should be used as the basis for calculation if a percentage is used.

Some confusion may exist regarding the application of Section 14.11.020 of Alaska Statutes dealing with Construction, Rehabilitation, and Improvement of Schools and Education Related Facilities. This section limits the costs of construction management to 4% for construction projects of \$500,000 or less, to 3% for projects over \$500,000. However, this section refers to the “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.” It does not place a percentage cap on the amount that can be expended for design services. Nor does it differentiate between those services performed by an architect under basic service and those to be performed by the owner in this administrative and accounting rate (or by a third party contract manager).

Under AIA document B141, the *Standard Form Of Agreement Between Owner And Architect*, it is acceptable for an architect to provide the services identified in statute as construction management. If a district chooses to retain a construction manager there must be a clear distinction between the

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# Negotiations

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responsibilities of the A/E consultant and the construction manager, as well as compensation for those services.

If a percent-of-construction-costs method is not used, districts must determine another way of establishing the reasonableness of compensation for design services. Other acceptable methods include comparison with other projects completed by the district, design cost ranges for comparable projects being developed by other districts, or professional judgment.

Design costs for basic services should be approximately the same for a similar project anywhere in the state, because the Alaskan cities in which A/E offices are located do not differ markedly in cost of living. Extra services, however, may vary considerably; a \$5 million facility constructed in Anchorage could easily cost \$10 million if built in Bethel or Barrow. Travel expenses to remote locations also need to be considered, along with the time lost when unplanned site visits become necessary. Fixed costs for site visits need to remain flexible enough to accommodate travel delays and resultant unplanned expenses.

Agreements between the owner and A/E consultant on the basis and amount of compensation, maximum amounts to be paid for reimbursable expenses, and the compensation schedule should be set out clearly in the agreement between the A/E consultant or firm and the district.

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DOT's "Professional Services Agreement" in Appendix C: Basis of Compensation contains one format which can be useful to districts in setting out the compensation rates and schedule. A more simplified format which has been used successfully by several districts is included as Appendix B of these Guidelines. Districts are able to choose the format that is most useful to them in laying out the terms and limits of compensation.

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# Contract for Design Services

Preparing a contract for design services is a complicated process, but the process can be made easier by utilizing standard contract documents available from one of many different organizations or associations. The comments which follow are not in any order of priority nor do they exhaustively discuss or analyze the various trouble spots which may arise in development of a contract for design services. This document covers a few specific areas and concepts that often appear to be misunderstood.

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The contracting process often raises issues and questions upon which specific legal advice is necessary. These guidelines are not a substitute for such advice but provide information that can enable the district to have an informed discussion with its legal counsel regarding the design services contract.

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## Standard Documents

There are numerous form contract packages in existence which have been developed by various user groups associated with the construction industry. For example, the American Institute of Architects (AIA) publishes forms which are often used by its members and others. The Alaska Department of Transportation and Public Facilities (DOT) has also developed such forms, several of which have been referenced. The Engineers Joint Contract Document Committee (EJCDC) also publishes standard contract documents. Other forms are published by contractor and engineering associations. Some municipalities have their own contract forms. Each form has its own constituency and group of adherents, and ideal circumstance of application.

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Architects generally use the AIA contract forms. These have been developed and modified to changing conditions over many years. The AIA contract documents from architect services through construction to project closeout are fully integrated with construction contract forms. All forms must be approached knowledgeably and employed properly. They can save a great deal of time and expense over trying to start from scratch. The contract document is extremely important, and the contracting agency should use great care in selecting the standard form. All contracts are not created equal.

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All contract form packages may be changed and supplemented. However, any change must be coordinated with construction documents. Some of the following comments provide areas for further consideration. Standard contract documents allow for revision, and each time the documents are used, the district should review provisions of the contract to verify that they apply, or if they should be modified. If provisions of the design contract are modified, careful consideration should be given to the impact that the change has on the corresponding construction contract. As with any contract, anytime provisions are modified or added, legal counsel should be consulted to determine the effect of the proposed changes.

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## Document Integration

Whether one of the form contracts is used as a basic document or not, the entire contract document for professional services must ultimately work together as a package. Districts must make sure that any changes incorporated into the form are made consistently throughout. If, for example, it is

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# Contract for Design Services

determined to delete the arbitration clause, all references to such arbitration must be deleted throughout the various contract documents.

These *Guidelines* focus only on the design services contract, ultimately there will be a construction contract, insurance documents etc. The duties, rights and responsibilities of the A/E consultant—as set out in the design services contract—will have a direct effect on the construction contract. It is very important that both the design contract and construction contract remain consistent.

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For this reason it is not recommended that a district use one form of design services contract and a different form of construction contract. If two “mismatched” contracts (e.g., AIA with DOT contract forms) were used, the provisions of each will have to be carefully rechecked and compared to be certain that all inconsistencies and discrepancies are caught and corrected. Generally speaking, if a standard design services contract is used, it should be used in the way it was intended—as a package with the construction contract as well.

## The Contractual Parties

AS 14.14.060 purports to lay out the relationship between a borough and a borough school district in the design and construction of schools. Although it is not entirely clear, a possible interpretation of that section is that the district is authorized to contract with the architect subject to municipal approval. The construction of the project, however, is handled and contracted by the municipality unless there are other specific agreements.

It is important that the contract documents clearly identify the entity responsible for the contract. If the municipality has authorized the school district to act as the contracting agency, a copy of the resolution should be included as an attachment to the contract.

It is also advisable that the same entity act as contracting agency for the complete project; i.e., both the design and construction of the project. If the municipality does not desire to release its obligation to the district as contracting agency for the construction of the project, then it may be preferable that the municipality should act as the contracting agency for the design services as well. Because the design of a project and the subsequent execution of that design are inextricably connected at many points and in many ways, the entity which bears the responsibility and also the liability for the design portion of the project should be a participant during construction to provide continuity and expertise the project.

- Deleted: reflect who the contracting agency is to be. If the municipality has by resolution authorized the school district to act as contracting agency for the design and construction of a certain project, a copy of the resolution should be attached to the professional services contract and made part of the contract by reference.¶
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Generally speaking, however, there should be a single entity which is the “contracting party” for all phases of the project. In many cases the head of the project team serves in that capacity or as representative of the superintendent of the school district.

## Indemnity and Liability

An “indemnity clause”, also known as the “hold harmless clause” may be important from the contracting agency’s viewpoint. Such a clause obligates the architect to indemnify and hold the owner harmless from certain kinds of claims. For example, if a floor collapses and the contractor

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# Contract for Design Services

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were to claim it was inadequately ~~designed~~; the contracting agency generally wants to assure itself that the architect will be responsible for defending the claim.

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The Alaska Statutes, Title 45, impose a limit on the kinds of claims that can be indemnified in a construction contract. An indemnity clause in any construction contract is void if it purports to indemnify the owner against liability for damages arising from the sole negligence or willful misconduct of the owner. The standard AIA form does not include an indemnity clause; it does however propose liability insurance and arbitration (A.S. 45.45.900).

A knowledgeable owner or school district may wish to find a place to put blame in case of delay or change order for faulty construction and personal damage. A construction project should be a three-way partnership of owner, architect and contractor. Architects can no more accept an indemnity clause than can the owner, architect or contractor.

Arbitration and liability insurance do provide for review of liability and security for recompense. Some contracts with architects have been written with a liquidated damage clause to provide that in the event the architect fails to perform in accordance with the contract time schedule, the architect agrees to pay. The standard AIA form does not include liquidated damages. It does call for arbitration of disputes and liability insurance.

Professional liability insurance is entrally required in Alaska and is carried by most architects. Policies are written with deductibles. Most claims in Alaska have been settled within the deductible. The cost for this insurance is high and if the owner's request is high the cost may equal the A/E expected profit. A reasonable and suggested approach is for the cost to be included in the final fee agreement. The duration of the policy is important. Policies are written on a "claims made" basis which means that a policy must be in force at the time of claim. If a policy is canceled at completion of a project will be in effect if a claim is made later.

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The architect, as a state-registered professional, accepts liability for injuries to his client or others which are due to his negligence. Most contracts do ask for architects or engineers to be covered by professional liability insurance. The architect does not profess to benefit but to a standard of practice. Due to complexities of a construction project it is neither person able not cost effective to expect perfection within normal fee ranges.

