

ALASKA LEGISLATURE SPECIAL COMMITTEE/SUBJECT FILES 8672

2526 SCOMM 111: DEFERRED MAINTENANCE TASK FORCE, 1997

**Capital Improvement Program Budget Request
School Construction Grant Fund - Project Descriptions
for Fiscal Year 1998**

DISTRICT	PROJECT	DESCRIPTION
68 Denali	Anderson Heating & Ventilation	Requesting funding for the replacement of four oil fired heaters in the Anderson School with new hydronic piping throughout the facility connected to one central oil fired heater. The new system would have a backup heater and fuel oil supply pump.
69 Juneau	Dzantik'i Heeni Site Development	This project is the development of the area around the school facility and adjacent wet lands for environmental education projects for students, residents and tourists as well as to provide recreational areas outside the classroom for the purpose of further developing a healthy campus. Scope of work is to include construction of outdoor educational instruction areas and the construction of recreational areas such as a ballfield and track.

**Capital Improvement Program Budget Request
Major Maintenance Grant Fund - Project Descriptions
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DISTRICT	PROJECT	DESCRIPTION
1	Juneau School District Mendenhall River School Roof Replacement	Funds are needed to replace the existing roof including some structure. Given the extensive work that will be required at all eaves of the building from the problems of sliding snow and icing eaves and gutters, the most expedient and prudent course of action will be to remove the entire existing roof system to the structural frame and construct a new ventilated roof and eave system with reconfigured gutters.
2	Fairbanks North Star Borough Hunter: Planning, Design & Renovation/ Addition	The project consist of planning and designing renovations to the Hunter School. These renovations include the correction of the fire code deficiencies, replacing the gym, providing handicapped access, upgrading the mechanical and electrical systems.
3	North Slope Borough Bulk Fuel Systems Upgrades--- Districtwide	Borough wide upgrade of all existing bulk fuel storage facilities to centralize storage and distribution within each community . The District's share of this work is approximately \$6 million.
4	Bering Strait Diomedes Structural Remediation Phase II & III	District is requesting funding to correct critical structural and foundation failures. This involves mainly the elementary area and a very small portion of the high school.
5	Fairbanks School District Denali: Planning, Design, & Renovation/Addition	Funding requested to correct a number of structural, building code, site and program deficiencies attributed to the existing structure.

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6	NW Arctic School District Kiana High School Renovation	Funds will be used to redefine and programmatically reallocate some of the existing educational space and provide new space for a better overall educational facility for the village. The existing elementary structure is a BIA facility constructed in the late '60's. The age and condition of this structure is beyond its intended life. This problem is exacerbated by the increase demand on the facility with the increase in population.
7	SW Region Schools Kolliganek Foundation & Basement Repair	A seasonal high water table and water infiltration has created foundation and structural failures in the floor joist system. Funding will replace the existing foundation system at the vocational education area, replace waterproofing, install drain tiles to redirect run-off away from the building, install ventilation in the basement and the repair existing water damage.
8	Sitka Borough Schools High School Renovation	Funding is needed for remodeling and reconstructing in order to protect a 35 year old structure. Work will consist of upgrading existing electrical, mechanical and operating systems and correcting the related building code violations.
9	Delta/Greely Schools Delta Roofing Repair & Fire Alarm Replacement	This project encompasses the repair/replacement of portions of the school roof that are no longer salvageable and repair/replacement of structural members that are required to maintain the integrity of the facility. Also included is the replacement of the fire alarm system in the Secondary and Elementary School and extension of that system into the Agricultural/Vocational, and University of Alaska buildings.

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DISTRICT	PROJECT	DESCRIPTION
10 Anchorage School District	Romig Jr. High Roof Replacement	Project is to replace a 33 year old roof. Leaks from deterioration are causing damage to the structure in the form of rusting steel deck plates and bar joists. This jeopardizes school operations. The District intends to reduce operating and maintenance expenses with an energy efficient roof replacement system.
11 Sitka Borough Schools	Baranof Renovation	The renovation of an existing 24 year old structure to accommodate current building codes.
12 Hoonah City Schools	Roof, Foundation and Fuel Tank Replacement	Project to include the reconfiguration and replacement of the existing roof, the repair and/or replacement of the doors and windows, the repair of the foundation and the replacement of existing fuel tanks with new.
13 Lake & Peninsula Borough School District	Pedro Bay Renovation	District needs funds to renovate and repair the foundation of the existing structure and to initiate related repairs to the facility.
14 Ketchikan Gateway Borough Schools	Houghtaling Maintenance & Renovation	Interior renovation to the existing structure in order to bring the school into code compliance as well as enhance instructional implementation.

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DISTRICT	PROJECT	DESCRIPTION
15 Lake and Peninsula Borough Schools	Districtwide Fuel Tank Upgrade	Funds would go to the repair of all fuel storage facilities districtwide to meet current code regulations. Many of these aging fuel storage facilities are located where an accidental spill, rupture or leak would cause substantial harm to the environment and the local culture.
16 Chatham Schools	Tenakee Retaining Wall Replacement	To replace the existing retaining wall which is failing. The property below is endangered by retained materials falling onto structures below. In addition, the "old school building" could suffer structural damage depending on how much slope failure occurs.
17 Fairbanks School District	Barnette: Planning, Design and Renovation/Addition	This project consists of the planning, design and construction of the renovations to Barnette School. The renovations include correction of the fire code deficiencies, providing handicapped access, upgrading mechanical and electrical systems, minor remodeling and refurbishing interior surfaces.
18 NW Arctic Schools	Noorvik High School Renovation	Renovation of the existing BIA structure to accommodate an increase student body population and upgrade to present day building code requirements.

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DISTRICT	PROJECT	DESCRIPTION
19	Anchorage School District Birchwood Roof Replacement	The school facility has a deteriorating 29 year old roof. Leaks are causing structural damage in the form of rusting decks, trusses, and connections. Surface damage results in heavy maintenance expenditures for replacement of ceilings, floor tiles, carpeting, and furnishings. Roof renovation with an energy efficient system will save the District operating as well as maintenance expenses.
20	Fairbanks School District Nordale: Planning, Design & Renovation	Funding requested to correct a number of structural, building code, site and program deficiencies attributed to the existing structure.
21	Cordova City Schools Elementary & High School Renovation	Repairs to the existing elementary and high school structures are needed in order to meet current building code and educational requirements.
22	Chugach Schools Whittier Drainage	Excavate the area at the back portion of the existing structure. Repair and extend the drainage systems and reconstruct and revamp the soffits on the back portion of the school building.
23	Ketchikan Gateway Borough Schools Valley Park Maintenance & Renovation	Project involves the renovation of the interior to the Valley Park Elementary School in order to bring the building into code compliance as well as enhance instructional implementation.

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DISTRICT	PROJECT	DESCRIPTION
24 Lake & Peninsula Borough Schools	District Wide Sprinkler Systems	This project involves the installation of fire suppressant sprinkler systems in thirteen of the District's fifteen school sites. Several of these sites will also require water storage due to the inadequate year round water availability in the amounts needed for the sprinkler system.
25 Annette Island Schools	Districtwide Major Maintenance Renovation	Repair and/or replace the existing roof, exterior siding, windows, insulation, and flooring to alleviate major leaks and repair extensive water damage.
26 Pelican City Schools	Major Maintenance	This project would correct deficiencies such as the installation of grounded electrical circuits, the replacement of leaking single pane windows, the installation of sprinklers and smoke detectors and the replacement of the boiler room piping.
27 Lower Kuskokwim School District	Mikelnguut Elitnaurviat Roof Repair	Funding is needed for the repair and/or replacement of the existing roof and related structural supports at the ME School facility located in Bethel.
28 Juneau School District	Marie Drake Roof Replacement	This project will remove existing roofing systems and roof insulation down to the existing concrete deck and install a new roofing system taking advantage of the latest technology.

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DISTRICT	PROJECT	DESCRIPTION
29	Juneau School District Auke Bay Roof Replacement	Replace the existing roof at the Auke Bay Elementary School Site.
30	Lower Kuskokwim School District. Bulk Fuel Tank Repairs -- 9 Sites	Funds are requested to correct code deficiencies at nine school sites for the bulk fuel storage facilities located there.
31	Klawock City Schools Major Maintenance	This project consist of making renovations on major architectural, electrical and mechanical items that were noted as being deficient in the 1994 Facility Condition Survey.
32	Wrangell City Schools Exterior Windows	Deterioration of windows, wood framing, sheathing and interior finishes has been a recurring problem. Funding is requested to remove the existing single pane windows and replace them with a more energy efficient thermalpane window. Window trim and finishes need to be removed and replaced on both the interior and exterior to allow for installation of a new window at multiple school sites.
33	Alaska Gateway Northway Wastewater Treatment	This project consist of converting the existing Wastewater Treatment Plant into a solids removal tank only; utilizing the existing adjacent wetlands for a secondary wastewater treatment.

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DISTRICT	PROJECT	DESCRIPTION
34 Haines Borough Schools	High School-Swimming Pool Roof Replacement	Project consist of replacing the existing metal roofing system on the swimming pool with a single ply membrane roofing system.
35 Galena City Schools	Roofing and Sprinkler Renovation	District is requesting funding to replace the existing roof. Project is to remedy weathered and worn roof membrane, inadequate insulation, poor drainage, unvented truss space, and asbestos. The project will also include the installation of fire alarm and sprinkler system.
36 Lower Yukon Schools	Hooper Bay Major Maintenance	Extensive repairs are needed for an aging BIA structure to preserve the integrity of the structure and to bring this facility into current building, fire and ADA code compliance.
37 NW Arctic Schools	Ambler High School Renovation	The District is requesting funds to remedy overcrowding, poor design, and Health/Life Safety problems.
38 Annette Island	Asbestos Abatement	This project involves the removal of asbestos from the elementary school annex, the middle and high school structures.

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39	Wrangell City Schools Civil Site Work	There is a critical need for civil and site work including the drainage, repair and replacement of concrete side walks and exterior stairs and the handling of roof runoff water. The current slope of the existing grade needs to be corrected to prohibit surface water and roof runoff from flowing back towards the foundation and into the crawl space and ponding. This existing problem causes odor and moisture problems and deterioration of the wood framing.
40	Kake City Schools District Wide Maintenance	Funding is being requested by the District to initiate necessary repairs to all existing mechanical and electrical systems.
41	Lower Kuskokwim School District Nelson Island, Tooksook Bay Roof Repair	This project would replace the roofing system on the high school buildings. The present roof consists of aluminum sheets that are fastened to the underlying stressed skin wood panel edges. the leaking appears to be caused by the expansion and contraction of the aluminum roofing material. The new roofing system would be a standing seam type with concealed fasteners over 30 pound roofing felt. New flashing and trim would be installed for roof penetrations.
42	Tanana City Schools Electrical Retrofit	The project consist of replacing all existing electrical lighting fixtures in the school building and the replacement of electrical kitchen equipment and appliances. Retrofitting the electrical system will reduce electrical expenses.

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43	Wrangle City Schools	Civil Site Development--Parking Lot
		There are three areas: the lower parking area near the metal shop at the high school and two areas on each side of the elementary school. These areas were never finished with the original construction which has resulted in significant compromise to the water drainage plan for both schools.
44	Iditarod Area Schools	Lime Village Oil Spill
		The fuel systems at the school site, the teacher's housing quarters, the pipeline to the runway and the bulk tank at the runway have evidence of fuel contamination. Although there has never been a reported oil spill, there is evidence of a past history of poor performance. The District is being held accountable for this situation.
45	Juneau School District	High School Heating & Ventilation
		This project will transfer control of the key parts of the old original heating system to other parts of the more recently installed heating/ventilation system.
46	Iditarod Area Schools	Grayling Oil Storage
		Funding is requested to replace the existing antiquated system with a new 10,000 gallon horizontal tank.
47	NW Arctic Schools	Noatak Major Maintenance
		The existing mechanical system is not able to adequately heat the existing facilities. Additional boilers are required, the fuel oil supply system needs repair and the control system needs to be replaced. Due to the age of this system and the condition of the fuel lines and existing controls, a major upgrade is needed.

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48	Juneau School District Floyd Dryden Gym Floor Replacement	Project includes removal of the existing roll-down flooring material and replacement with a more durable material
49	Bristol Bay Borough Schools Sprinkler System	The District is requesting funding to install an automatic fire sprinkler system throughout the existing structure. Since the sprinkler system will involve building upgrades, the district has determined that renovating the existing library and computer rooms to meet the academic needs should also be accomplished.
50	Lower Kuskokwim School District Districtwide Water Treatment--8 Sites	District is requesting funding to alleviate the existing water treatment problems at eight (8) District sites.. These existing sites are out of compliance with the State Department of Environmental Conservation requirements.
51	SW Region Weather Protection--4 Buildings	The District is requesting funding for the completion of metal-clad weather protection of four facilities in the district --Clarks Point, Twin Hills, Aleknagik, and the District Central Office Building. The weather conditions found in the southwestern portion of the state provides a very poor environment for structures with wood facades. Buildings completely enclosed in metal cladding are much more economical and longer lasting.
52	Alaska Gateway Northway Fuel Storage Replacement	All existing fuel storage tanks, transfer and distribution system components will be replaced. This upgrade is to include a secondary containment system and the removal and remediation of contaminated soils.

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53	NW Arctic	Shungnak Major Maintenance
		The existing mechanical system is not able to adequately heat the facilities. Additional boilers are required along with the installation of a new control system. This problem is compounded by a poor building envelope that allows water and air infiltration. Funding is requested to replace the existing wood siding with metal that will protect the structural integrity by preventing further deterioration of the structural members and provide ultimate utilization of the upgraded mechanical system.
54	Alaska Gateway	Mentasta Storage Tank
		Funding is require to remove residual contaminated soil from a past rupture of underground fuel storage tanks.
55	Alaska Gateway	Northway Soil Remediation
		In 1988, a heating oil spill occurred at Northway. Substantial contamination remains in the thawed soil, in the permafrost and in the perched aquifer surrounding the fuel tanks. The school drinking water source is located about 200 feet from the fuel tanks and is at risk of becoming contaminated by the migrating fuel spill.
56	Hydaburg	Heating System Renovation
		This project is for construction of a 225 square foot addition to the high school, and the purchase and installation of a new boiler system. The high school is presently connected to the elementary school for heat. The purpose of the project is to provide a more efficient and cost effective heating system and to reduce the strain on the elementary boiler system.