The AIA document does call for arbitration of claims, disputes or other matter in question between the parties to the agreement. This is in accordance with the construction industry arbitration rules of the American Arbitration Association.

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# Post-Occupancy Services

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When school construction is complete and the school is occupied, there are other services that may be provided by an A/E consultant. Those services include development of a preventive maintenance plan; development of an operations manual; and completion of a Post-Occupancy Survey.

Development of a preventive maintenance plan is a required deliverable under the department's Project Agreement, and involves developing periodic maintenance schedules for all of the components upgraded or installed as a part of a capital improvement project. The preventative maintenance plan also includes development of a custodial operation plan, energy management plan, maintenance training plan and renewal and replacement schedules.

Development of an operations manual is not required by the department, but is an important document that will provide future users of the facility with a reference document for operation of the building systems.

In some instances, especially in cases where a project will utilize new, innovative, or un-tested design strategies or non-standard space utilization strategies, it is beneficial to return to the facility at least a year after student occupancy and review the facility using a process known as a "Post-Occupancy Survey." A Post-Occupancy Survey provides the district and users of the facility an opportunity to report on how well the facility is performing. The department has developed a detailed questionnaire that can be used to perform a Post-Occupancy Survey.

**Deleted:** Both a post-occupancy evaluation and a preventive maintenance schedule are important elements of facility management. They should be considered as an additional service for the architect. The Department of Education and Early Development (EED) should expect to prepare additional documents to clarify the scope of work required. A third effect unusual in standard contracts is the assistance and instructions. The architect and his consultant, in cooperation with the general contractor and any subcontractors he has retained, prepare adequate operation and maintenance instructions as well as supplying manufacturers' literature and parts identification documents.¶  
¶ This service, as with the other additional services, should be incorporated in both the design and construction contracts.¶  
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# Project Budget and Schedule

The district should include provisions in the A/E contract to insure that the A/E consultant is prepared to develop three cost estimates at three separate times during project development.

The department's Project Agreement includes required submittal of three progressive cost estimates during the development of the project documents.

The first cost estimate typically prepared by the A/E consultant is the Schematic Design cost estimate, and is performed at the schematic design phase of the project, or approximately 35% through the design process. This estimate will be based on the schematic design drawings and will provide the district with a cost that includes more detail than the cost estimate a district may have prepared for the submittal of a CIP application. The schematic design cost estimate will assist the district in identifying if a project budget is adequate to complete the work identified in the scope of the project. At this state of the project, changes to the scope and design are relatively easy for the designer to make, so the district should pay very close attention to this document and make the effort to thoroughly review the cost estimate and scope of the project before authorizing the A/E consultant to proceed to the design development stage.

The Design Development cost estimate is completed at the design development phase of the project, or approximately 65% through the design process. This estimate will provide a further refinement of the cost estimate prepared during the schematic design phase and should give the district an idea of whether the project budget is adequate to complete the entire project scope. If the design development cost estimate exceeds the project budget, the district will need to work with the A/E consultant to refine the project scope to decrease project costs so that they are within the allocated budget amount.

The Construction Document cost estimate is completed at the end of the design phase, and serves as a final check of the anticipated project cost against the project budget. If the construction cost estimate exceeds the project construction budget, the district will need to review the project and identify components of the project that can be reduced or eliminated in order to bring the construction project cost within the construction budget for the project.

The department has developed a tool identified as the *Program Demand Cost Model*; this tool provides districts with the ability to perform basic cost estimating tasks that can be useful for preparation of planning level cost estimates that can be used for the Capital Improvement Program Application. The Cost Model can also be used for preparation of schematic level cost estimates, although it is strongly recommended that the design consultant be responsible for development of the schematic design level cost estimate. The *Cost Model*

In addition to tracking the project budget through cost estimates, the district should also consider including provisions in the contract with the A/E consultant that provide for tracking of the project schedule. The project schedule should be updated periodically throughout the project in order for the district to verify that the project completion date does not slip, or if it does, that the appropriate school district and school board representatives are informed of any changes in the schedule.

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It is desirable for the professional services agreement to contain a provision requiring the architect to prepare estimates at three stages of design as identified in the contractors contract. ¶  
¶  
These estimates are made at points identified in the architects contracts as schematics, design development, and construction ready. The architect will generally identify the contingencies allowed which might be plus or minus 20 mil for the first two and 10 mil for the last. ¶  
¶  
The Department of Education & Early Development (EED) has distributed a program demand cost model that might be adequate for a schematic estimate but labor and material would be appropriate. ¶  
¶  
The architect should design to an estimate agreed upon at the start of the design phase as reasonable for the established program or educational specifications. As work progresses, he should keep the district notified of changes required in budget or scope of work and obtain approval to proceed. If this is not feasible, he should propose changes in program size or quality. The architect will assist the district in a total project budget and in preparation of a project schedule. ¶

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## APPENDICES

# Appendix A

## Design Services Provided by Architects and Engineers

As the owner, you will find it helpful to review this chart with your architect or engineer to acquaint yourself with the various phases of design and construction and the services available for each.

Project Administration & Management Services	Pre-design Services	Site Development	Design Services
Project Administration	Programming	Site Analysis and Selection	Architectural Design/ Documentation
Disciplines Coordination/ Document Checking	Space Schematics/ Flow Diagrams	Site Development Planning	Structural Design/ Documentation
Agency Consulting/ Review/ Approval	Existing Facilities Surveys	Detailed Site Utilization Studies	Mechanical Design/ Documentation
Owner-Supplied Data Coordination	Marking Studies	On-Site Utility Studies	Electrical Design/ Documentation
Schedule Development/ Monitoring of the Work	Economic Feasibility Studies	Off-Site Utility Studies	Civil Design/ Documentation
Preliminary Estimate of Cost of the Work	Project Financing	Environmental Studies and Reports	Landscape Design/ Documentation
		Zoning Processing Assistance	Interior Design/ Documentation
Presentation		Geotechnical Engineering	Special Design/ Documentation
		Site Surveying	Materials Research/ Specifications

Bidding or Negotiation Services	Contract Admin. Services	Post-contract Services
Bidding Material	Submittal Services	Maintenance and Operational Programming
Addenda	Observation Services	Startup Assistance
Bidding/Negotiation	Project Representation	Record Drawing
Analysis of Alternates/ Substitutions	Testing & Inspection Administration	Warranty Review
Special Bidding	Supplemental Documentation	Post-contract Evaluation
Bid Evaluation	Quotation Requests/ Change Orders	
Contract Award	Contract Cost Accounting	Basic Services Contained in AIA's Standard owner architect agreement (B141)
	Furniture & Equipment Installation Administration	
	Interpretations and Decisions	Additional Services contained in expanded list of services (B163)
	Project Closeout	

Refer to AIA Document B163, *Standard Form of Agreement Between Owner and Architect for Designated Services for an expansive listing of available services.*

**Deleted:** This chart lists types of services offered by architects. The chart groups services under seven broad classifications that track the possible phases of a project as delineated in AIA Document B163, *Standard Form of Agreement Between Owner and Architect for Designated Services*. This agreement contains an expansive listing of available services and allows parties to identify in detail the specific services required for a given project.

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# Appendix B

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## Suggested A/E Rating System

Following is a possible rating review for architectural firm interviews should be prepared to consider other pertinent areas for discussion.

OVERALL EXPERIENCE - (10 points) The entire architectural experience based upon varied projects involvement.

SPECIFICALLY RELATED EXPERIENCES - (10 points) That architectural experience which directly involves construction and design of educational facilities similar to the project.

CAPACITY - (10 points) The ability of the architectural firm to handle the magnitude and complexity of the project.

QUALIFIED STAFF - (10 points) The professional experience of the architectural team to be involved in the project.

ABILITY TO RESPOND (TIMELINE)- (10 points) The ability to meet deadlines as proposed. The ability to respond to clients' needs.

DESIGN PHILOSOPHY- (10 points) The aesthetic and functional accomplishments of design and construction work performed (appearance, function, quality and technological approach).

COST- (10 points).The reality of the construction and project budget as indicated in material provided.

EXTRA POINTS- (10 points) Additional strengths of architectural firms. Examples include: design problems, limited number of change orders, staying within the architectural contract, communication and work attitude, responsiveness to problem areas, and varied recommendations received from previous clients.

# Appendix B

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## The Scoring Scale

Each area to be rated is to be assigned a numerical value from 0 to 10 by the rater. The following may be referred to as a general guide; Districts may wish to revise points available for each group.

- 10 - Exceptionally Strong Area
- 8 - Very Strong Area
- 5 - Average Strengths
- 3 - Weak Area
- 0 - Area not Addressed

Following are some of the items for discussion with the architect.

### OVERALL EXPERIENCE - (10 points possible)

1. What is the Architect's entire architectural experience based on various projects involvement? Are these experiences relevant to the project?
2. Has the Architect demonstrated familiarity with:
  - a. Making facilities accessible to physically handicapped?
  - b. Fire safety criteria?
  - c. Energy conservation appropriate to Alaska?
  - d. Design environment for education?
3. What does the Architect state regarding the following?
  - a. Response to owner (cooperation, management plan, timelines, etc.)?
  - b. Budget control (design budget, bids, change orders)?
  - c. Design success (function, user satisfaction)?
  - d. Aesthetic acceptance (owner and community acceptance)?
  - e. Maintenance and operation?
  - f. Involvement during construction (including construction observation)?
4. What efforts has the Architect made in the past to insure that contract documents include inventory lists detailing spare parts, location of suppliers for spare parts, submittal data, required testing, etc.? And how would the architect handle this important service?

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What experience does the Architect have in managing a project, and is he willing to take on this role from educational specification to move into finished facility?

### SPECIFICALLY RELATED EXPERIENCES - (10 points possible)

1. What school design experience has the Architect had? How closely is it related to this project? Have these closely related jobs been successes?
2. What can the Architect state regarding the following about past related experiences:
  - a. Response to owner (cooperation, timelines, management plan, etc.)?
  - b. Budget control ( design budget, bids, change orders)?
  - c. Design success (function, user satisfaction)?
  - d. Aesthetic acceptance (owner and community acceptance)?
  - e. Maintenance and operation?
  - f. Involvement during construction (including construction observation)?
3. Does the Architect have experience working on facilities similar to those contemplated by the District, with specific reference to experiences in last ten years?
4. What efforts would the Architect make to insure that contract documents include adequate documentation of materials and systems for operation maintenance and supply?
5. Is the Architect familiar with EED regulations?

### Capacity - (10 points possible)

1. What is the Architect's overall ability to handle the magnitude and complexity of the project? How the architectural team will be organized and administered?
2. Does the Architect have the office facilities and production capabilities to handle this project?
3. What is the Architect's suggested scope of services?
4. What energy conservation measures would the Architect utilize in this design? Detailed operational cost estimates may be required (regarding wind-driven rain, solar advantage, light utilization, heating and air-conditioning systems).

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5. Would the Architect and sub-consultants be willing to write a complete maintenance and operations narrative for the District?
6. Will the Architect and sub-consultants assist in a one-year post-occupancy inspection in order to evaluate maintenance and operations?
7. What other information do you feel is important about your firm that will justify your selection over other firms?

### QUALIFIED STAFF - (10 points possible)

1. Who are the members of the architectural team to be involved in the project? What is the professional experience of each of the team members? Does the Architect and/or architectural team have backgrounds appropriate for handling the project?
2. What are the names and addresses of the Architect's proposed consultants? Are they "in-house"? How is coordination handled for completion of electrical, mechanical, and structural components? What experience have you had with the proposed design team?

## Appendix B

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### ABILITY TO RESPOND (TIMELINE) - (10 points possible)

1. Does the Architect show a willingness to be sensitive to community needs, and will he welcome involvement of community representatives? Is the Architect willing to work with District personnel in the ongoing process?
2. What schedule and guidelines would the Architect suggest in order to plan and coordinate the design of the facility with community participation and approval?
3. Can the Architect suggest a time schedule indicating when the design, bidding and award, and construction phases could be completed?
  - a. What techniques has the Architect employed on past projects to ensure the set time schedule is met?
  - b. Does the Architect have the staff and capability to have the construction documents completed along the District's timelines? Who will be working on the project? List by discipline and by name.
  - c. What is a realistic period of time to have completed plans for actual construction? (Give some timelines.)
4. What design and construction problems have you encountered on similar projects, and how can they be avoided?
5. Could the Architect assist the District with the selection of all equipment and furnishings?
6. Would the Architect and sub-consultants be willing to write a complete maintenance and operations narrative for the District? Would the Architect and sub-consultants be available to perform start-up of a new facility and give complete maintenance instructions?
7. Can the Architect coordinate design to provide a place for the Work of Art? How could this effort be coordinated with the community?

## Appendix B

---

### DESIGN PHILOSOPHY- (10 points possible)

1. Does the Architect have the ability to produce an excellent design for the project? (This should be based upon the aesthetic and functional accomplishments of the design and construction work performed— appearance, function, quality, and technical approach.)
2. What is the Architect's design philosophy for this project (including life-cycle costs factors and aesthetic values)?
3. Is the Architect familiar with the various design standards (i.e., fire, handicapped) and EED requirements?
4. Can the Architect coordinate design to make provisions for art works? How could this effort be coordinated with the community?

### COST - (10 points possible)

1. What are the costs per square foot estimated to be for this area for various types and locations of school construction?
2. What is the Architect's basic scope of services? What is the estimated slope of reimbursable services?
4. Does the Architect see any constraints with the budget indicated for the project?

### EXTRA POINTS - (10 points)

1. Additional strengths of the Architect's firm. Examples include: design problems solved, services available during construction, change order experience, staying within the parameters of the architectural contract, communication and work attitudes, responsiveness to problem areas, and various recommendations received from previous clients.





# Appendix C

## SAMPLE SCHEDULE OF COMPENSATION

This sample schedule provides one method whereby the fees and expenses for each basic and additional service may be displayed in the agreement for design services. The form is a sample only and would need to be modified to reflect only those services which are to be provided by the architect or architectural firm.

### BASIC SERVICES

Description of Services	Agreement Reference	Days for Completion	Method Compensation of Pay	
			Fees	Expenses
Schematic Design	_____	_____	_____	_____
Design Development	_____	_____	_____	_____
Construction Documents	_____	_____	_____	_____
Bid Services	_____	_____	_____	_____
Construction Services	_____	_____	_____	_____

In addition to the above, services may be required of the architect during the following phases of the project:

Pre-design Services	_____	_____	_____	_____
Site Selection	_____	_____	_____	_____
Post-Construction Services	_____	_____	_____	_____

### Additional Services (Examples)

Feasibility Study	_____	_____	_____	_____
Energy Audit	_____	_____	_____	_____
Meetings & Presentations	_____	_____	_____	_____

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## Notes

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1. Castaldi, Basil, *Educational Facilities, Planning, Modernization and Management*, 2<sup>nd</sup> Edition, Allyn and Bacon, Inc., Boston, Massachusetts, 1982. p. 158.
2. State of Alaska, Department of Transportation and Public Facilities, Appendix B: Standard Statement of Services for General Architectural and Engineering Design, Form SSS/GAED, Juneau, Alaska, 1980. pp. 2-4.
3. American Institute of Architects, *Compensation Management System*, Form F819, AIA, Washington, D.C., 1975 and contracts B163 and B141.
4. Council of Educational Facility Planners, Inc, *Planning Guide*, 1991 C.E.F.P.I., Scottsdale, Arizona.

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# **Alaska School Facilities Integrated Facility Management Handbook**

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Thanks to the Bond Reimbursement and [Grant Review Committee members and to facility personnel across the state who reviewed this publication in its 1997 edition and responded to the Department of Education & Early Development with comments.](#)

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State of Alaska  
Department of Education & Early Development  
Juneau, Alaska

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# Overview

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An Integrated Facility Management Program (IFM) provides a school district with the tools necessary for maintaining and extending the life of existing school facilities.

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

Facility management is not just a matter of fixing things when they break; it is a comprehensive program of fixing and replacing components before they have a chance to create a crisis or emergency in a district facility.

With a comprehensive facility management program, a district has tools that will extend the effectiveness of each maintenance and operations dollar so that the maximum amount of funding is made available for the students in the classroom.