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57	Nenana City Schools Handicap Access Repairs & Improvements	Demolition and reconstruction of the main handicap access ramp to the building; provide handicap fixtures in the restrooms; and to revamp existing exits to correct a two to three inch variance in elevation between the floor and the door threshold.
58	Nenana City Schools Interior Lighting	This project consists of replacing lighting fixtures and installation of a drop ceiling in the elementary classrooms. The majority of the fixtures in this area are in excess of 30 years old and have yellowed to the point that cleaning is no longer an option. Illumination at task level is only 45 foot-candles vs. 50 foot-candles recommended by Alaska State Regulation 18AAC30.340. These aging fixtures also contain PCB as a cooling agent in the ballast's. The district wishes to eliminate all PCBs from the facility.
59	Hydaburg Major Maintenance	Funding is needed to correct the major maintenance problems related to the high school roof and underground fuel storage tanks. Interior/exterior repairs to the gym and the replacement of the covered walkway between the gym and the high school will also be accomplished.
60	Fairbanks North Star Borough Schools Districtwide ADA Code Compliance	This project requires building modifications to meet the Americans With Disabilities Act, (ADA), regarding building accessibility. Non-structural changes including constructing ramps, enlarging door opening, relocating plumbing fixtures, relocating partitions, providing lifts, and installing handrails to stairs and ramps were to have been accomplished on or before the effective date of January 26, 1992.

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DISTRICT	PROJECT	DESCRIPTION
61 Chatham Schools	Angoon High School Major Maintenance	Project consist of removal of existing siding, replacing all dry rotted framing, the installation of metal head and sill flashing at the windows, providing a new parapet flashing consisting of roofing and continuos metal flashing, the replacement of the existing flat roof with a modified bitumen or EPDM type system, the replacement of the sidewalk at the northeast corner of the structure and extending the gym roof to prevent the buildup of snow and ice along side the building.
62 Fairbanks School District	District Physical Plant Renovation/ Addition	This project will involve the renovation of the existing plant facilities building to resolve space shortages.
63 Chugach Schools	Districtwide Building Security & ADA	The scope of this project consists of a complete upgrade of all door operating device hardware within the district. All of the doors in the district's facilities do not meet code requirements as stipulated by the Americans With Disabilities Act of 1991, (ADA).
64 Juneau School District	High School Gymnasium Floor Replacement	This project includes the removal of the existing roll-down flooring material of the alternative gym for the high school and the replacement with a more durable material.
65 Tanana City Schools	Voc-Ed Roof Replacement.	Funds are to be used to upgrade the existing Vocational Education facility at the City of Tanana.

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66	Wrangell City Schools Hot Water Tank Replacement	The 1,000 gallon hot water storage tank which supplies domestic hot water to both the High School locker rooms is aging and currently out of compliance with current building codes. A lined tank and a double wall heater exchanger in the tank will be installed in order to restore the system to code standards.
67	Lower Kuskokwim School District Districtwide ADA	Funds are needed in order for the district to initiate the necessary repairs and renovations to bring those facilities that are currently inaccessible to the Handicap into compliance with The Americans With Disabilities Act, ADA, standards.
68	Wrangell City Schools Interior Corridor Finish	The wall coverings in the hallways are rapidly falling apart. The trim around the doors and windows are made of a thin metal that lends to project into this heavy traffic area in such a manner that they are a safety hazard. Funding is requested to replace wainscot in corridors with a durable fabric or other finish which can be bonded directly to wall board.
69	Juneau School District Gastineau Floor Heating Coil Replacement	To avoid the costs involved with a possible failure of the panel heating system in the Gastineau Elementary School which would involve emergency heating and the possible relocation of students, funding is being requested for a replacement system.

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70	Skagway City Schools School Roof Replacement	Project is to reroof the existing structure and relocate the boiler stack. The main hip areas of the roof show signs of nails starting to pop lose; the cupola at the peak may be a source of leaking into the learning areas; flashing is loose in several areas along the base of the cupola, and several shingles are missing from other areas of the roof. The age and condition of the roof along with the rain and high wind conditions have contributed significantly to the need to reroof this facility.
71	Kenai Peninsula Borough Schools Homer Jr High - Handicap Access	ADA survey taken in 1994 indicates that the District is not in compliance with the Americans With Disabilities Act Federal Standard 1990 for interior accessibility. To be in compliance, second floor access is required to music, home economics, and science. This project would consist of the installation of an elevator to the second floor.
72	Lower Kuskokwim School District Districtwide Asbestos Abatement	This project will remove all potentially friable asbestos containing materials from the buildings. The District intends to advertise requests for proposals for a designer, select a firm, review all management plan documents, perform additional field testing of suspect materials, develop construction documents, bid the project to determine if there is a successful bidder and construct the project.
73	Nenana City Schools Sprinkler System Renovation	This project consist of installing a sprinkler system in the Gym/Multipurpose Room and Metal/Automotive Shop areas of the school. When originally constructed, funding was not considered towards extending the existing sprinkler system. As these areas are connected to the elementary and secondary portions of the structure, a loss of the entire school will be averted in the event of a fire.

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74 Yukon Koyukuk School District	Districtwide Structural Repairs	The District is requesting funds for the use on a district wide basis. to repair and/or replace the existing thermopile foundations on a site by site basis.
75 Unalaska City Schools	Multi-purpose Room Roof Replacement	This project will replace the existing multipurpose room roof with an approximate 4,100 square foot Carlisle EPDM metal roof. Sections of the existing roof are leaking badly. All other roof areas of the existing school have already been replaced with the EPDM type roof planned for this project.
76 Chugach Schools	Districtwide Fuel Tank Safety Upgrade	All of the district's fuel facilities lie within one quarter mile of navigable waters on the Prince William Sound. It is of the utmost importance that the integrity of these facilities not be compromised and that they remain sound and functional. All sites within the District's boundaries have fuel facilities that are in need of major maintenance.
77 Yukon Koyukuk School District	Districtwide Tank Farm Upgrades	All bulk fuel storage systems within the District need to be substantially upgraded. The existing tanks, secondary containment systems, lighting, and fencing are currently insufficient.

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78	Kenai Peninsula Borough Schools Kenai Middle School Handicap Access	ADA survey taken District Wide in indicates that the district is not in compliance with the Americans With Disabilities Act Federal Standard 1990 for interior accessible route. To be in compliance, basement access is required to reach the weight room and physical education classes. Project consists of installation of an elevator to the basement.
79	Yukon Koyukuk School District Districtwide Roof Repairs	There exists within the District serious problems with the existing school facilities which exceed the District's ability to correct within present maintenance budgets. The sites within the district all have serious problems with the siding and flashing components of their roofing system. Repairs need to be made before the inadequacy of these roofing systems causes interior damage to the structures.
80	Yukon Koyukuk School District Districtwide ADA Code Upgrade	Renovate and remodel all structures within the district to accommodate the Americans with Disabilities Act, (ADA).
81	Iditarod Area Schools McGrath Flooring Upgrade	Financial assistance is requested to replace the existing flood damaged subflooring, carpets, and linoleum.
82	Chugach Schools Tatitlek Generator Replacement	This project involves the removal and replacement of one of the two existing auxiliary generators This system will be set up with an automatic actuator system to bring the generator on line at the moment insufficient power is recorded from the village utility.

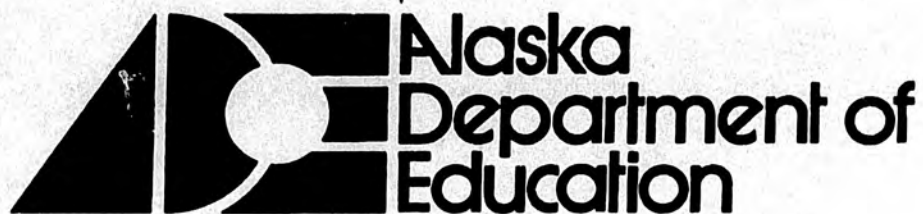
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83	Alaska Gateway Tetlin Sewer Line	The existing system is to be removed including 200 feet of sewer pipe and the wooden supports. A new sewer line is to be installed from the school to the lagoon.
84	Skagway City Schools School Access/Egress Replacement	The project will repair and improve the access and egress areas of the facility. The exterior doors are located under a sloping roof with little overhang. This situation provides little protection from wind driven rain. Snow tends to build up in the entry during the winter months. The main entry doors are showing extreme wear and require replacement. The age and condition of the entryways along with the rain and high wind conditions have contributed significantly to the existing condition.
85	Craig City Schools Elementary Roof Replacement	Project includes re-roofing the elementary school, the inclusion of a sprinkler system and the relocation of the covered play area in order to make room for a classroom addition.
86	Kenai Peninsula Borough School District ADA Districtwide Entries	The district is not in compliance with the Americans with Disabilities Act Federal Standard 1990 for accessible entries into District wide facilities. Project will consist of entrance ramps, widening landings, widening exterior door entrances, exterior handrails, threshold changes, directional signage, protruding objects addressed and accessible stairs.

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87	Kenai Peninsula Borough School District	ADA Districtwide Restrooms
		The District is not in compliance with the Americans with Disabilities Act Federal Standard 1990 for accessibility into the rest rooms, districtwide. Project will consist of making standard accessible stalls, renovate privacy rest rooms and nurses area, renovation of stall doors, toilets, grab bars, flush controls, dispensers, urinals, lavatory, faucets and showers.
88	Kenai Peninsula Borough School District	ADA Districtwide Parking
		The District is not in compliance with the Americans With Disabilities Act Federal Standard 1990 for accessibility in the parking lots. Project will consist of curb cuts, signs, painting crosswalks, curb ramps, detectable warning on walking surfaces and repainting parking lots for accessible passenger loading.

Alaska School Facilities Preventive Maintenance Handbook



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Preventive Maintenance Handbook

Overview

Preventive maintenance (PM) is the component of a facilities maintenance system which has as its goal the maximizing of the useful life of all building systems. Just as maintenance is an aspect of facility management which impacts virtually all other areas of the total facility equation, so PM, as a philosophy or mind-set, has a broad influence on the total maintenance effort. At its heart, preventive maintenance asks, "What can I do to make this item--be it an automobile, building, or piece of equipment--remain as good as new for as long as possible?"

Many discussions of maintenance relegate preventive maintenance to a small role, for example: "Preventive maintenance (PM) is defined in the maintenance management audit as periodically scheduled work on selected equipment, usually dynamic, to provide for required inspection, lubrication and adjustment."¹

However, a broader application of the term is desirable to avoid fragmentation of the maintenance system into multiple subcomponents where routine, preventive, regular, recurring and other variations of maintenance each have their own definition (and accounting classification). For the purposes of meeting the requirement and intent of Alaska Statutes, the Department of Education sees preventive maintenance as:

All activities which can be regularly scheduled to prevent premature failure or maximize or extend the useful life of a facility and its components. This will include items such as roof inspections, repainting, and door hardware adjustments as well as more traditional items such as bearing lubrication and belt replacements on HVAC equipment.

It is essential that school boards, school district administration and staff make a commitment to this philosophy when considering their responsibilities in managing district facility assets. Preventive maintenance should be a key element of a school board's mission statement.

Legislation

State of Alaska legislation is very clear about preventive maintenance. By statute, a duty of each district's school board is to "provide for the development and implementation of a preventive maintenance program for school facilities." Some school districts share the duties of maintenance with another agency within the city or borough. This legislation in no way prohibits districts from acting in conjunction with these associated agencies to effect all or a part of their maintenance program, however, neither does doing so relieve the school board of its obligations in the area of preventive maintenance. The legislation goes on to say, "... in this paragraph, 'preventive maintenance' means scheduled maintenance action that prevents the failure or extends the useful life of a facility, or facilities systems or components and that are cost effective on a life cycle basis." (AS14.14.090(10))

Legislation also does not allow capital funding for the accomplishment of preventive maintenance nor for projects caused by lack of it. A district requesting capital funding from either the school

Preventive Maintenance Handbook (cont.)

construction fund or major maintenance fund must provide "evidence that the project should be a capital improvement project and not part of a preventive maintenance program, or regular custodial care." An obvious conclusion to reviewing the pertinent legislation is that PM in Alaska is solely the responsibility of school districts and that funding must come from operating budgets which are in turn funded by community and state funds as well as federal funds allocated under the public school funding program.

Developing a Preventive Maintenance Program

Introduction

Alaska statutes give school districts two main responsibilities with regard to preventive maintenance. The first of these responsibilities is to *develop* a preventive maintenance program. This section will offer *guidance* in developing an effective program.

According to the Encyclopedia of Architecture, "Preventive maintenance programs should not be thought of as spontaneous natural events that will occur in the passage of time to meet the needs of the systems in place. Preventive maintenance programs begin with the acceptance of a need and the development of a considered, planned program for addressing the individual and different needs of each specific unit or system in a project."²

Many districts will have developed a traditional preventive maintenance program for various types of mechanical and some electrical equipment and components. Industry leaders in the design and manufacture of this type of equipment have long advocated and effectively promoted maintenance of their equipment. The early steps in this effort consisted of operations and maintenance manuals and, while these are still in use, have been supplemented by advanced, micro-processor based diagnostic and control systems.

In extending the scope of preventive maintenance to "maintenance work on any building system or component which can be scheduled", each district will be required to reassess their program's breadth and enhance it as necessary. The obvious first step in this process is identifying the facilities which need preventive maintenance (**by statute, all schools**) and the particular building systems and their components at those facilities which will respond effectively to preventive maintenance. This is followed by determining the present condition, establishing a level of maintenance and writing preventive maintenance tasks for each system or component

Identification of Facilities, Systems and Components

From the list in Appendix A, select those systems and components which apply to each of the district's facilities. Districts may add additional items if desired and/or necessary. The list is intended to be a baseline for a comprehensive integrated maintenance program; it is not an exhaustive list of every component. Many buildings will 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.). A specific preventive

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maintenance plan will need to be developed for each item. In addition, districts should consider the benefits in standardizing systems and components within a district.