Tools for implementing a comprehensive facility management program include:

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

Alaska statute requires that a district develop and maintain a preventive maintenance plan that includes a minimum of the following components:

- Systematic tracking of time and cost associated with maintenance activities;
- Energy Management Plan for district buildings;
- Custodial Care program for district buildings;
- Preventative Maintenance Training Plan for facility managers and maintenance employees;
- Renewal and Replacement Plan for components and systems in facilities owned or operated by the district.

A district is not only required to demonstrate existence of a plan as described above, a district also needs to be able to demonstrate to the department that it is “adhering to the preventive maintenance plan” [AS 14.11.011(b)(4) and AS 14.11.100(j)(5)]

This Guide provides basic information that will assist a district in development and maintenance of an Integrated Facility Management Program.

# Statutory Authority

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## Alaska statutes:

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

AS 14.08.111: “A regional school board shall...”

(8) provide custodial services and routine maintenance of school buildings and facilities;

AS 14.14.060(f)

“The borough school board shall provide custodial services and routine maintenance for school buildings and shall appoint, compensate and otherwise control personnel for these purposes. The borough assembly through the borough administrator, shall provide for all major rehabilitation, all construction and major repair of school buildings. The recommendations of the school board shall be considered in carrying out the provisions of this section.”

AS 14.14.090: “In addition to other duties, a school board shall...”

(10) provide for the development and implementation of a preventive maintenance program for school facilities...”

- Define preventive maintenance (AS 14.14.090);

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

- Establish the requirements of a preventive maintenance plan as a condition of receiving grant funding [AS 14.11.011(b)(4)], or debt reimbursement [AS 14.11.100(j)(5)].

“evidence acceptable to the department that the district

(A) has a preventive maintenance plan that

- (i) includes a computerized maintenance management program, cardex system, or other formal systematic means of tracking the timing and costs associated with planned and completed maintenance activities, including scheduled preventive maintenance;
- (ii) addresses energy management for buildings owned or operated by the district;
- (iii) includes a regular custodial care program for buildings owned or operated by the district;
- (iv) includes preventive maintenance training for facility managers and maintenance employees;
- (v) includes renewal and replacement schedules for electrical, mechanical, structural, and other components of facilities owned or operated by the district; and

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

# Regulatory Guidance

---

## Alaska Administrative Code:

- Provide direction in regulation for development of a district Preventive Maintenance program.

### [4 AAC 31.013. Preventive maintenance and facility management](#)

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

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

(2) an energy management plan that includes recording energy consumption for all utilities on a monthly basis for each building; for facilities constructed before 12/15/2004, a district may record energy consumption for utilities on a monthly basis when multiple buildings are served by one utility plant;

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

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

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

(b) Repealed 12/15/2004.

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

(d) Repealed 12/15/2004.

(e) On an annual basis, the department shall provide a preliminary notice to each district regarding its compliance with each element required in (a) of this section, based on evidence of a program that was previously provided to the department, or that was gathered by the department during an on-site visit conducted under (f) of this section. On or before June 1, the department will provide its preliminary notice. The department may change a determination of non-compliance at any time during the year based on new evidence. Districts that are not in full compliance must provide evidence of compliance to the department by August 1. On or before August 15, the department will notify districts of its final determination regarding compliance. The department will deny a grant application submitted under [AS 14.11.011](#) by a district that has received a final determination from the department that the district is out of compliance with this section.

(f) The department shall conduct on-site inspections of school district preventive maintenance and facility management programs at least once every five years. The department may make additional inspections as it deems necessary. The department may change its determination of compliance based on information obtained during the on-site inspections.

(g) In this section

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

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

# Facility Management

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## Facility management as a strategy (not as a requirement)

While a preventive maintenance program is required by law, the requirement is not onerous, nor does it create undo burden on the districts. In the effort to achieve the most value for the operational dollar contributed by the district, a preventive maintenance program, and a diligent facility management program go hand in hand toward extending the life of existing facilities. State law provides the basic building blocks for districts to get the most of their facilities.

## Basic components of a successful facility management program

- Activity tracking – in order to effectively manage
- Progress reporting
- Energy Management
- Custodial Care
- Maintenance Training
- Capital Improvement

## Budgeting Considerations

70/30

Big things first

Spend a little now, or a lot later

4%

Consider contracting

Key components of an overall facility management program include preventive maintenance, corrective maintenance, energy management, custodial care, and staff training.

Preventive maintenance is the responsibility of the school district, and funding should be an integral part of a district's operating budget. Some school districts share the duties of maintenance with another agency within the city or borough. This situation is acceptable; however a district is still required to demonstrate compliance with state statute and regulation regarding preventive maintenance.

Alaska law requires that school districts have a preventive maintenance program<sup>1</sup>. The program is required to be certified by the Department of Education and Early Development at least every five years.

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<sup>1</sup> AS 14.11.011(b)(4), or AS 14.11.100(j)(5)

# **Development of a Preventive Maintenance Program**

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## **Introduction**

Development of a Preventive Maintenance Program that will satisfy the requirements of state statute includes the following tasks:

- Establish information tracking structure
- Identify Systems and Components to be included in the program
- Determine present condition of systems and components
- Establish appropriate levels of maintenance
- Prepare Work Items Plan

## **Information Tracking Structure**

In order to have an effective Preventative Maintenance Program, a district will need to develop a mechanism for collecting information on components and systems that will be the subject of the preventative maintenance program. There are many existing computer programs that are designed for such a purpose including School Dude, Maximo, Quick Time, Quest, TMA, JW Edward, ACT 1000, Miro-Main, or mpulse. Some districts choose to develop their own in-house method or program, but the key to any of the systems is in the ability to store, retrieve and analyze the information collected.

## **Identification of Facilities, Systems and Components**

Once a district has identified an information tracking structure, the next step is to get information entered into the system. First, the district will need to inventory and categorize the systems and components maintained by the district in each of the facilities that the district maintains. During the inventory, information such as quantity, type, size, manufacturer, model, material specification, location, key parts, part numbers, and other item-specific data will be documented.

In order to assist districts in this task, the department has established a baseline for a comprehensive preventive maintenance program by identifying facility systems and components that should be included in such a program. A list of these components is included as Appendix A. While thorough, the list is not intended to be an exhaustive list of every possible component.

From the list, a district can select those systems and components that apply to each of the district's facilities. Districts may add items as necessary to create a complete plan. Many buildings may have multiple system types within a particular category (e.g., roofing, package unit heaters, etc.) as well as multiple components of the same type (e.g., circulating pumps, water closets, toilet partitions, etc.). For each item, a specific preventive maintenance should be developed. The greater the number of differing systems and components, the greater the effort necessary to both develop and to implement the preventive maintenance plan.

# Development of a Preventive Maintenance Program

During this stage of the development of a district preventative maintenance program, there is going to be a significant amount of data-entry. In order to complete the data-entry, a district may need to consider hiring temporary help to complete the task.

A district may want to consider standardizing systems and components within the district facilities. Standardization can provide measurable benefits to a district in terms of time and cost. These benefits include reductions in inventory, reductions in training costs and increases in productivity and quality of work.

The Appendix A list of systems and components is designed to dovetail with other facility assessment devices such as the CEFPI *Alaska School Facility Appraisal* and the EDD *Guide for School Facility Condition Survey*, as well as facilities audits outlined by organizations such as the Association of Physical Plant Administrators (APPA).

## Determine Present Condition of Systems and Components

While developing the inventory of systems and components, the district will need to complete an inspection of the components in order to establish their current condition. A qualified technician or professional will need to make an assessment of current condition. The condition assessment will be used to determine both the immediate and future levels of preventive maintenance for the system or component and also its end-of-service-life replacement date.

## Establish Appropriate Levels of Maintenance

Preventive maintenance efforts range from visual inspections only to performance testing and analysis; from minor adjustment, cleaning and/or lubrication to complete overhauls; from reconditioning to components replacement.<sup>3</sup>

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

Manufacturer’s literature, experience, test results, and industry averages are some ways to determine both acceptable life-cycles and what preventive maintenance work would result in achieving those life expectancies in the most efficient manner (i.e. the lowest life-cycle cost).

## Prepare Work Items Plan

Once your levels of maintenance have been established, setting the tasks into a workplan is the next step. According to Basil Castaldi, a recognized expert in the field of educational facility planning and author of **Educational Facilities: Planning, Modernization, and Management (4th Edition)**, four elements make up any preventive maintenance work item.

“In any prescribed maintenance program, the list of tasks to be performed is described in detail. The frequency and nature of the work are clearly stated. The

# Development of a Preventive Maintenance Program

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materials to be used are specified in considerable depth and the manner in which the work is to be accomplished is expressed in simple language.”<sup>5</sup>

**From:** Kathy Brown [mailto:kathyb@serrc.org]  
**Sent:** Thursday, April 10, 2008 4:23 PM  
**To:** Carney, Donald (EED)  
**Cc:** donh@serrc.org  
**Subject:** Building Systems and Components

Hi Don,

Here's my "wish list" for the Preventive Maintenance Handbook (and Renewal & Replacement Schedules).

- I hope that when the Preventive Maintenance Handbook is updated, it will explain the relationship of the items listed in Appendix A to the systems in the Renewal & Replacement Schedule. It's difficult for the school districts to know when to update the Year Installed on the R&R schedules when they don't have a list of what each of those systems includes.
- If would be nice if both the handbook and the R&R schedules bore more of a resemblance to a standard classification system such as UNIFORMAT or MasterFormat.

I copied the items from Appendix A into a Word table and started matching them up to R&R systems in a second column. It is unfinished and contains errors, but I'd be glad to send you a copy if you think it would be helpful.

Kathy

[Custodial Plan](#)  
[Energy Management Plan](#)  
[Maintenance Training Program](#)  
[Renewal and Replacement Schedules](#)  
[Capital Improvement Program Development](#)

# **Implementing a Preventive Maintenance Program**

---

## **Introduction**

Implementation of a Preventative Maintenance Program that will satisfy the requirements of state statute include the four components mentioned earlier. Those components are:

- Systematic tracking of time and cost associated with maintenance activities;
- Energy Management Plan for district buildings;
- Custodial Care program for district buildings;
- Preventative Maintenance Training Plan for facility managers and maintenance employees;
- Renewal and Replacement Plan for components and systems in facilities owned or operated by the district.

## **Time and cost tracking (why work-orders)**

In order to effectively manage

## **Energy Management**

Develop an energy management plan. Local involvement in energy management plan. Its not just about turning off the lights. Staff and students can participate by identifying opportunities for energy savings. Annual review of overall energy management plan.

## **Custodial Care Program**

Should develop a custodial care plan with input from school staff, students and administrators. Identify critical inventory items.

## **Preventative Maintenance Training Plan**

## **Renewal and Replacement Plan**

## **Introduction**

Where the first school board responsibility was to *develop* a preventive maintenance program, the second responsibility is to *implement* a preventive maintenance program. This section offers guidance on carrying out the developed preventive maintenance work plan and establishes the

# Implementing a Preventive Maintenance Program

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importance of having management reports and a system of feedback from the field in order to implement an effective program.

The basic task of preventive maintenance implementation is to match needs with resources. However, both needs and resources are variables in the facilities management effort. As a result, implementation efforts may occur once to initiate a preventive maintenance program but will also require continuous monitoring of needs and resources to accommodate changes in these variables. For example, the work items assessment of a circulating pump may have indicated an anticipated failure in three years. At the three-year point, a stress test of the pump may indicate no appreciable degradation has occurred. This information may necessitate a revision to the preventive maintenance plan initially implemented. Other examples include the impact of new technologies, improvements to building systems or new tools that reduce repair times. These examples of variables in needs and resources all support the conclusion that implementation requires both an initial and an on-going effort.

Moving from the planning and development phase to implementation and operation almost always involves funding, regardless of the endeavor. Preventive maintenance is no exception. As evidence of the importance of funding in this transition, the portion of the Encyclopedia of Architecture devoted to implementation of a preventive maintenance program is largely a discussion of funding.<sup>6</sup> Because funding is so critical to the transition, some findings from research concerning maintenance funding and resources are included in the following paragraphs.

## Determining Necessary Resources

As previously mentioned, most of the resource requirements result in a need for funds. Determining the level of funding needed for preventive maintenance at a detailed level requires estimating literally thousands of labor and material line items. This method is very time consuming. Other approaches to budgeting for preventive maintenance include establishing a formula based on a percentage of the operating budget or a percentage of building replacement value(s). In California, research showed that:

“If a planned maintenance program is followed, about 5 percent of a district’s operating budget will be required to provide an adequate maintenance program.

In addition to the 5 percent expenditure for the district’s maintenance program, a reserve fund is needed for unanticipated and emergency maintenance expenditures. Another criterion for determining budget requirements is to calculate 2.9 percent of the current net building replacement cost or a projected cost based on the square footage of property to be maintained.”<sup>7</sup>

In another budgeting formula, the Encyclopedia of Architecture indicated:

“The cost of preventive maintenance ranges according to the intent of the *plans developed*. To set a budget for this type of work, one may estimate 5% of the present value of the building for preventive maintenance activity. Perhaps 1.5% of the value of the building may be estimated for simpler structures or systems.”<sup>8</sup>

# **Implementing a Preventive Maintenance Program**

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The department's capital improvement project (CIP) application scoring criteria assigns increased points to districts based on the percentage of total maintenance expenditures relative to the building replacement value(s). Maximum points are achieved when the percentage is 5% or greater.

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

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

## **Determining Organizational Structure**

The structure and organization of the preventive maintenance program must be in place before effective scheduling of work can occur. Some operations and maintenance organizations establish a cross-disciplined preventive maintenance work center whose main task is to inspect various systems and components (usually dynamic equipment) and write maintenance work orders. Following the inspection, more traditional work centers such as plumbing, sheet metal, etc. are assigned the actual work tasks. Other maintenance organizations are oriented almost completely to preventive maintenance tasks with major crafts taking responsibility for components and systems within their respective areas. In this model, a small multi-disciplined workcenter handles routine maintenance and emergency repairs and, in some cases, minor improvement work.

Rural school districts have their own unique challenges in establishing an organizational structure for preventive maintenance efforts. The availability of trained workers, limited accessibility, and logistical concerns are among the factors that will influence the organization. A common structure for many rural districts is to have one or two on-site custodial and general maintenance personnel supplemented by a traveling team of maintenance personnel with journeyman skills in the various building trades.

These are just some of many options available in establishing a structure for preventive maintenance scheduling.

## **Scheduling and Assigning Work**

The heart of any preventive maintenance program is scheduling and assigning specific preventive maintenance tasks. This is almost always done on a work order system. This element of the preventive maintenance program takes the work items developed for each component and assigns them to the appropriate maintenance craftsman or team according to the established structure and schedule.

# Implementing a Preventive Maintenance Program

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Simple preventive maintenance programs can be executed using a manual system of scheduling and work tracking. The statutory language in AS14.11.011 refers to this method as a “cardex system.” One writer describes an approach to such a method as follows:

“He or she may wish to record each task to be performed on a card. This may include a description of the task and the tools and the materials to be used. These cards may well serve as a ‘tickler file’ or a reminder to the *maintenance manager* as to when the task should be completed. He or she should note on the card the date of the next time when the work is required and file all of the cards chronologically by date, starting with the current date. In this way, the *maintenance manager* will know at a glance what needs to be completed within a given month, week or day. Once the work is completed, he or she can record what was done on the back of the card.”<sup>9</sup>

Although preventive maintenance tasks can be managed using a manual system, the computerized maintenance management system is now state-of-the-art and financially affordable for even the smallest maintenance organizations. In many school districts, maintenance managers are running computerized maintenance management programs particularly suited to preventive maintenance. Once pertinent data is entered into the database system, work orders detailing the preventive maintenance requirements can be generated and tracked. More advanced programs have an integral query feature which prompts maintenance managers for necessary input and provides industry standards for certain maintenance tasks. It is estimated that there are more than fifty (50) suppliers of maintenance software packages with price variations based on need and capacity. Maintenance magazines and the world-wide-web are good locations to look for these products.

## Reporting Systems and Feedback

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

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

# Implementing a Preventive Maintenance Program

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**Productivity** - the portion of a worker's time that is directly productive.