This portion of preventive maintenance program development is designed to dovetail with other facility assessment devices such as the DOE School Facility Appraisal and School Condition Survey, as well as facilities audits as outlined by literature from the Association of Physical Plant Administrators (APPA).

Determining Present Conditions

Following the selection of the general categories of the items in each facility (based on that facility's construction and in-place systems) a detailed inventory is needed to quantify the systems and components and establish their current condition. In quantifying the items, information such as quantity, type, size, manufacturer, model, material specification, location, key parts, part numbers, and other item specific data will be gathered and documented. In establishing their current condition, a qualified technician or professional will need to make the assessment.

Establishing Levels of Maintenance

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

In establishing levels of maintenance, two tracks or approaches are required. One is to establish a basic life-span for the system (i.e. asphalt shingle roofing - 20yrs, oil-fired boiler, 22yrs, etc.). The second consideration is to answer the question, "What maintenance activities are needed to ensure that this particular system/component meets or exceeds it's life expectancy?" Manufacture'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 total cost).

Preparing the Work Items Plan

According to Basil Castaldi, four elements make up any preventive maintenance work item. "In any prescribed maintenance program, the list of tasks to be performed is described in detail. The frequency and nature of the work are clearly stated. The materials to be used are specified in considerable depth and the manner in which the work is to be accomplished is expressed in simple language."⁴

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

Standard III - School Plant and Equipment

"13. Inspection(s) of the school plant and equipment shall be made each school year by a qualified official and any deficiencies addressed."⁵

Preventive Maintenance Handbook (cont.)

This type of standard is effectively achieved by a thorough set of work items which incorporate the necessary levels of maintenance mentioned in the previous paragraph.

Implementing a Preventive Maintenance Program

Introduction

A second responsibility with which Alaska statutes charge school districts is to *implement* a preventive maintenance program. This section will offer *guidance* on carrying out the developed preventive maintenance work plan and will establish the importance of having management reports and a system of feedback from the field in implementing an effective program.

The basic task of PM implementation is matching needs with resources. Because both needs and resources are variables in the facilities management effort, implementation may occur once to initiate a PM program but will also require continuous monitoring and control.

Moving from the planning and development phase to implementation and operation almost always involves funding, regardless of the endeavor. Preventive maintenance is no exception. The portion of the Encyclopedia of Architecture devoted to implementation of a preventive maintenance program is largely a discussion of funding.⁶ For consideration, some findings from research concerning maintenance funding and resources are included in the following paragraphs.

Determining Necessary Resources

One effective strategy for determining the necessary resources is to start at the smallest detailed increment of the PM plan and combine them for the aggregate picture. Take each well developed PM 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 needs are clear, the supporting issues of space for shops and material staging along with transportation requirements can be addressed.

As previously mentioned, most of the resource requirements turn into a need for funds. 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."⁷

Preventive Maintenance Handbook (cont.)

The Encyclopedia of Architecture indicates:

"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."⁸

While starting with the most detailed information and building up yields a comprehensive assessment of necessary resources, thinking broadly and systematically is required to arrive at the necessary organization with which to accomplish the PM program.

Scheduling and Assigning Work

The structure and organization of the preventive maintenance program must be in-place before the effective scheduling of work can occur. Some operations and maintenance organizations establish a cross-disciplined PM work center whose main task is to inspect various systems and components (usually dynamic equipment) and write maintenance work orders. Following that, 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. A small multi-disciplined workcenter handles routine maintenance and emergency repairs and, in some cases, minor improvement work. These are just two of many options available in establishing a structure for preventive maintenance scheduling.

The heart of any preventive maintenance program is assigning and executing specific PM tasks. This is almost always done on a work order system. This element of the PM program takes the work items developed for each component and assigns them to the appropriate maintenance craftsperson or team according to the established structure and schedule. Another factor to consider when scheduling PM work is productivity. Scheduling and work assignments are among the most significant influences in worker productivity.

Simple preventive maintenance programs can be executed using a manual system of scheduling and work tracking. One approach to such a method is described by one writer 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."⁹

Preventive Maintenance Handbook (cont.)

Although preventive maintenance tasks can be managed using a manual system, the automated 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 comprehensive 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 phase 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."¹⁰

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 the integrated maintenance system, which incorporates both daily maintenance tasks and long range planning along with continuous monitoring and evaluation, depends upon an automated database of facility information. Effective preventive maintenance programs depend on feedback from maintenance personnel and a reporting/tracking system of associated costs to maintain the proper balance between preventive maintenance and renewal and replacement efforts.

Reporting Systems and Feedback

District maintenance programs should undergo periodic audits of their effectiveness. This can occur both at the workers 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 generally consider the following four factors:

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

Performance - how well the individual is working, 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.¹¹

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

In addition to informal and formal audits, a reporting system should be established to analyze a district's maintenance system to achieve the lowest total maintenance costs. The optimum maintenance program is one in which the total costs for PM and repair and replacement is the lowest.

Notes

1. Applied Management Engineering, PC, Kaiser, Harvey H.; **Maintenance Management Audit: A Step By Step Workbook to Better Your Facility's Bottom Line**; Kingston, MA; R.S. Means Company, Inc., 1991. p.4
2. **Encyclopedia of Architecture**, John Wiley and Sons, Inc. p.68
3. Applied Management Engineering, PC, Kaiser, Harvey H.; **Maintenance Management Audit: A Step By Step Workbook to Better Your Facility's Bottom Line**; Kingston, MA; R.S. Means Company, Inc., 1991. p.83
4. Castaldi, Basil; **Educational Facilities: Planning, Modernization, and Management**; Allyn and Bacon, 1982, rev. 1994, p. 421
5. **Standards for Accreditation**; Northwest Association Schools and Colleges, 1995, p. 11
6. **Encyclopedia of Architecture**, John Wiley and Sons, Inc. p.70
7. School Facilities and Transportation Division; **Administration of Maintenance and Operations in California School Districts: A Handbook for School Administrators and Governing Boards**; California State Department of Education, 1986, p. 33
8. **Encyclopedia of Architecture**, John Wiley and Sons, Inc. p.70
9. Castaldi, Basil; **Educational Facilities: Planning, Modernization, and Management**; Allyn and Bacon, 1982, rev. 1994, p. 420
10. **Maintenance and Operations Administrative Guidelines for School Districts and Community/Junior Colleges**; Florida Department of Education, Office of Educational Facilities, Plant Management and Insurance, January 1989, p. III-9
11. Applied Management Engineering, PC, Kaiser, Harvey H.; **Maintenance Management Audit: A Step By Step Workbook to Better Your Facility's Bottom Line**; Kingston, MA; R.S. Means Company, Inc., 1991. p.9-10

Appendix A

Sample Systems and Components Inventory List

Foundation and Substructure

- Footings
- Foundation walls
- Slab/bearings on grade
- Piling/Posts
 - thermopiles
- Reinforcing
- Connectors
- Waterproofing
- Insulation
- Underdrains

Superstructure

- Columns
- Beams
- Rigid frames
- Floor structure
 - joists
 - deck/slab/sheathing
 - ramps
- Roof structure
 - trusses
 - deck/slab/sheathing
- Monolithic bearing walls
- Stairs and railings
- Structural bracing
- Welds/connectors

Exterior Wall Systems

- Wall construction
- Cladding/sheathing
- Doors
 - frame
 - door unit
 - hardware
- Glazing systems
 - frame
 - glazing
 - hardware
 - curtain walls
 - storefronts
- Balcony walls/railings
- Louvers and screens
- Expansion/seismic joints
- Insulation
- Protective coating
- Sealants

Appendix A

Sample Systems and Components Inventory (cont.)

Roof Systems

- Roofing
- Insulation
- Paving and ballast
- Curbs/supports
- Expansion/seismic joints
- Drains, gutters and d.s.
- Drywells
- Flashing and trim
- Fasteners
- Snow stops
- Roof openings

Interior Construction

- Fixed partitions
- Demountable partitions
- Retractable partitions
- Doors
 - frame
 - door unit
 - hardware
- Glazing systems
 - frame
 - glazing
 - storefronts/entrances
- Interior finishes
 - carpet
 - resilient tile/sheet
 - ceramic/clay tile
 - terrazzo
 - paint
 - vinyl/fabric wall cover
 - wood
 - metal panels
- Ceiling system
 - suspension grid
 - acoustical units
 - soffits (metal/gyp.)

Specialties

- Toilet partitions
- Display boards
- Projection screens
- Display cases
- Lockers
- Flag poles

Appendix A

Sample Systems and Components Inventory (cont.)

Conveying Systems

- Elevators
- Moving stairs/walks
- Dumbwaiters
- Pneumatic tube
- Lifts(material/personnel)

Heating Systems

- Boilers
- Furnaces
- Burners
- Fuel tanks & distribution
- Heat transfer equipment
 - heat exchangers
 - coils
- Terminal/package units
- Fin tubes/radiators
- Heating accessories
 - dampers/draft control
 - breeching and ductwork
 - stacks
 - insulation
 - piping
 - valves

Air Handling Systems

- Air handling units
- Unit ventilators
- Fans
- Inlets/outlets
- Ducting systems
 - dampers
 - filters
 - mixing boxes
 - sound attenuators
- Humidifiers
- Dust collection systems

Cooling Systems

- Condensing units
- Compressors
- Heat exchangers
- Packaged A/C units
- Chillers
- Absorption units

Mechanical Controls

- Compressors
- Pneumatic valves/levers

Appendix A

Sample Systems and Components Inventory (cont.)

- Pneumatic tubing
- Electronic controls

Plumbing Systems

- Cold water piping
- Water heater
- Hot water piping
- Pumps
 - sewage lift
 - water booster
 - circulating
 - sump
- Valves and traps
- Insulation
- Plumbing fixtures
 - sinks and faucets
 - toilets/urinals
 - coolers/drinking fountains
 - exterior hose bibs
- Waste vents
- Waste piping
- Septic tanks

Fire Protection/Suppression Systems

- Sprinkler piping
- Backflow preventers
- Sprinkler heads
- Fire extinguishers
- Fire hose system
- Standpipe connection
- Fire pumps
- Grease hood extinguisher

Power Generation and Transmission

- Generators
- Engines/turbines
- Transfer switches
- Transformers
- Service wiring
- Substation
- Switchgear
- Bus ducting
- Overcurrent protection

Power Distribution Systems

- Main distribution panel
- Wiring
- Conduits
- Raceway

Appendix A

Sample Systems and Components Inventory (cont.)

- Cable trays
- Distribution panels
- Electrical receptacles
- Circuit breakers
- Baseboard heaters
- Motors/fans
- Heat trace

Lighting Systems

- Fixtures
 - fluorescent fixtures
 - incandescent fixtures
 - HID fixtures
- Wiring
- Lighting panels
- Emergency lighting
- Standby lighting
- Exterior lighting

Signal Systems

- Computer data
- Public address
- Television
- Telephone
- Clock system
- Satellite delivery system
- Fire alarms
- Fire door hold-opens
- Security alarm/devices

Landscaping Systems

- Irrigation
- Tree/shrub plantings
- Flower bed plantings
- Turf/lawn
- Walks/plazas

Playfields and Playground Systems

- Football fields
- Baseball/softball fields
- Hard surface courts
- Hockey/skating rinks
- Playdecks
- Swings
- Climbing toys
- Safety mats
- Gravel and containment
- Markings/painting

Appendix A

Sample Systems and Components Inventory (cont.)

Vehicular Systems

- Parking lots
- Roads/drives
- Curbs
- Fire lanes

Site Utilities

- Fuel tanks
- Fuel distribution piping
- Storm drainage
- Fire hydrant systems
- Electrical power
- Pole-mounted lighting

Equipment

- Furnishings
 - classroom furniture
 - seating
 - rugs and mats
- Fixtures
 - window treatments
 - artwork
 - vending
- Equipment
 - waste handling
 - loading dock
 - parking equipment
 - postal
 - food service
 - woodworking shop
 - auto/engine shop
- Special construction
 - vaults
 - swimming pools
 - acoustical enclosures
 - raised computer flooring

Appendix B

Definitions

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 or electrical system.

Note: The above definitions are those adopted by the Bond Reimbursement and Grant Review Committee 4-18-97.

**DEPARTMENT
OF
TRANSPOR-
TATION**

PRELIMINARY BRIEFING
LEGISLATIVE DEFERRED MAINTENANCE TASK FORCE



Prepared by
**STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES**

Engineering & Operations Division

May 6, 1997

Preliminary Briefing

- The Department of Transportation and Public Facilities is committed to supporting the work of the Task Force and assisting however necessary.
- We recommend a single point of contact for DOT/PF:

Boyd Brownfield, P.E.
Deputy Commissioner
Channel Dr.
Juneau, Alaska 99801
Phone: (907) 465-3900
Fax: (907) 586-8365

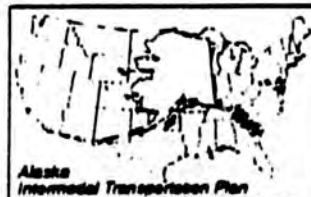
- The accumulation of deferred maintenance will continue so long as routine maintenance is underfunded. The two problems need to be solved simultaneously.
- We recommend that "Deferred Maintenance" be as clearly defined as possible for each facility/system/mode/departement. An up front effort to identify the Task Force's goals and to clarify terminology will greatly assist the DOT/PF in supporting the Task Force. Also helpful would be determining the work products expected of the DOT/PF.
- For the purposes of discussions and reports, a dollar should be defined. The simplest definition is whole dollars in the year 1997. Inflation, funding percentages or match ratios would be kept as a separate discussion.
- There are some sensible connections that can be made between funding sources and the programs in need of deferred maintenance funds. The DOT/PF has previously reviewed some possible means of funding maintenance and can provide assistance.
- The DOT/PF is ready to meet with the Task Force members or staff to review the information currently available and plan for the work ahead.