**Performance** - how well the individual is working, i.e., is work being completed as planned?

**Work Quality** - are they producing a satisfactory work product.

**Priority** - effective allocation of available time to the most important tasks. <sup>10</sup>

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

# Additional Considerations

---

Importance of PM in consideration of grant applications

Required Reports

- Maintenance Hours by Month and Work Type
- Summary of Completed and Scheduled Work Orders
- Summary of Incomplete Work Orders by Age and Status
- Comparison of Scheduled to Unscheduled Maintenance
- Unscheduled Maintenance Trends

# Conclusion

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This guideline provides basic direction to school district's in Alaska who are interested in developing a compliant Preventative Maintenance program for district facilities. Districts should consider this document as a place to start, and to utilize the tools and recommendations contained in this document to develop a compliant program.

# Appendices

## Appendix A Sample Systems and Components Inventory List

<p><b>Foundation and Substructure</b></p> <ul style="list-style-type: none"> <li>• Footings</li> <li>• Foundation walls</li> <li>• Slab/beams on grade</li> <li>• Piling/Posts             <ul style="list-style-type: none"> <li>- thermopiles</li> </ul> </li> <li>• Reinforcing</li> <li>• Connectors</li> <li>• Waterproofing</li> <li>• Insulation</li> <li>• Underdrains</li> </ul> <p><b>Superstructure</b></p> <ul style="list-style-type: none"> <li>• Columns</li> <li>• Beams</li> <li>• Rigid frames</li> <li>• Floor structure             <ul style="list-style-type: none"> <li>- joists</li> <li>- deck/slab/sheathing</li> <li>- ramps</li> </ul> </li> <li>• Roof structure             <ul style="list-style-type: none"> <li>- trusses</li> <li>- deck/slab/sheathing</li> </ul> </li> <li>• Monolithic bearing walls</li> <li>• Stairs and railings</li> <li>• Structural bracing</li> <li>• Welds/connectors</li> </ul> <p><b>Exterior Wall Systems</b></p> <ul style="list-style-type: none"> <li>• Wall construction</li> <li>• Cladding/sheathing</li> <li>• Doors             <ul style="list-style-type: none"> <li>- frame</li> <li>- door unit</li> <li>- hardware</li> </ul> </li> <li>• Glazing systems             <ul style="list-style-type: none"> <li>- frame</li> <li>- glazing</li> <li>- hardware</li> <li>- curtain walls</li> <li>- storefronts</li> </ul> </li> <li>• Balcony walls/railings</li> <li>• Louvers and screens</li> <li>• Expansion/seismic joints</li> <li>• Insulation</li> <li>• Protective coating</li> <li>• Sealants</li> </ul>	<p><b>Roof Systems</b></p> <ul style="list-style-type: none"> <li>• Roofing</li> <li>• Insulation</li> <li>• Paving and ballast</li> <li>• Curbs/supports</li> <li>• Expansion/seismic joints</li> <li>• Drains, gutters and downspouts</li> <li>• Drywells</li> <li>• Flashing and trim</li> <li>• Fasteners</li> <li>• Snow stops</li> <li>• Roof openings</li> </ul> <p><b>Interior Construction</b></p> <ul style="list-style-type: none"> <li>• Fixed partitions</li> <li>• Demountable partitions</li> <li>• Retractable partitions</li> <li>• Doors             <ul style="list-style-type: none"> <li>- frame</li> <li>- door unit</li> <li>- hardware</li> </ul> </li> <li>• Glazing systems             <ul style="list-style-type: none"> <li>- frame</li> <li>- glazing</li> <li>- storefronts/entrances</li> </ul> </li> <li>• Interior finishes             <ul style="list-style-type: none"> <li>- carpet</li> <li>- resilient tile/sheet</li> <li>- ceramic/clay tile</li> <li>- terrazzo</li> <li>- paint</li> <li>- vinyl/fabric wall cover</li> <li>- wood</li> <li>- metal panels</li> </ul> </li> <li>• Ceiling system             <ul style="list-style-type: none"> <li>- suspension grid</li> <li>- acoustical units</li> <li>- soffits (metal/gyp.)</li> </ul> </li> </ul> <p><b>Specialties</b></p> <ul style="list-style-type: none"> <li>• Toilet partitions</li> <li>• Display boards</li> <li>• Projection screens</li> <li>• Display cases</li> <li>• Lockers</li> <li>• Flag poles</li> </ul>	<p><b>Conveying Systems</b></p> <ul style="list-style-type: none"> <li>• Elevators</li> <li>• Moving stairs/walks</li> <li>• Dumbwaiters</li> <li>• Pneumatic tube</li> <li>• Lifts(material/personnel)</li> </ul> <p><b>Heating Systems</b></p> <ul style="list-style-type: none"> <li>• Boilers</li> <li>• Furnaces</li> <li>• Burners</li> <li>• Fuel tanks &amp; distribution</li> <li>• Heat transfer equipment             <ul style="list-style-type: none"> <li>- heat exchangers</li> <li>- coils</li> </ul> </li> <li>• Terminal/package units</li> <li>• Fin tubes/radiators</li> <li>• Heating accessories             <ul style="list-style-type: none"> <li>- dampers/draft control</li> <li>- breeching and ductwork</li> <li>- stacks</li> <li>- insulation</li> <li>- piping</li> <li>- valves</li> </ul> </li> </ul> <p><b>Air Handling Systems</b></p> <ul style="list-style-type: none"> <li>• Air handling units</li> <li>• Unit ventilators</li> <li>• Fans</li> <li>• Inlets/outlets</li> <li>• Ducting systems             <ul style="list-style-type: none"> <li>- dampers</li> <li>- filters</li> <li>- mixing boxes</li> <li>- sound attenuators</li> </ul> </li> <li>• Humidifiers</li> <li>• Dust collection systems</li> </ul> <p><b>Cooling Systems</b></p> <ul style="list-style-type: none"> <li>• Condensing units</li> <li>• Compressors</li> <li>• Heat exchangers</li> <li>• Packaged A/C units</li> <li>• Chillers</li> <li>• Absorption units</li> </ul>
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# Appendices