Alaska Facts

	Alaska	United States
Population	550,043	248,709,873
Physical Characteristics		
Land Area (sq. miles)	586,412 sq. miles	3,623,420
Miles of Coastline	6,640 miles	12,383 miles
Miles of Shoreline	33,904 miles	88,533 miles
Number of Rivers	3,000+	
Miles of Rivers	4,296 miles	11,700 miles
Roads		
Interstate System	1,087 miles	43,000 miles
Other Principal Arteries	383 miles	138,000 miles
Minor Arteries	1,127 miles	219,000 miles
Collectors	2,960 miles	805,000 miles
Local Roads	8,292 miles	2,674,000 miles
Total	13,849 miles	3,879,000 miles
Paved	2,802 miles	2,175,000 miles
Gravel/Stone	6,124 miles	1,328,000 miles
Bridges	882 bridges	577,000 bridges
Airports & Airways		
Commercial Airports	81 airports	570 airports
General Aviation	1,020 airports	16,700 airports
Commuter/Taxis	275 aircraft	1,221 aircraft
General Aviation	7,963 aircraft	217,200 aircraft
Airways	26,252 miles	360,000 miles
Railroads		
Class I	0 miles	128,000 miles
Regional	525 miles	16,000 miles
Local	50 miles	15,000 miles
Freight cars	1,200	748,000
Locomotives	60	19,647
Passenger cars	24	500
Waterborne		
Major Ports	11	177

- ☆ The Alaska Railroad is North America's northern-most railroad.
- ☆ Alaska is one-fifth the size of the contiguous United States; 488 times larger than the state of Rhode Island; larger than the three largest states in the union combined.
- ☆ As of May 1993, Alaska had 9,391 pilots and 9,408 aircraft. This is about one pilot and one aircraft for every 61 Alaskans.
- ☆ While Alaska is over twice as large as the next largest state (Texas), Alaska's population and land road mileage compare more closely with those of Vermont.
- ☆ Alaska not only has the largest seaplane base in the world, but with 102 facilities, it is first among the states in number of seaplane bases.
- ☆ North to south, Alaska measures 1,420 miles -the distance between Denver and Mexico City.

HDR



Alaska Intermodal Transportation Plan

Fact Sheet

DOT&PF

STATEWIDE – DOT&PF ‘RESPONSIBILITIES AND SERVICES’ STATISTICS

Maintain & operate over 14,400 lane miles in the State Hwy. system

Maintain & operate 8 vessels in the Alaska Marine Hwy. System

Maintain & operate almost 700 Public Facilities occupied by the department and State agencies, excluding courts, education & the university

Maintain & operate Anchorage & Fairbanks International Airports – and, 264 other airports

There are 907 state inspected Bridges which qualify for federal aid – 787 are state owned

There are 95 public Harbors in Alaska – 80 are state owned, and 15 are locally owned

DEFERRED MAINTENANCE [DEFINITION] – Required maintenance and repair on a facility that, having **NOT** been accomplished in a thorough and timely fashion, contributes to the accelerated deterioration and/or failure of any part of that facility. When deferred maintenance is addressed and corrective action performed, reconstructed components/features are brought back to near original condition, renewing/extending their service life. Examples of statewide, transportation related, deferred maintenance items needing redress are:

Bridges

- Stream channel embankment repair to prevent the undermining of bridge foundations
- Approach railing damage repair
- Debris removal from bridge substructures to prevent washouts during floods
- Structural steel painting
- Replace deck wearing surfaces and deck protection systems
- Clean, repair and/or replace deck joint seals to protect bearing systems

Highways

- Asphalt leveling/patching
- Culvert, slope, and drainage repairs
- Guardrail repair & replacement
- Traffic signal upgrade/repair
- Gravel road repair/resurfacing

Airports

- Crack sealing & pavement patching
- Culvert repair/replacement
- Fencing repairs
- Gravel replacement/resurfacing
- Lighting, beacon & marker repairs/replacement

Marine Hwys

- Vessel renovation
- Repair offshore facilities (e.g. pontoons, transfer bridge, piles, catwalks, etc.)

Harbor Facilities

- Major repair & replacement on older facilities (includes demolition, as necessary, engineering, & construction)

VEHICLE OPERATING COSTS

In 1990, there were 1,068,227 miles of arterial and collector roads in the United States. Of these, 90,934 miles (8.5 percent) were rated in poor condition and 521,194 miles (48.8 percent) were rated in fair condition.

Roads classified as "poor" rate 2.0 or below on FHWA's five-point pavement serviceability rating (PSR) scale. These roads are badly cracked, rutted or broken. In some cases, poor roads can be resurfaced, but most are too deteriorated and must be reconstructed.

Roads that fall into the "fair" category rate between 2.1 and 3.4 on the PSR scale. These roads are in the initial stages of deterioration and their pavement is noticeably inferior to new pavement -- they are characterized by cracked, rutted or broken pavement. Most fair roads are in need of resurfacing.

Since poor and fair roads are in inferior condition, it costs motorists more to drive on them. For example, in 1990, Americans spent an estimated \$140.5 billion driving on poor and fair roads. Had these roads been in good condition, driving on them would have cost American motorists \$123.1 billion -- a difference of \$17.4 billion. In other words, on the average, each of America's 167,015,250 licensed drivers spent an average of \$104.33 to operate a vehicle on substandard roads. The \$104.33 cost per driver included \$66.77 in wasted motor fuel, \$26.08 in extra vehicle repairs, and \$11.48 in excess tire wear. Table XXIII lists the 10 states with the

PROGRAM

highest vehicle operating cost while table XXIV breaks down vehicle operating cost by the amount wasted by each state, as well as the cost per motorist.

Table XXIII: STATES WITH THE HIGHEST VEHICLE OPERATING COSTS

STATE	COST PER DRIVER
1. ALASKA	\$179.89
2. IDAHO	\$179.77
3. KENTUCKY	\$178.79
4. NEW MEXICO	\$169.97
5. NEVADA	\$156.23
6. NORTH DAKOTA	\$154.86
7. MISSISSIPPI	\$151.38
8. WEST VIRGINIA	\$150.53
9. NEW HAMPSHIRE	\$142.48
10. SOUTH DAKOTA	\$139.64

Table XXIV: VEHICLE OPERATING COSTS

STATE	TOTAL WASTED VOC	COST PER DRIVER	COST OF WASTED MOTOR FUEL	COST OF EXTRA VEHICLE REPAIRS	COST OF EXTRA TIRE WEAR
ALABAMA	\$366,930,001	\$133.30	\$85.31	\$33.33	\$14.66
ALASKA	56,440,914	179.89	115.13	44.97	19.79
ARIZONA	322,819,927	134.92	86.35	33.73	14.84
ARKANSAS	218,327,031	126.79	81.14	31.70	13.95
CALIFORNIA	2,369,126,021	119.34	76.40	29.84	13.13
COLORADO	235,979,557	115.51	73.92	28.80	12.71
CONNECTICUT	154,077,217	69.59	44.54	17.40	7.65
DELAWARE	49,865,785	102.86	65.83	25.71	11.31
D.C.	42,343,281	102.70	65.73	25.67	11.30
FLORIDA	517,819,835	56.09	35.09	14.02	6.17
GEORGIA	520,739,380	116.28	74.42	29.07	12.79
HAWAII	88,789,542	131.03	83.86	32.76	14.41
IDAHO	126,589,786	179.77	115.05	44.94	19.77
ILLINOIS	743,639,288	101.94	65.24	25.49	11.21
INDIANA	477,524,379	132.60	84.86	33.15	14.59
IOWA	119,286,453	63.70	40.77	15.93	7.01
KANSAS	222,559,511	129.81	83.08	32.45	14.28
KENTUCKY	429,935,422	178.79	114.43	44.70	19.67
LOUISIANA	326,668,385	126.84	81.18	31.71	13.95
MAINE	107,324,712	120.99	77.43	30.25	13.31
MARYLAND	227,023,058	67.53	43.22	16.88	7.43
MASSACHUSETTS	427,146,842	101.00	64.64	25.25	11.11
MICHIGAN	659,917,171	102.47	65.58	25.62	11.27
MINNESOTA	276,724,174	109.42	70.03	27.36	12.04
MISSISSIPPI	285,273,617	151.38	96.88	37.84	16.65
MISSOURI	472,873,853	128.22	82.06	32.05	14.10
MONTANA	76,119,862	126.11	80.71	31.53	13.87
NEBRASKA	126,439,773	116.14	74.33	29.04	12.78
NEVADA	132,231,964	156.23	99.99	39.06	17.18
NEW HAMPSHIRE	120,181,744	142.48	91.19	35.62	15.67
NEW JERSEY	463,217,538	82.94	53.08	20.74	9.12
NEW MEXICO	182,521,514	169.97	106.78	42.49	18.70
NEW YORK	535,018,138	52.18	33.39	13.04	5.74
NORTH CAROLINA	211,316,266	46.44	29.72	11.61	5.11
NORTH DAKOTA	65,800,317	154.86	99.11	38.72	17.03
OHIO	790,497,488	106.43	68.12	26.61	11.71
OKLAHOMA	248,499,848	109.11	69.83	27.28	12.00
OREGON	245,511,658	111.01	71.05	27.75	12.21
PENNSYLVANIA	1,062,758,647	134.54	86.11	33.64	14.80
RHODE ISLAND	87,429,008	130.36	83.43	32.59	14.34
SOUTH CAROLINA	218,422,418	92.05	58.91	23.01	10.13
SOUTH DAKOTA	68,756,920	139.64	89.37	34.91	15.36
TENNESSEE	377,928,456	113.34	72.54	28.34	12.47
TEXAS	1,424,399,974	127.90	81.86	31.98	14.07
UTAH	93,168,274	89.06	57.00	22.27	9.80
VERMONT	52,841,616	128.28	82.10	32.07	14.11
VIRGINIA	371,066,285	84.55	54.11	21.14	9.30
WASHINGTON	288,419,871	85.42	54.67	21.35	9.40
WEST VIRGINIA	193,235,429	150.53	96.34	37.63	16.56
WISCONSIN	103,057,046	30.97	19.82	7.74	3.41
WYOMING	40,059,515	120.10	76.87	30.03	13.21
TOTAL COST	\$17,424,764,711				
AVERAGE COST		\$104.33	\$66.77	\$26.08	\$11.48

SOURCE: American Automobile Association, The Federal Highway Administration, and The Road Information Program.

GOV. BUDGET ONLY

Department of Transportation & Public Facilities
FY98 GENERAL FUND OPERATING BUDGET BY FUNCTION

Administration \$8,049.0 -
6.3%

Planning \$851.3 0.7%

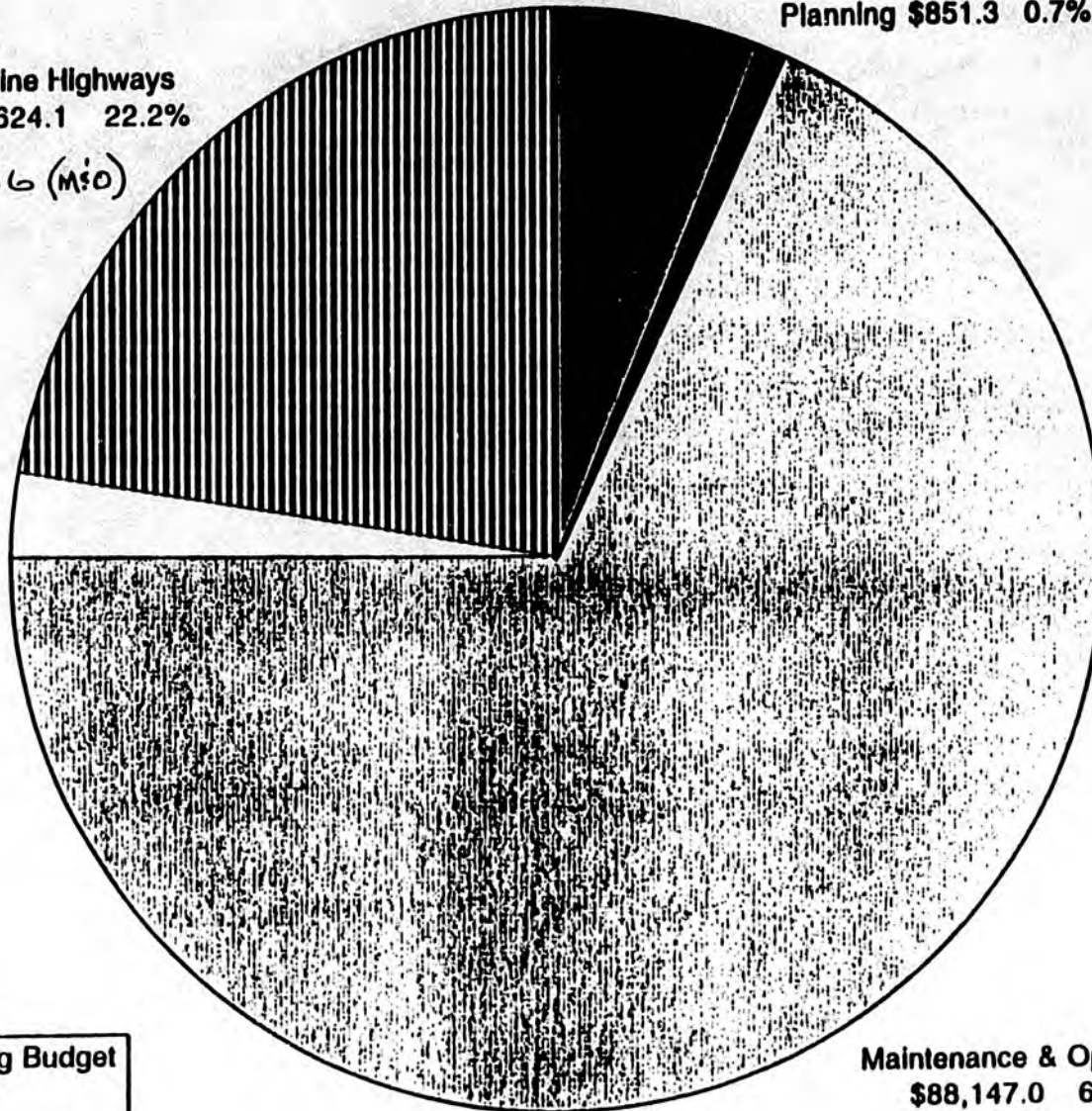
Marine Highways
\$28,624.1 22.2%

INCLUDES FUNDING (M&O)
FOR:

VESSEL
MOORING
UPLAND

Design & Construct
\$3,139.2 2.4%

Total FY98 GF Operating Budget
\$128,810.6
(\$ in Thousands)



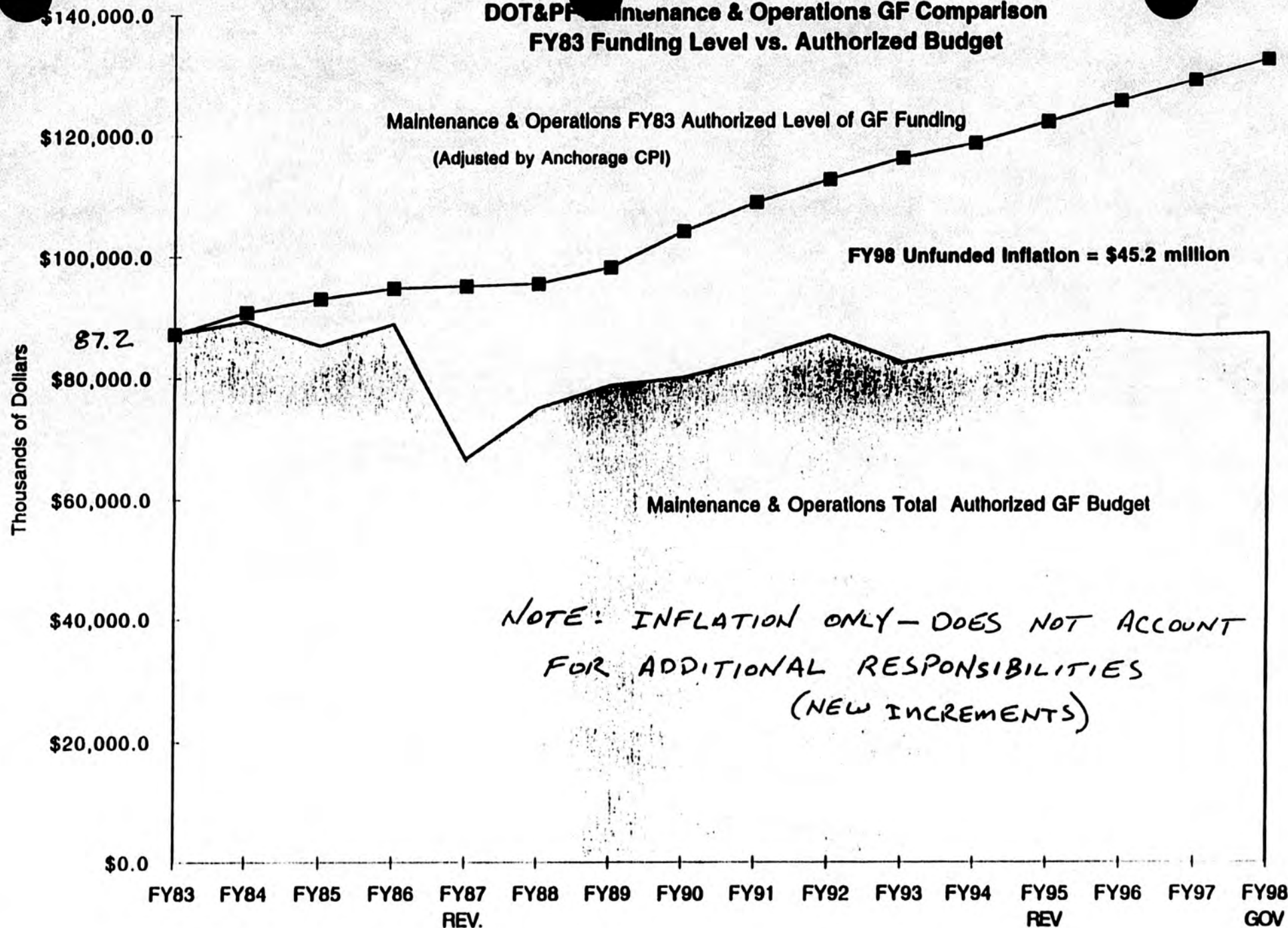
Maintenance & Operations
\$88,147.0 68.4%

FUNDS

- HWY & AVIATION M&O
- M&O ADMIN
- PUBLIC FACILITIES
- HARBORS

1/24/97

DOT&PF Maintenance & Operations GF Comparison FY83 Funding Level vs. Authorized Budget





U.S. Department
of Transportation
Federal Highway
Administration

OFFICE GUPU

Alaska Division

P.O. Box 21648
Juneau, Alaska 99802

September 11, 1996

HFO-AK
MA-2

Boyd Brownfield
Deputy Commissioner
ADOT&PF
3132 Channel Dr.
Juneau, AK 99801

Dear Mr. Brownfield:

Preventive Maintenance Eligibility

Preventive Maintenance Legislation

In 1991, the ISTEA established the Interstate Maintenance Program, and designated a special category of funds (IM) which could only be used on the Interstate System for preventive maintenance and 3R work.

The National Highway System Designation Act of 1995 added a new section to Title 23 entitled Preventive Maintenance. Activities that are eligible for funding under this section are those that cost-effectively extend the useful life of a Federal-aid highway. Since Section 118(f) of Title 23 allows Alaska to use Federal-aid funds on any public road, preventive maintenance activities on any public road are eligible. Except for IM funds, any regular system funds available under Title 23 can be used for the work.

Eligible Preventive Maintenance Work

The Alaska DOT&PF must be able to demonstrate that activities undertaken are a cost-effective means of extending the useful life of the roadway or bridge. In general, qualifying work includes any work which provides additional pavement structural capacity, prevents the intrusion of water into the pavement or base, provides for removal of water that is in the pavement or base, restores surface rideability, or prevents the deterioration of bridges.

A normal Federal-aid project must be established for preventive maintenance work. Work should not be scheduled for isolated problems but should be of a sufficient scope to extend the service life of a reasonable length of roadway. Upgrading of safety appurtenances is also encouraged.

Routine maintenance work is not eligible.

Eligible Roadway Work

1. Overlays or replacement of the pavement structure or roadway surface.
2. Seal coats, joint and crack sealing.
3. Restoration of drainage systems.
4. Profiling or milling to smooth the surface.

Roadway Work NOT Eligible

1. Mowing, brushing, or cleaning roadsides and ditches.
2. Snowplowing.
3. Painting or replacing pavement markings.
4. Pothole patching.
5. Landscape maintenance.
6. Guardrail repair.
7. Spot improvements to isolated areas.

Eligible Bridge Work

Federal funds may be used to perform preventive maintenance on bridges included in the National Bridge Inventory that are not owned by a Federal Agency.

1. Seismic Retrofit. Bridges must be on Alaska's Seismic Retrofit Prioritization List.
2. Scour Countermeasures. Repair of spurs, spur dikes, rip-rap, and other river training structures used to minimize scour. Removal of significant amounts of debris upon concurrence of the Region or Headquarters hydraulic engineer.
3. Crack Sealing. Decks, girders, and substructure.
4. Joint Repair.
5. Painting and repainting an entire bridge or areas essential for bridge performance.
6. Deck Overlays. Including repair of delaminated and spalled areas.

7. Spalled concrete repair. Including repair to damaged superstructure due to bridge rail impacts.

Bridge Work NOT Eligible

1. Cleaning normal amounts of debris.
2. Routine cleaning of deck drains.
3. Minor touch-up painting.
4. Bridge rail repair.

If you have questions on this program or on the eligibility of work activities, please contact our office.

Sincerely yours,

Robert E. Ruby
Division Administrator

/s/ Phillip A. Smith

By: Phillip A. Smith
Field Operations Engineer

091103r1.ps

PROPOSAL FOR BETTER MANAGEMENT OF STATE FACILITIES

DRAFT - APRIL 1997

1. BACKGROUND

There is significant agreement that the condition of the state's infrastructure could be better managed than it is today. This paper outlines a draft proposal by the Knowles/Ulmer administration on how state facilities should be managed, funded and several recommendations for improvement.

At a recent facility manager's conference, Alaskans identified forty separate indicators of problems that exist with the management of our facilities. The ten items mentioned most often were:

1. A shortfall in annual maintenance funding necessary to prevent further accrual of deferred maintenance;
2. A backlog of deferred maintenance;
3. No overall policy for maintenance and operations and lack of consistency between departments;
4. Lack of a statewide automated maintenance management system;
5. Lack of statewide CIP renovation/construction prioritization;
6. Lack of criteria for defining a buildings useful life, an economic model for decision making or a consistent cost accounting for decision making;
7. No identification of maintenance funding which allows "programs" to prioritize resources (financial and personnel) away from facilities maintenance;
8. Lack of funding for efficient space planning, tenant conversions and moving costs to gain long-term savings;
9. No clear accountability for the condition of state facilities; and
10. Inability to respond to changing federal facility requirements (i.e., ADA, LUST, EPA and OSHA regulations).

In April 1996, the Commissioners of DOA, DOTPF and the Director of OMB formed a Facilities Advisory Council with representatives from all departments and experts from the private sector. The council's charge is to develop a means to ***achieve efficient and effective management, repair, maintenance, planning and construction of state owned and leased facilities; reduce the deferred maintenance backlog; develop a rental rate system to achieve accountability for the full cost of occupancy; and develop a consistent statewide policy.***

Council members were divided into four task groups to accomplish these objectives:

- **Space Utilization/Planning & Acquisition** — Identify the optimum use of state owned and leased space, develop space standards in the workplace, identify customers and their expected level of performance, and improve the process for acquiring and leasing facilities.
- **Capital Needs** — Identify current capital needs, determine how to prioritize those needs, identify options for financing and budgeting capital projects, identify who the customers are and develop performance measures, and identify improvements to the process.
- **Operations & Customer Services** — Identify optimum levels of customer service satisfaction and participation, develop maintenance standards, determine and define occupancy cost elements, and identify resources needed to deliver facility services.
- **Rent Structure** — Identify a rental structure methodology and elements of occupancy cost, develop benchmarks, and define how a rental fund should work.

PROPOSAL FOR BETTER MANAGEMENT OF STATE FACILITIES

DRAFT - APRIL 1997

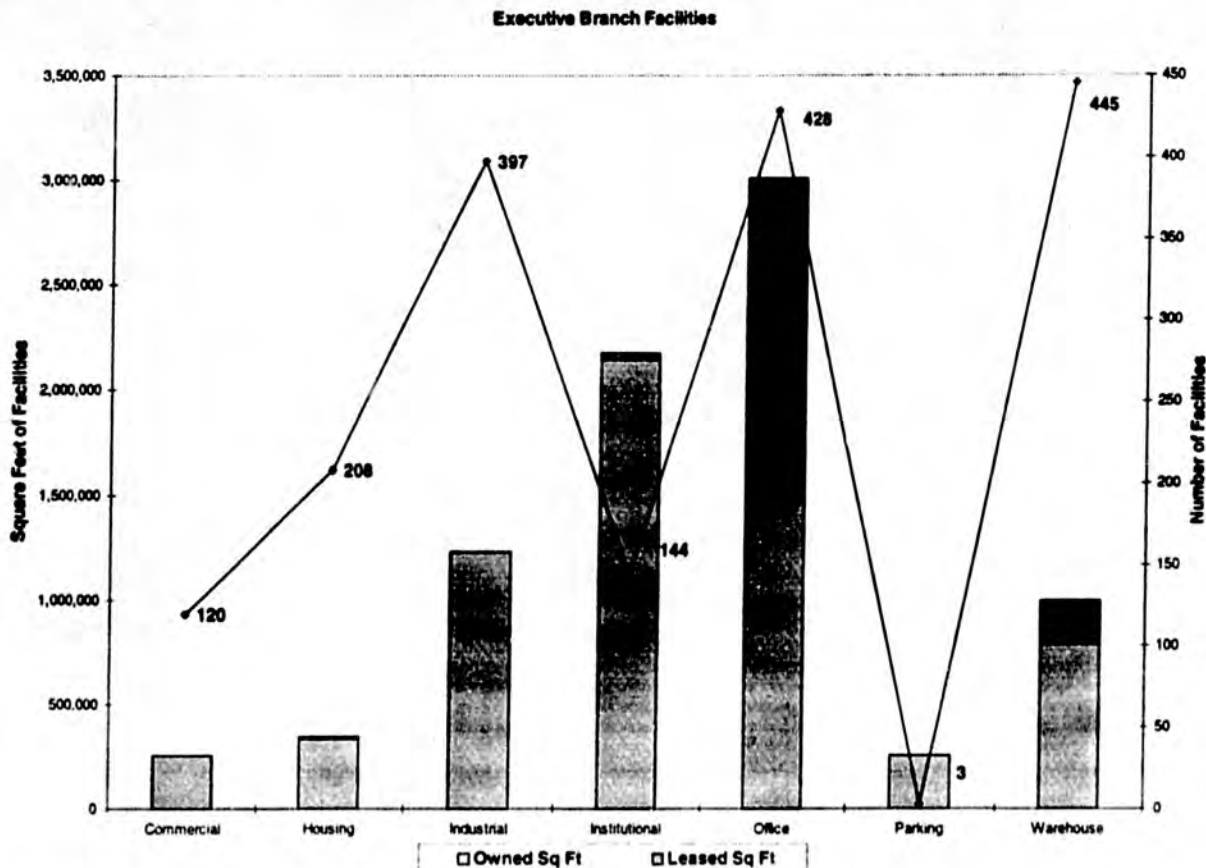
The Facility Council recommended five "pilot projects" to test the critical elements necessary to achieve this administration's goals for facilities:

- Implementation of standard facility accounting definitions and practices.
- Delegation of facility design and construction authority from DOTPF to DOA.
- Development of a statewide maintenance management database and preventative maintenance workorder service.
- Development of an office and warehouse rental structure on a regional basis.
- Establish a maintenance workforce pilot in Nome to demonstrate the service improvements possible through inter-agency teamwork.