## Appendix A Sample Systems and Components Inventory (cont.)

<p><b>Mechanical Controls</b></p> <ul style="list-style-type: none"> <li>• Compressors</li> <li>• Pneumatic valves/levers</li> <li>• Pneumatic tubing</li> <li>• Electronic controls</li> </ul> <p><b>Plumbing Systems</b></p> <ul style="list-style-type: none"> <li>• Cold water piping</li> <li>• Water heater</li> <li>• Hot water piping</li> <li>• Pumps               <ul style="list-style-type: none"> <li>- sewage lift</li> <li>- water booster</li> <li>- circulating</li> <li>- sump</li> </ul> </li> <li>• Valves and traps</li> <li>• Insulation</li> <li>• Plumbing fixtures               <ul style="list-style-type: none"> <li>- sinks and faucets</li> <li>- toilets/urinals</li> <li>- coolers/drinking fountains</li> <li>- exterior hose bibs</li> </ul> </li> <li>• Waste vents</li> <li>• Waste piping</li> <li>• Septic tanks</li> </ul> <p><b>Fire Protection/Suppression Systems</b></p> <ul style="list-style-type: none"> <li>• Sprinkler piping</li> <li>• Backflow preventers</li> <li>• Sprinkler heads</li> <li>• Fire extinguishers</li> <li>• Fire hose system</li> <li>• Standpipe connection</li> <li>• Fire pumps</li> <li>• Grease hood extinguisher</li> </ul> <p><b>Power Generation and Transmission</b></p> <ul style="list-style-type: none"> <li>• Generators</li> <li>• Engines/turbines</li> <li>• Transfer switches</li> <li>• Transformers</li> <li>• Service wiring</li> <li>• Substation</li> <li>• Switchgear</li> <li>• Bus ducting</li> <li>• Overcurrent protection</li> </ul>	<p><b>Power Distribution Systems</b></p> <ul style="list-style-type: none"> <li>• Main distribution panel</li> <li>• Wiring</li> <li>• Conduits</li> <li>• Raceway</li> <li>• Cable trays</li> <li>• Distribution panels</li> <li>• Electrical receptacles</li> <li>• Circuit breakers</li> <li>• Baseboard heaters</li> <li>• Motors/fans</li> <li>• Heat trace</li> </ul> <p><b>Lighting Systems</b></p> <ul style="list-style-type: none"> <li>• Fixtures               <ul style="list-style-type: none"> <li>- fluorescent fixtures</li> <li>- incandescent fixtures</li> <li>- HID fixtures</li> </ul> </li> <li>• Wiring</li> <li>• Lighting panels</li> <li>• Emergency lighting</li> <li>• Standby lighting</li> <li>• Exterior lighting</li> </ul> <p><b>Signal Systems</b></p> <ul style="list-style-type: none"> <li>• Computer data</li> <li>• Public address</li> <li>• Television</li> <li>• Telephone</li> <li>• Clock system</li> <li>• Satellite delivery system</li> <li>• Fire alarms</li> <li>• Fire door hold-opens</li> <li>• Security alarm/devices</li> </ul> <p><b>Landscaping Systems</b></p> <ul style="list-style-type: none"> <li>• Irrigation</li> <li>• Tree/shrub plantings</li> <li>• Flower bed plantings</li> <li>• Turf/lawn</li> <li>• Walks/plazas</li> </ul>	<p><b>Playfields and Playground Systems</b></p> <ul style="list-style-type: none"> <li>• Football fields</li> <li>• Baseball/softball fields</li> <li>• Hard surface courts</li> <li>• Hockey/skating rinks</li> <li>• Playdecks</li> <li>• Swings</li> <li>• Climbing toys</li> <li>• Safety mats</li> <li>• Gravel and containment</li> <li>• Markings/painting</li> </ul> <p><b>Vehicular Systems</b></p> <ul style="list-style-type: none"> <li>• Parking lots</li> <li>• Roads/drives</li> <li>• Curbs</li> <li>• Fire lanes</li> </ul> <p><b>Site Utilities</b></p> <ul style="list-style-type: none"> <li>• Fuel tanks</li> <li>• Fuel distribution piping</li> <li>• Storm drainage</li> <li>• Fire hydrant systems</li> <li>• Electrical power</li> <li>• Pole-mounted lighting</li> </ul> <p><b>Equipment</b></p> <ul style="list-style-type: none"> <li>• Furnishings               <ul style="list-style-type: none"> <li>- classroom furniture</li> <li>- seating</li> <li>- rugs and mats</li> </ul> </li> <li>• Fixtures               <ul style="list-style-type: none"> <li>- window treatments</li> <li>- artwork</li> <li>- vending</li> </ul> </li> <li>• Equipment               <ul style="list-style-type: none"> <li>- waste handling</li> <li>- loading dock</li> <li>- parking equipment</li> <li>- postal</li> <li>- food service</li> <li>- woodworking shop</li> <li>- auto/engine shop</li> </ul> </li> <li>• Special construction               <ul style="list-style-type: none"> <li>- vaults</li> <li>- swimming pools</li> <li>- acoustical enclosures</li> <li>- raised computer flooring</li> </ul> </li> </ul>
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# Appendices

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## Appendix B

### Definitions

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The definitions included below were reviewed and approved by the Bond Reimbursement and Grant Review Committee at the April 18, 1997 BR&GR meeting.

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.

Renewal or Replacement

A scheduled and anticipated systematic upgrading of a facility system or component to rehabilitate it to a renewed functioning standard.

System(s)

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

## **Appendix C**

### **SAMPLE REPORTS**

# Appendices

## Anonymous School District - Maintenance Hours by Month and Work Type - 5/1/2004 through 4/30/2005

	AD	CM	CP	EM	GM	PM	SR	TH	TN	VM	VN	Total Hours	Hours Available	Unreported Hours
May-04	31.75	365.42		179.58		95.77	1.50	226.50		3.00		903.52	500.00	-403.52
Jun-04	21.00	449.58		7.50		203.06		97.17				778.31	500.00	-278.31
Jul-04	20.00	105.92		26.50				40.50	12.00	3.50		208.42	500.00	291.58
Aug-04	61.00	167.00				0.25		29.75	16.00	28.50		302.50	500.00	197.50
Sep-04	44.00	104.00		21.00		90.99		16.00	11.25	9.00		296.24	500.00	203.76
Oct-04	39.25	100.50		52.50		128.11	1.75	33.75	45.00	14.75		415.61	500.00	84.39
Nov-04	31.50	262.49		13.25		128.64	21.25	75.93	3.00	42.25	2.75	581.06	500.00	-81.06
Dec-04	18.00	129.83		73.33		196.63	22.00	82.16		60.25	26.00	608.20	500.00	-108.20
Jan-05	31.50	92.84		80.99		91.54	6.50	52.75		9.00		365.12	500.00	134.88
Feb-05	37.67	156.25	8.00	4.00		133.19	7.00	65.92		19.92		431.95	500.00	68.05
Mar-05	48.92	214.34		2.00	16.00	159.01	5.00	12.00	22.00	18.25		497.52	500.00	2.48
Apr-05	13.00	248.07		44.50	1.50	120.14		34.50		78.83	12.83	553.37	500.00	-53.37
<b>Total Hours</b>	<b>397.59</b>	<b>2,396.24</b>	<b>8.00</b>	<b>505.15</b>	<b>17.50</b>	<b>1,347.33</b>	<b>65.00</b>	<b>766.93</b>	<b>109.25</b>	<b>287.25</b>	<b>41.58</b>	<b>5,941.82</b>	<b>6,000.00</b>	<b>58.18</b>

Work Types: AD=Administrative Labor CM=Corrective Maintenance CP=Capital Project EM=Emergency Maintenance EV=Event Report GM=General Maintenance PM=Preventive Maintenance SR=Snow and Ice Removal TH=Teacher Housing TN=Training TR=Travel Time VM=Vehicle Maintenance VN=Vandalism

Work Order Data as of 5/16/2005, 9:44:26AM

Note: Hours are reported in the work order month, which may not be when the work was done.



CIP\_c1a21\_MaintHoursSAMPLE.xls

# Appendices

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5/16/05 9:55 am

## Summary of Completed and Scheduled/Unfinished Work Orders

Page 1 of 1

5/1/2004 through 4/30/2005

Month	Completed	Scheduled/ Unfinished	Total
May 2004	282	5	287
June 2004	276	0	276
July 2004	22	0	22
August 2004	34	0	34
September 2004	266	2	268
October 2004	232	0	232
November 2004	333	0	333
December 2004	277	1	278
January 2005	190	0	190
February 2005	232	1	233
March 2005	237	0	237
April 2005	259	5	264
<b>District Totals</b>	<b>2,640</b>	<b>14</b>	<b>2,654</b>

**Report Options Selected:** *Includes Housing (134 reported)*  
*Includes GM Work Type (2 reported)*  
*Includes All Other Work Types (124 non-facilities-maintenance types reported)*



CIP\_c1a2i2\_CompleteScheduledSAMPLE.tp

# Appendices

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5/16/05 9:56 am

## Summary of Incomplete Work Orders by Age and Status 5/1/2004 through 4/30/2005

Page 1 of 1

Status		Current	31-60	61-90	91-120	Over 120	Total
APPR	Approved	0	0	0	0	1	1
DEFER	Deferred	0	0	1	1	6	8
INPRG	In Progress	1	2	0	0	1	4
WMATL	Waiting for Material	0	0	1	0	1	2
WSCH	Waiting to Be Scheduled	0	4	6	0	16	26
<b>District Totals</b>		<b>1</b>	<b>6</b>	<b>8</b>	<b>1</b>	<b>25</b>	<b>41</b>

**Report Options Selected:**

*Includes Housing (0 reported)*

*Includes GM Work Type (2 reported)*

*Includes All Other Work Types (0 non-facilities-maintenance types reported)*



CIP\_c1a23\_incompleteAgeStatusSAMPLE.rpt

# Appendices

5/16/05 9:56 am

## Comparison of Scheduled to Unscheduled Maintenance

Page 1 of 1

5/1/2004 through 4/30/2005

<u>Month</u>	<u>Scheduled Maintenance WO Hours</u>	<u>Unscheduled Maintenance WO Hours</u>	<u>Total WO Hours</u>	<u>Percent Scheduled</u>	<u>Crime &amp; Nature* WO Hours</u>
May 2004	95.77	545.00	640.77	15%	1.50
June 2004	172.95	457.08	630.03	27%	
July 2004	0.00	132.42	132.42	0%	
August 2004	0.00	167.25	167.25	0%	
September 2004	121.10	125.00	246.10	49%	
October 2004	128.11	153.00	281.11	46%	1.75
November 2004	128.64	275.74	404.38	32%	24.00
December 2004	196.63	203.16	399.79	49%	48.00
January 2005	80.62	130.33	190.95	32%	6.50
February 2005	164.11	166.50	330.61	50%	4.50
March 2005	159.01	249.34	408.35	39%	7.50
April 2005	115.14	307.65	422.79	27%	12.83
<b>District Totals</b>	<b>1,342.08</b>	<b>2,912.47</b>	<b>4,254.55</b>	<b>32%</b>	<b>106.58</b>

**Report Options Selected:** Excludes Housing  
 Excludes GM Work Type  
 Excludes Work Types AD, CP, EV, TN, TR, and VM (not facilities maintenance)

\*Hours for remediating damage due to illegal acts or the forces of nature (work types SR and VN) are excluded from other columns.