The state's advisor on indirect costs and cost recovery was contracted to prepare a generic rate methodology that could be modified to meet Alaska's needs. A draft proposal is anticipated for review by April 1997.

2. WHAT FACILITIES DO WE HAVE?

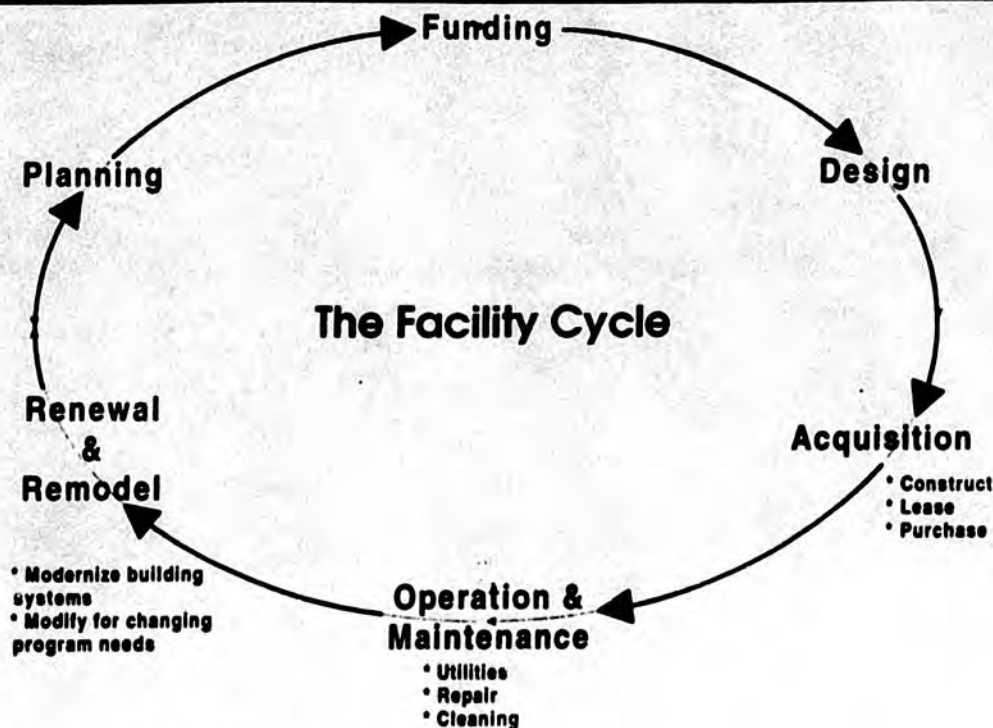
The following graph shows the number and area of state owned and leased facilities.



3. WHAT IS REQUIRED TO MAINTAIN STATE FACILITIES?

Buildings require constant attention to keep them from deteriorating prematurely. Yet even with proper maintenance, certain parts and systems within a building will require major replacement or renewal at predictable intervals. The following picture depicts the typical facility maintenance cycle for major assets.

PROPOSAL FOR BETTER MANAGEMENT OF STATE FACILITIES
DRAFT - APRIL 1997



4. ELEMENTS OF OCCUPANCY COST

A financial plan must be developed which identifies the different types of facility activities performed and method to budget and account for them separately. Following are the definitions and examples of facility activities proposed by the Facility Council.

4.1. Operations

Costs which are inherently required to occupy a facility, such as:

- Utilities, including purchases and plant operations
- Janitorial Services / Waste Disposal
- Security (required for the general protection of the building and its occupants)
- Snow removal
- Pavement clearing and grounds care
- Safety Inspections (boiler, elevator, life safety, etc.)

4.2. Routine Maintenance and Repair

Day to day scheduled and preventative maintenance work and minor repairs performed on the building or grounds to keep a building operational, such as:

- Replace burned out light bulbs or repair fixture wiring
- Tune up boiler or replace parts
- Patch roof
- Painting

4.3. Renewal & Replacement

The periodic refurbishment or replacement of components of the building or its attached systems. Work is most often required due to the expiration of the useful life of the particular systems or components and helps prevent a backlog of deferred maintenance. Examples:

PROPOSAL FOR BETTER MANAGEMENT OF STATE FACILITIES
DRAFT - APRIL 1997

- Install new light fixtures
- Install new boiler
- Install new roof
- Bring building into compliance with current building codes
- Refurbish failed foundation or structural components
- Overhaul or replace utility system

The best facility maintenance programs link the level of renewal and replacement spending to the replacement value of the asset. Some methods additionally include the age of the facility. The University of Alaska has adopted a formula approach which takes into account both replacement value and facility age. The average rate of spending for renewal & replacement should be 1% to 5% of replacement value.

4.4. Renovation and Remodeling

Changes to the building which are motivated principally by new occupant needs or new occupancy criteria. These costs would not normally be included in annual rents but would more likely be pursued as capital budget items. Examples:

- Reconfigure walls from open office space to private office space
- Move walls to accommodate additional staff or new functions
- Change warehouse space to office space

5. HOW ARE BUILDING COSTS CURRENTLY FUNDED?

Not all of the state's facilities are funded or managed in the same way.

State owned office facilities:	
Multi-tenant	DOTPF budgets all costs
Single tenant	Some are budgeted by DOTPF, some by occupying agency
Single occupant institutional facilities (i.e., Adult and Youth Correctional facilities)	Occupant agency budgets all costs
Leased facilities	All leases are managed by DOA. Either DOA incurs 100% of lease expenditure or collects interagency receipts from the department occupying the building (via budgeted or unbudgeted RSA).

6. WHY CHARGE RENT?

Establishing a rental rate would:

- Increase accountability for the use of facilities and encourage more efficient use of space;
- Maximize the recovery of non-general fund dollars where appropriate;
- Reduce the accumulation of deferred maintenance; and
- Promote a statewide facility maintenance perspective.

With a federally approved rental rate methodology, the state has the potential to capture non-GF dollars to reimburse facility costs incurred as a result of providing federal programs or services. The state annually expends approximately \$33.5 million on office space of which approximately \$7.5 million is on state owned facilities and \$26.0 million is on leased office space. Of this amount only about 5% is non-general fund. The

PROPOSAL FOR BETTER MANAGEMENT OF STATE FACILITIES

DRAFT - APRIL 1997

potential exists to recover additional federal funds and other non-GF funding through rate implementation.

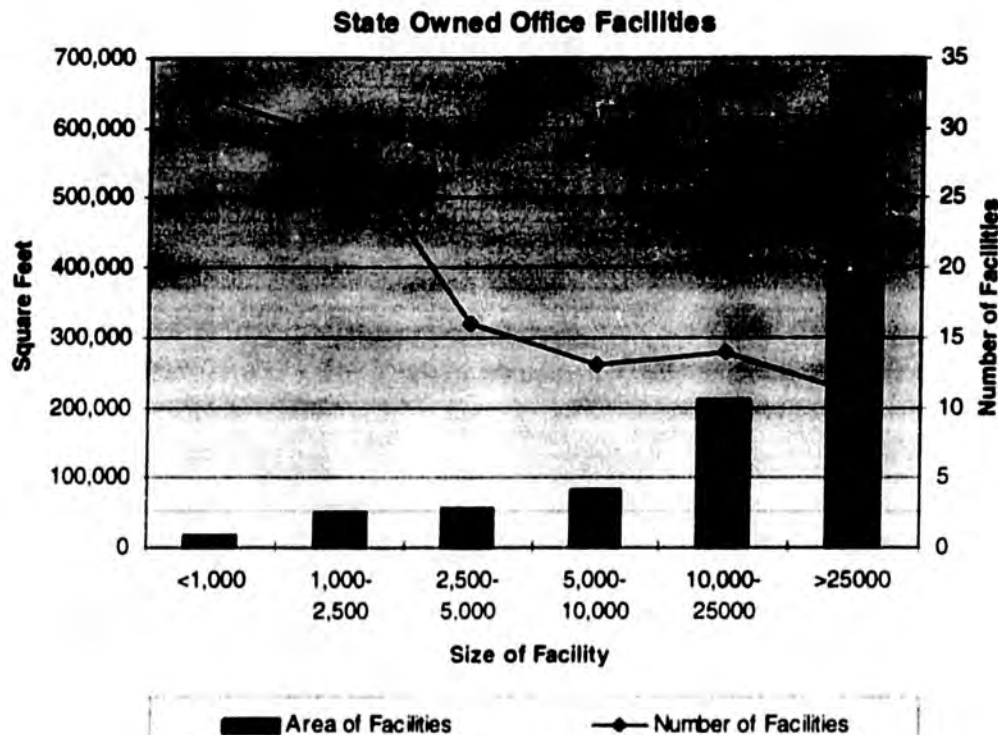
7. HOW COULD RENT BE IMPLEMENTED?

7.1. Accounting Mechanism

To accurately account for the collection of rents and payment for services, an Internal Service Fund is recommended. The major advantages of an internal service fund include the ability to accumulate total costs by activity, simpler provision of cost and pricing of services, and the ability to accumulate funds for renewal and replacement purposes (depreciation). Direct costs will be tracked by each individual facility and indirect costs will be allocated equitably to all users. Rates may be averaged across similar building types within contiguous geographic areas.

The proposed rental rate will be based on recoverable depreciation (based on original acquisition cost and repairs greater than \$5,000 that extend the life of the structure) plus operation costs (costs to operate new facility division, maintenance personal services, materials and equipment, risk management, etc.) divided by usable square footage. The initial rate calculation will be based mainly on estimated operation costs because the majority of actual costs are not known due to the lack of standard accounting. Rental rates to the extent that they may be higher than current levels of spending, are likely to be phased in over several years. In future years, rates will be adjusted to compensate for the difference between actual and estimated costs.

The most logical pilot for charging of rent would be for office space because a significant portion of state resources are invested in these facilities. The following graph shows that the vast majority of the state's owned office space is located in a few large buildings.



PROPOSAL FOR BETTER MANAGEMENT OF STATE FACILITIES
DRAFT - APRIL 1997

7.2. Organizational Structure

Current responsibilities are fragmented between DOA and DOT&PF. To ensure efficient use of office space and effective use of statewide maintenance staff, it would be beneficial to merge DOA leasing staff and DOTPF maintenance and operations staff in a new facility division reporting to the DOA Commissioner. Although existing personnel and resources will be utilized, there is a need to change how we manage our facilities. An organization whose sole responsibility is to care for building assets will bring greater focus and accountability to the task of property management. The organizational structure for management of the proposed facility division would probably include a manager, accounting staff and a programmer. It is the intention to delegate responsibilities between departments prior to FY99, and to formalize those responsibilities beginning in FY99.

7.3. Budgeting

As previously mentioned, the majority of facility costs for office space are paid by DOTPF (maintenance and operations) and DOA (leases). Under a rental structure, funds to pay rent would be transferred from DOTPF and DOA to the departments through the operating budget process. On an annual basis, the facility division would have reimbursable service agreements with agencies for their full cost of occupancy, using a standard rate per square foot.

7.4. Tracking Facility Activity

A computerized maintenance (management) system would be used to track facility activity. DMVA currently uses a system which has proven extremely useful and cost effective. The system will have the capability to schedule maintenance and track accounting activity. A space utilization study will have to be conducted in order to accurately bill agencies.

7.5. Accounting Structures

To promote consistent accountability of facility expenditures, existing AKSAS account codes would be redefined to correlate with the five elements of occupancy costs. Each facility and department would be assigned a unique AKSAS code for tracking purposes. Thus facility and departmental activity can either be tracked separately or collectively. Facilities not included in the initial office rental structure will be tracked separately by the responsible agency consistent with the redefined account codes.

Rental rates will be broken out at a minimum by: 1. office space, 2. computer space (24-hour activity) and 3. storage space. Separate regional rates will be developed for warehouse space and office space.

8. OTHER FACILITY INITIATIVES

8.1. Workforce Teamwork

This pilot would combine the facility maintenance personnel in Nome into a single team and apply computerized maintenance management technology to those facilities. An inter-agency team would create an annual maintenance plan indicating the frequency and nature of preventative maintenance workorders to be executed in each building. The team would then cooperatively execute the annual plan.

PROPOSAL FOR BETTER MANAGEMENT OF STATE FACILITIES
DRAFT - APRIL 1997

With the team approach, it is expected that response time will be reduced and more expertise will be available. It is believed that by creating a professional preventative maintenance program, the growth of deferred maintenance will be diminished.

8.2. Automated Maintenance Management System

This proposal would establish a statewide computerized maintenance management system for all state buildings. Support and data management would be provided from a service center within the Department of Military & Veterans Affairs (DMVA) since they currently have such a system in place.

DMVA and the tenant agencies would jointly identify the minimum maintenance required for each building component. DMVA would issue to the tenant agencies the respective preventative maintenance workorders on a quarterly basis.

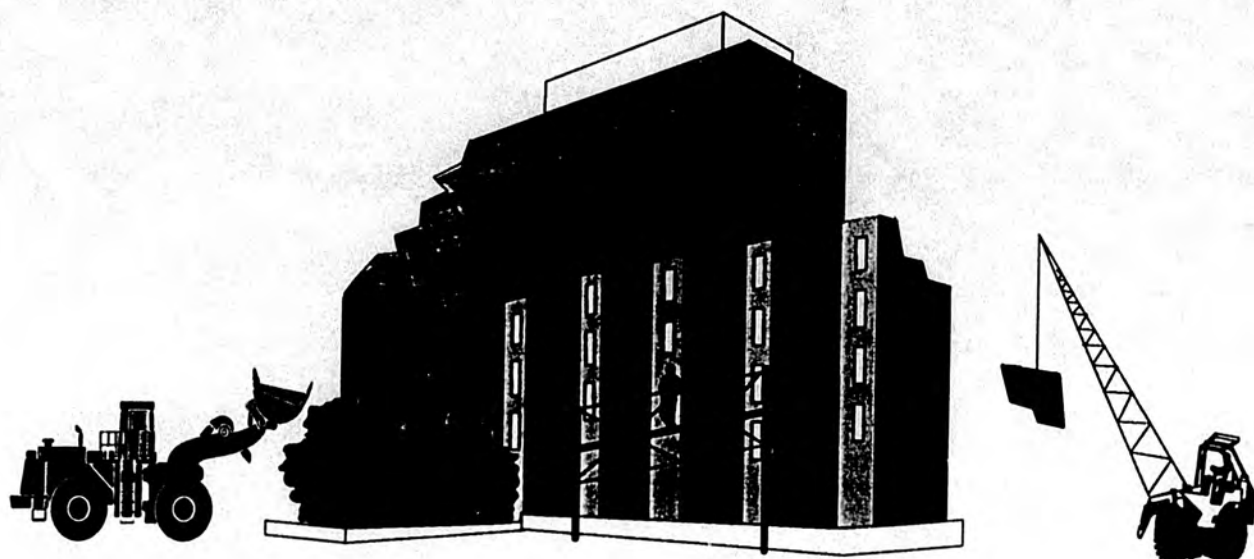
8.3. Accounting for Facility Expenditures

Standard accounting methodology and policies will apply to all state facilities in the executive branch. This will provide a more accurate and realistic assessment of our current spending and provide better information for future phases of facilities re-engineering.

8.4. Facilities Design & Construction

Design and construction activities are an integral part of the maintenance, operation and renewal of facilities. Some authority for facility design and construction would be delegated by DOTPF to DOA to support the work of the pilot projects. This authority is critical to achieving an improvement in service levels through energy conservation, condition assessments, and implementation of renewal and replacement of existing facility systems.

**UNIVERSITY
OF
ALASKA
TATION**



University of Alaska Deferred Maintenance

**Prepared by
Statewide Office of Facilities
March 1997**

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Position Paper
on
Deferred Maintenance
March 1997

The University of Alaska received \$6.1 million for deferred maintenance from the 1996 legislative process. These funds were distributed to the campuses based on a combination of their share in the balance of unfunded deferred maintenance as well as their enrollment and the size of the campus. These funds are being spent in FY97.

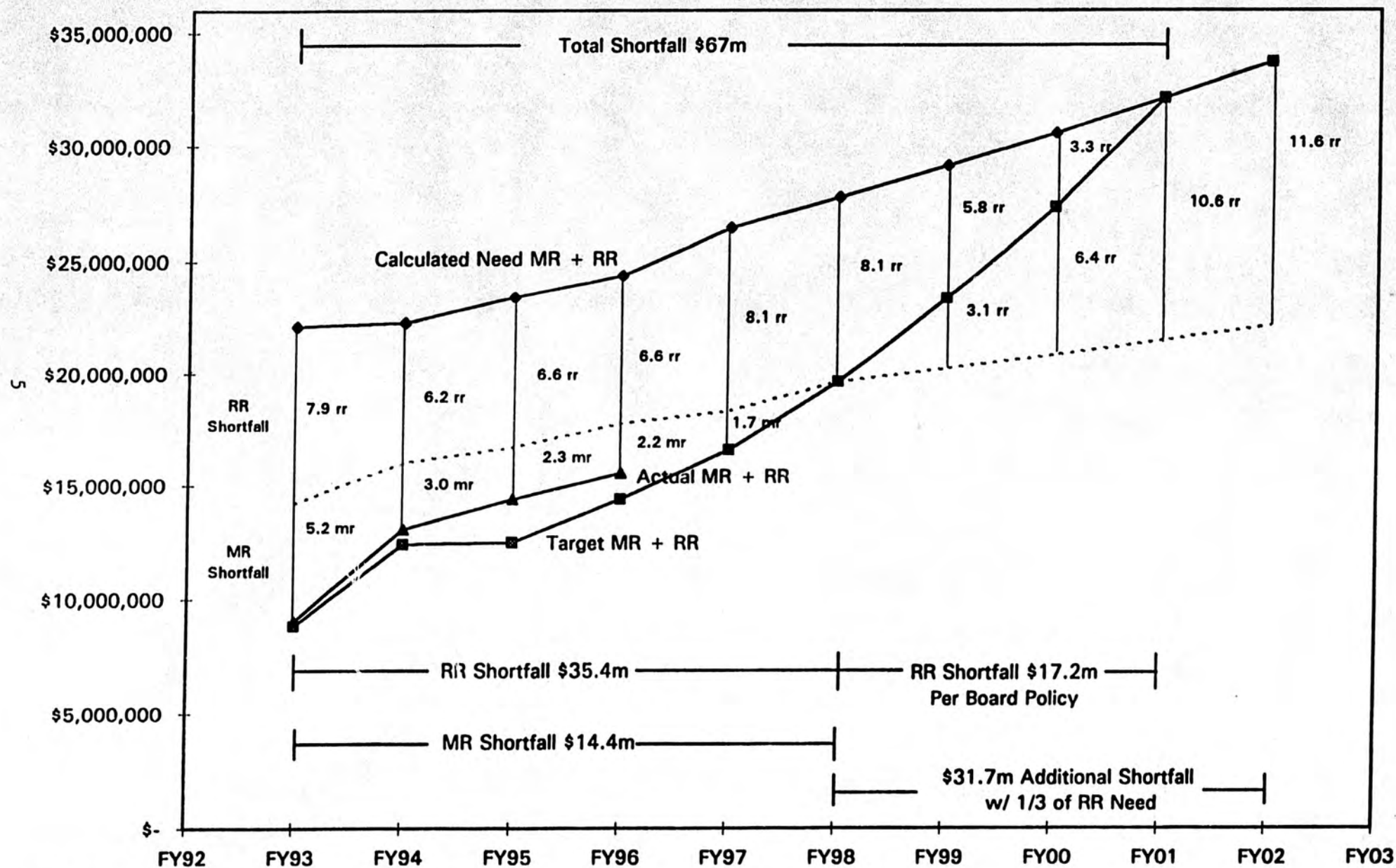
The University continues to progress towards fully funding *Maintenance and Repair (M&R)* and *Renewal and Replacement (R&R)* at the recommended formula levels. All MAUs met their required target for FY97. Board Policy passed in December 1994 requires M&R to be fully funded by the end of FY98. Board Policy also requires R&R to be fully funded by the end of 2001 and that at least one-third of the R&R level be achieved by the end of FY98. Until full-formula funding is achieved in the operating budgets, additional deferred maintenance problems will continue to occur and be added to the backlog. With only \$6.1 million appropriated this year, a further reduction in the backlog is not possible. In fact, with a net underfunding for M&R and R&R of \$8.1 million for FY97, it is estimated that the University will actually lose ground by adding approximately \$2.0 million to the list.

The University is at a difficult juncture in addressing the deferred maintenance backlog. For the University to further reduce the backlog, it must continue to move towards full-formula funding. However, it is expected that funding M&R and R&R at the formula levels will eventually require approximately 20 percent of the University's state appropriation. The consequence of not funding M&R and R&R at the formula levels is that it would take a capital appropriation of \$35 million a year for approximately nine years to fully address the backlog of deferred maintenance. Annual appropriations of as much as \$25 million a year would fail to bring the problem under control. These issues are shown on the graphs on the following pages.

Graph 1 shows the levels of M&R and R&R funding required at full-formula levels in FY98 and FY2001. Also summarized is the amount of shortfall which has occurred in each category since the policy change was implemented. The accumulated shortfalls represent repair and renewal work not undertaken and an estimate of the increase in the deferred maintenance backlog resulting from the under funding.

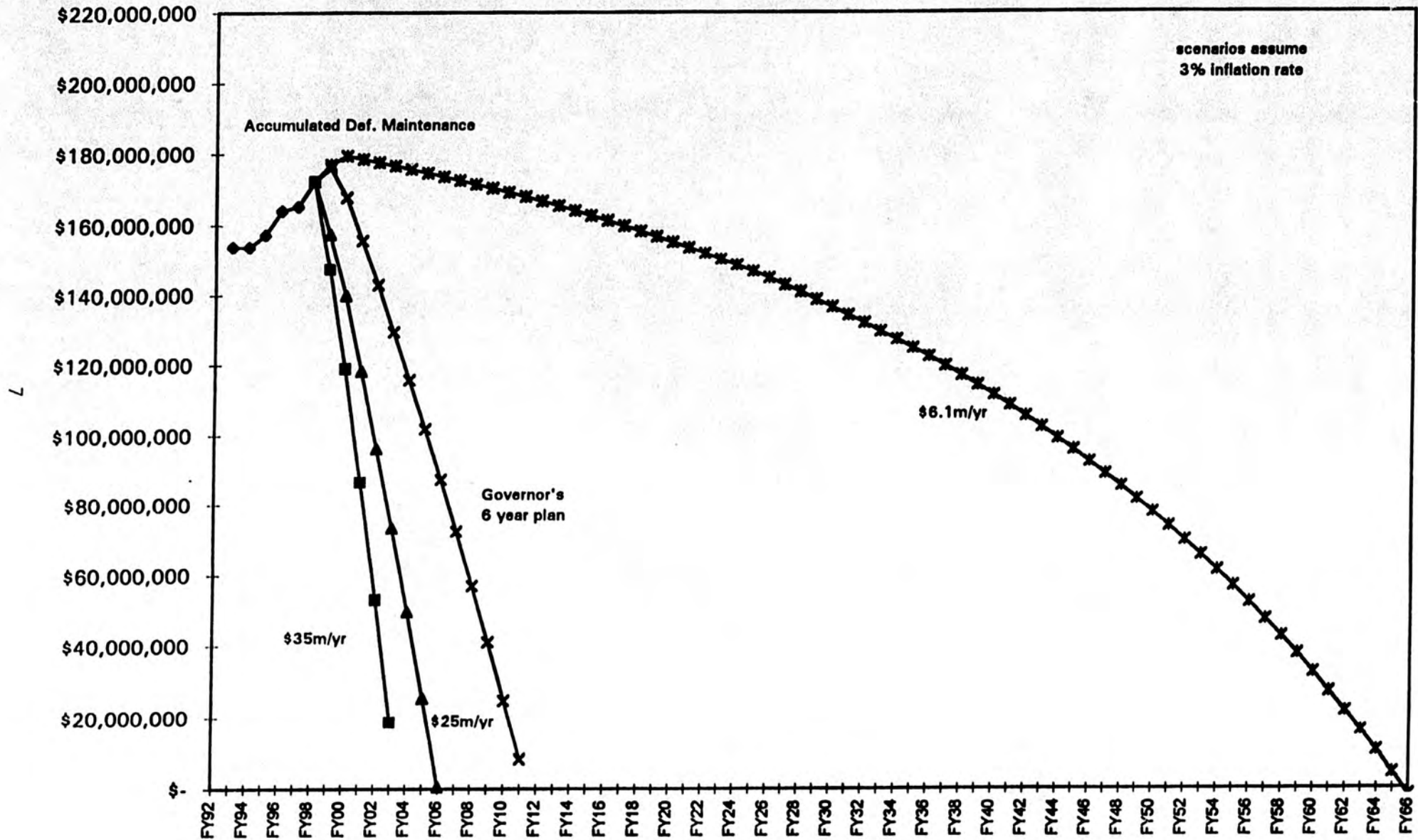
GRAPHS

University of Alaska
Maintenance and Repair + Renewal and Replacement
FY93 - FY02



University of Alaska

Deferred Maintenance Reduction Scenarios with MR & RR Achieved Per BOR Policy



University of Alaska

Deferred Maintenance Funding Scenarios

with M&R Target by FY98 and R&R Frozen at 1/3 Target Level

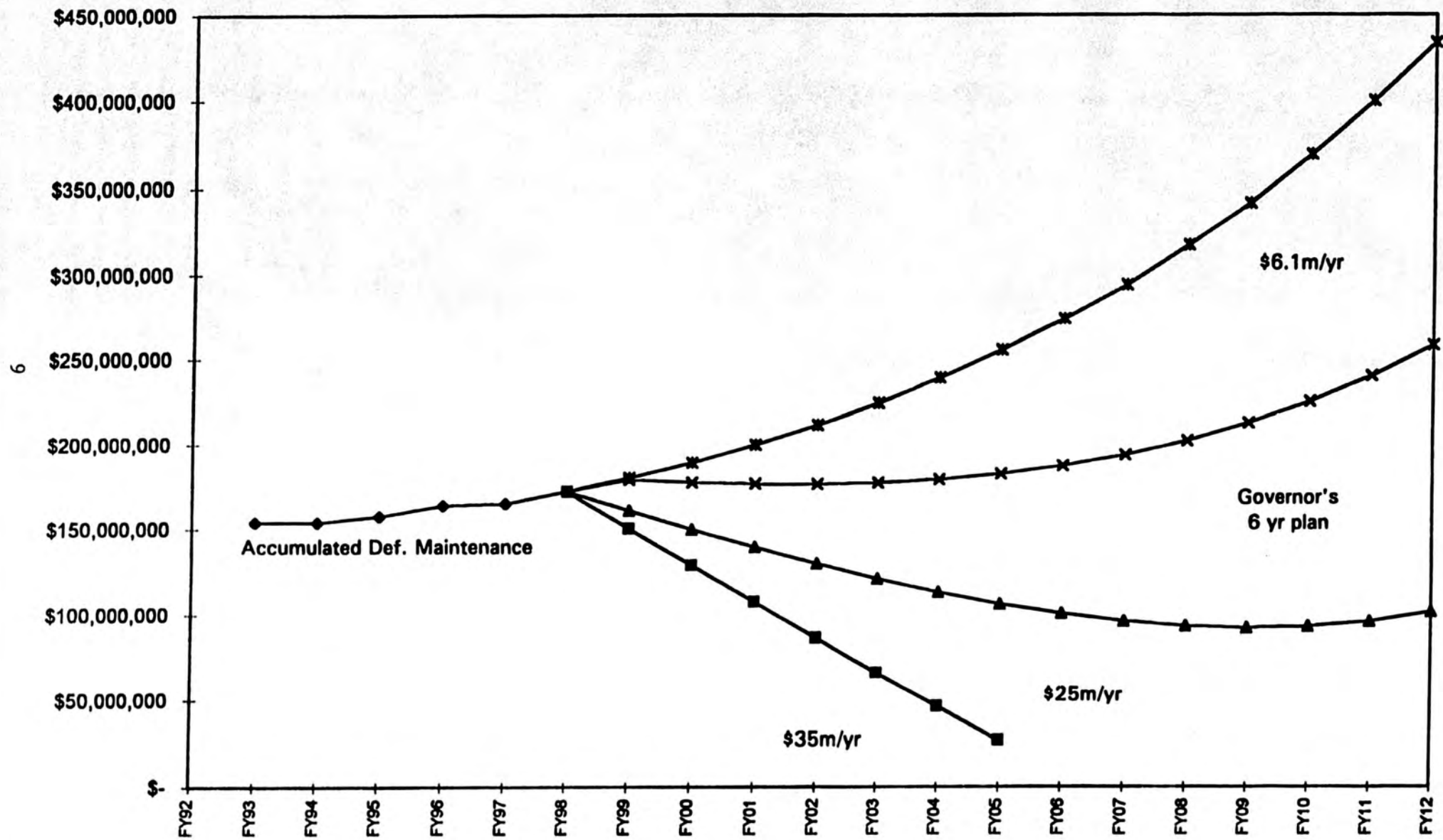


TABLE A

Unfunded Deferred Maintenance by MAU as Compared with Last Two Year's Totals
(in thousands)