CIP\_c1a3v1\_CompareSched2UnschedSAMPLE.rpt

# Appendices

5/16/05 9:57 am

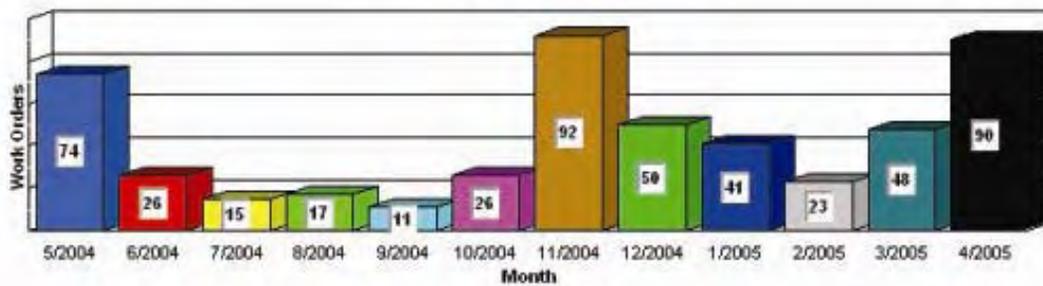
## Unscheduled Maintenance Trends

Page 1 of 1

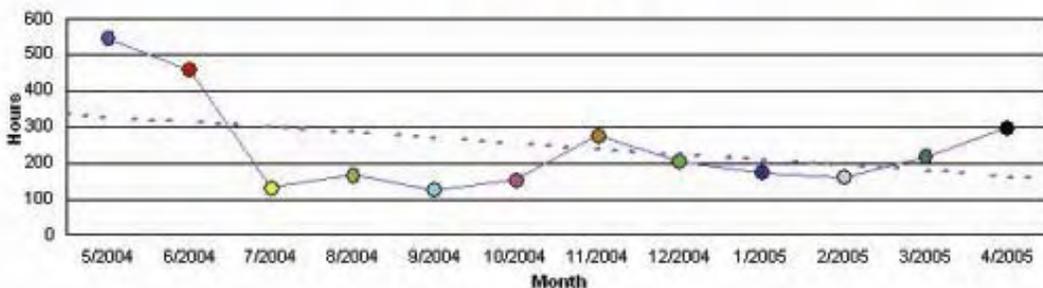
5/1/2004 through 4/30/2005

Location	Month	Unscheduled Maintenance Work Orders	Unscheduled Maintenance WO Hours	Unscheduled Maintenance WO Costs
	May 2004	74	545.00	\$22,159.85
	June 2004	26	457.08	\$30,137.27
	July 2004	15	132.42	\$4,534.76
	August 2004	17	167.25	\$7,163.97
	September 2004	11	125.00	\$6,893.10
	October 2004	26	153.00	\$6,204.17
	November 2004	92	275.74	\$10,097.37
	December 2004	50	203.16	\$7,079.34
	January 2005	41	173.83	\$5,829.34
	February 2005	23	160.25	\$39,683.21
	March 2005	48	216.34	\$20,918.81
	April 2005	90	297.57	\$10,125.68
	<b>District Totals</b>	<b>513</b>	<b>2,906.64</b>	<b>\$170,826.87</b>

Number of Work Orders by Month



Work Order Hours by Month



**Report Options Selected:**

- Excludes Housing*
- Excludes GM Work Type*
- Excludes Work Types AD, CP, EV, TN, TR, and VM (not facilities maintenance)*
- Excludes crime and nature work types (SR and VN)*



CIP\_c1a3k2\_UnschedTrendsSAMPLE.rpt



State of Alaska  
Department of Education and Early Development

School Facilities

**Sustainable Schools  
Educational Specifications Supplement**

Establish sustainability goals at the conceptual stage of project development.

- Goals on fuel usage
- Goals on water usage
- Goals on electricity usage
- Goals on maintenance expenditures
- Goals on training expenditures

Monitor and adjust goals year-to-year.

Consider level of difficulty for maintenance when selecting building systems. Don't select a system that promises potential utility savings if the cost of maintenance and operation of that system will cost more than is saved, or requires skills the district does not have to maintain and/or operate.

Consider school size in terms of educational requirements, but also in terms of operating costs associated with the space.

Consider a site as close to the majority of the student population served as possible.

Consider a site that provides ready access to necessary utilities, or that provides site characteristics that provide for on-site development of utility services.

Consider a site with minimal impact on existing habitat, or alternatively consider a site that provides a clear opportunity for habitat restoration.

Consider Building orientation to take advantage of the site characteristics.

- South facing windows to maximize natural light infiltration.
- Use natural features to protect from wind loads.
- Consider predominant wind direction when identifying window size and location.
- Consider that the majority of usage will take place during the school year (Sep-May).

Consider joint-use of a school facility with other organizations such as community schools programs, community health programs, mental health programs, senior care or service programs or other programs compatible with the school mission.

Consider choice of heating and ventilation alternatives that provide the district with the best combination of energy efficiency and ease of maintenance.



# State of Alaska

## Department of Education and Early Development

### School Facilities

Consider day-lighting alternatives that minimize the use of artificial lighting throughout the building while still provided for adequate insulation characteristics for the school location. Compare costs of alternative day-lighting strategies in terms of electricity cost, as well as anticipated heating costs.

Consider strategies to minimize water use

- Low-flow double-flush toilets
- Waterless urinals
- Recapture of grey-water and treatment for non-potable water uses
- Rainwater recovery systems

Compare the cost of increasing insulation R-values versus the long-term benefit of decreased heating costs.

Consider computer controlled heating, ventilation and lighting controls with remote monitoring and data collection capacity to monitor and analyze energy usage.

Consider rapidly renewable materials.

Consider use of regionally available materials.

Establish a minimum Indoor Air Quality (IAQ) standard and develop a process to monitor IAQ during peak usage.

Establish a minimum acoustical performance standard and verify at commissioning.

Establish a minimum classroom and hallway lighting level and verify at commissioning.

**2008 Work Topics for the BR & GR Committee**  
Reviewed 07/21/08

<b>2008 Work Items</b>	<b>Responsibility</b>	<b>Due Date</b>
1. Subjective Scoring Review	Staff	December 08
2. FY2010 CIP List Review	Committee	December 08
3. Database Review		
3.1. Consolidation into a single Database	Staff	December 08
3.2. Coordination with the Unity project	Staff	December 08
3.3. Incorporate renewal and replacement information	Staff	December 08
4. 2011 Application	Staff	April 09
5. Online CIP Application	Staff	April 09
6. Statute and Regulation Changes	Staff	December 08
7. Publications Review	Staff	Ongoing
7.1. Integrated Facility Management Guide (IFM)	Staff	July 08
7.2. A/E Selection Guide	Staff	July 08
7.3. Outdoor Facilities Guidelines		
7.4. Space Guidelines		
7.5. Lifecycle Cost Analysis Handbook		
7.6. Swimming Pool Guidelines		
7.7. Site Selection Criteria Handbook		
7.8. Condition Survey		
7.9. Renewal and Replacement Guideline		
7.10. Project Delivery Handbook		
7.11. Equipment Purchase Guideline		
7.12. Educational Specifications Handbook		
7.13. Capital Project Coordinators Handbook		

**Projected Meeting Dates**

July 21, 2008 (Fairbanks)

December 3, 2008 (Anchorage)

April 16, 2009 (Juneau)

Other times as necessary teleconference