Non-Residential							Residential							Totals				
MAU	FY95		FY96		FY97		FY95		FY96		FY97		FY95		FY96		FY97	
UAA	35,687.0	29%	33,729.0	28.6%	35,917.5	23.8%	4,127.0	12%	2,733.0	14%	2,638.0	19%	39,814.0	25%	36,462.0	27%	38,555.5	23%
UAF	82,580.0	68%	77,244.0	67.9%	112,951.9	74.8%	30,782.0	87%	16,421.0	85%	10,898.4	77%	113,362.0	72%	93,665.0	70%	123,850.3	75%
UAS	3,710.0	3%	2,863.0	2.5%	2,038.5	1.4%	566.0	1%	220.2	1%	669.4	5%	4,276.0	3%	3,083.2	2%	2,707.9	2%
TOTALS	121,977.0	100%	113,836.0	100.0%	150,907.9	100%	35,475.0	100%	19,374.2	100%	14,205.8	100%	157,452.0	100%	133,210.2	100%	165,113.7	100%

Reduction from FY95 to FY96 = 24,242.0

Funding received in FY96 = 29,500.0

Increase from FY96 to FY97 = 31,903.5

Funding received in FY97 = 6,125.0

TABLE B

**FY97 Unfunded Deferred Maintenance
Non-Residential
University of Alaska Anchorage
Building Summary**

Campus	Building	Building Use	Estimate
Anchorage	Administration	Administration Offices	725,000
Anchorage	Allied Health Sciences	Classrooms/Teaching Labs	630,000
Anchorage	Arts	Classrooms/Teaching Labs	692,000
Anchorage	Auto/Diesel	Voc-Tech Labs/Classrooms	1,001,000
Anchorage	Aviation Complex	Aviation Programs	782,000
Anchorage	Bookstore	Merchandising/Storage	70,000
Anchorage	Campuswide	Campuswide	400,000
Anchorage	Campus Center	Student Services	1,105,000
Anchorage	College of Arts & Sciences	Classrooms/Offices	2,932,000
Anchorage	Cuddy Center	Food Service Technology	321,000
Anchorage	Diplomacy	Offices	270,000
Anchorage	Energy Modules 1 & 2	Standby Utilities	115,000
Anchorage	Engineering	Teaching Labs/Offices	1,252,500
Anchorage	Hartlieb	Voc Tech/Labs/Shops	1,157,000
Anchorage	K Building	Offices/Classrooms	784,000
Anchorage	Library	Campus Library	2,472,500
Anchorage	Library/Various	Campus Library	400,000
Anchorage	McDonald	Library/Classrooms	1,362,000
Anchorage	Monserud	Library/Classrooms	1,586,000
Anchorage	Science	Labs/Offices	520,000
Anchorage	Short	Administration/Classrooms	1,273,000
Anchorage	Sports Center	Physical Education	5,377,000
Anchorage	Various	Campuswide	650,000
Anchorage	Warehouse	Storage	75,000
Anchorage	Williamson	Assembly/Lecture Hall	1,950,000
Anchorage	7&A	Offices	482,000
Homer	Campuswide	Campuswide	85,000
Homer	Kachemak	Campuswide	180,000
Kodiak College	Adult Learning Center	Classrooms/Labs	180,500
Kodiak College	Benny Benson	Administration/Library	789,000
Kodiak College	Various	Campuswide	100,000
Kodiak College	Voc-Tech	Labs/Classrooms	200,000
Kenai Peninsula College	Brockel	Library/Classrooms	136,000
Kenai Peninsula College	Campuswide	Campuswide	1,275,000
Kenai Peninsula College	Goodrich	Voc Tech/Classrooms	289,000
Kenai Peninsula College	McLane	Labs/Classrooms/Student	317,000
Kenai Peninsula College	Various	Campuswide	180,000
Kenai Peninsula College	Ward	Voc Tech/Offices	559,000
Mat-Su College	Campuswide	Roads/Streets/Parking	200,000
Mat-Su College	Kerttula	Offices/Classrooms/Labs	1,142,000
Mat-Su College	Okeson	Library	878,000
Mat-Su College	Snodgrass	Offices/Classrooms/Labs	350,000
Prince Wm. Sound Comm.	Campuswide	Campuswide	60,000
Prince Wm. Sound Comm.	Grouden-Harrison	Offices/Classrooms/Labs	613,000
Total University of Alaska Anchorage Non-Residential Deferred Maintenance			<u>35,917,500</u>

**FY97 Unfunded Deferred Maintenance
Non-Residential
University of Alaska Fairbanks
Building Summary**

Campus	Building	Building Use	Estimate
Fairbanks	Ag & Forestry Experiment Station Farm	Facility/Offices/Labs	1,503,000
Fairbanks	Arctic Health Research Center	Offices/Research Labs	10,400,000
Fairbanks	Ambler Lane	Parking	269,000
Fairbanks	Atkinson	Utilities	1,410,000
Fairbanks	Ballaine Parking Lot	Parking	34,000
Fairbanks	Brooks	Offices/Classrooms	4,180,540
Fairbanks	Bunnell House	Day Care Facility	65,000
Fairbanks	Chandalar Exterior	Faculty Housing	171,000
Fairbanks	Chandalar/Cooper Street	Streets	183,000
Fairbanks	Chapman Yukon Drive	Streets	40,000
Fairbanks	Columbia Circle Exterior	Site Work	255,000
Fairbanks	Commons Plaza	Building Exterior	41,000
Fairbanks	Constitution Hall	Offices/Bookstore	1,525,580
Fairbanks	Copper Street	Street	379,000
Fairbanks	Deer Yard	Animal Pens	275,000
Fairbanks	Denali Lane Walkway	Site Work	167,000
Fairbanks	Duckering	Classrooms/Labs/Offices	8,237,750
Fairbanks	Eielson	Offices/Classrooms	1,685,000
Fairbanks	Elvey	Offices/Labs	7,218,050
Fairbanks	Fairbanks Street	Street	535,000
Fairbanks	Fine Arts	Offices/Classrooms	8,473,010
Fairbanks	Geist Museum	Museum	2,014,000
Fairbanks	Geist Road Sewer	Sewer	674,000
Fairbanks	Gruening	Offices/Classrooms	5,113,150
Fairbanks	Haida	Street/Parking	59,000
Fairbanks	Harwood Hall Exterior	Site	53,000
Fairbanks	Health/Safety	Infirmiry/Campus Security	1,069,530
Fairbanks	Hess Commons	Food Service	465,000
Fairbanks	Hess Village Exterior	Site	676,000
Fairbanks	Irving I	Offices/Labs	6,856,849
Fairbanks	Irving II	Offices/Labs	2,560,240
Fairbanks	Kobuk Avenue Walkway	Site Work	128,000
Fairbanks	Kuskokwim Way/Tanana Loop	Street	287,000
Fairbanks	Lars Viewing Parking Lot	Parking	25,000
Fairbanks	Moore Hall Exterior	Site	215,000
Fairbanks	Nenana Parking Lot	Parking	48,000
Fairbanks	Noatak Parking Lot	Parking	294,000
Fairbanks	O'Neill	Offices/Labs	4,110,250
Fairbanks	Patty Center	Physical Education	6,026,950
Fairbanks	Patty Ice Arena	Physical Education	1,306,750
Fairbanks	Physical Plant	Shops/Offices	6,398,861
Fairbanks	Plaza	Site Work	51,000

**FY97 Unfunded Deferred Maintenance
Residential
University of Alaska Fairbanks
Building Summary**

Campus	Building	Building Use	Estimate
Fairbanks	610 Kobuk Residence	Staff Residence	109,910
Fairbanks	Chandalar Units	Faculty Housing	2,059,679
Fairbanks		(Single/Duplex/Triplex - 34 units)	
Fairbanks	Chatanika	Faculty Housing (Single - 2 units)	231,925
Fairbanks	Columbia Circle 739	Faculty Housing	19,980
Fairbanks	Colville	Faculty Housing (Single - 3 units)	285,056
Fairbanks	Copper Lane	Faculty Housing (Single - 5 units)	500,402
Fairbanks	Garden Apartments	Student Housing	434,922
Fairbanks	Harwood Hall	Married Students (30 units)	1,460,298
Fairbanks	Stuart Hall	Married Students (12 units)	1,000,000
Fairbanks	Tanana Drive	Faculty Housing (Duplex - 6 units)	583,884
Fairbanks	Tilly Commons	Food Service	3,222,359
Fairbanks	Walsh Hall	Married Students (13 units)	990,000
Total University of Alaska Fairbanks Residential Deferred Maintenance			<u>10,898,415</u>

**FY97 Unfunded Deferred Maintenance
Residential
University of Alaska Southeast
Building Summary**

Campus	Building	Building Use	Estimate
Juneau	Student Lodge	Housing Services	54,547
Juneau	Student Housing	15 married units + 133 beds	430,940
Juneau	Student Housing Site	Campus	120,350
Juneau	Koschmann House	Housing	33,754
Juneau	Mathisen House	Housing	29,800
Total University of Alaska Southeast Residential Deferred Maintenance			669,391

TABLE C

Planned Campus Projects Using FY97 Capital Allocations

N-RESIDENTIAL	Project	Work Category	Estimate	Total
University of Alaska Anchorage				
1.	Short Bldg. - Correct Fire Protection System	Deferred Maint/Major Repair	92,000	
2.	7th & A - Repair/Replace HVAC System	Deferred Maint/Major Repair	175,000	
3.	Cuddy Center - Repair/Replace HVAC System	Deferred Maint/Major Repair	110,000	
4.	PE Sports Facility - Repair/Replace Plumbing, Ph 2	Deferred Maint/Major Repair	125,000	
5.	Short Bldg. - Repair/Replace HVAC System	Deferred Maint/Major Repair	240,000	
6.	Various Facilities - Repair/Replace Lighting Systems	Deferred Maint/Major Repair	104,000	
7.	Campus Center - Renovate HVAC Systems, Ph 1	Deferred Maint/Major Repair	65,000	
8.	Administration Bldg. - Renovate HVAC Systems, Ph 1	Deferred Maint/Major Repair	65,000	
9.	PE Sports Facility - Renovate HVAC Systems, Ph 1	Deferred Maint/Major Repair	112,000	
10.	East Campus - Repair Gas Cathodic Protection System	Deferred Maint/Major Repair	75,000	
11.	Various Facilities - Repair Roof & Parapet	Deferred Maint/Major Repair	238,500	
12.	Monserud - Replace Panic Hardware	Maintenance	9,300	
13.	Hartlieb - Repair Ventilation	Deferred Maint/Major Repair	100,000	
14.	Kodiak Voc-Tech - Repair HVAC in Buildings Ph 2 (Partial Funding)	Deferred Maint/Major Repair	66,000	
15.	Homer - Renovate Interior	Alteration	16,100	
16.	Kenai Peninsula Various - Replace Domestic Water Piping Ph 2	Deferred Maint/Major Repair	60,000	
17.	Kenai Peninsula McLane - Repair HVAC System (Partial Funding)	Deferred Maint/Major Repair	103,600	
18.	Mat-Su Campuswide - Repair Fire Protection Systems Ph 1	Deferred Maint/Major Repair	114,200	
19.	Prince Wm. Sound Community College Grouden-Harrison - Repair Fire Protection Systems Ph 1	Deferred Maint/Major Repair	44,500	
University of Alaska Anchorage Non-Residential Total				1,915,200
University of Alaska Fairbanks				
1.	Bunnell - Deferred Maintenance Project	Deferred Maint/Major Repair	3,000,000	
2.	Bunnell - Fire Exit & ADA Access Floor 2 West Wing	Mandated Improvement	100,000	
3.	Schaible Auditorium	Remodeling	150,000	
4.	Duckering - Deferred Maintenance Scoping & Schematic Design	Deferred Maint/Major Repair	250,000	
5.	Contingency & Small Deferred Maintenance Projects	Deferred Maint/Major Repair	203,900	
University of Alaska Fairbanks Non-Residential Total				3,703,900
University of Alaska Southeast				
Sitka Floor 1 - Laboratory Expansion		Renovation	250,000	
<i>Juneau</i>				
1.	Bill Ray Ctr - Repair Structure Between Phases 1 & 2 Floor/Ceiling	Deferred Maint/Major Repair	18,560	
2.	Bill Ray Ctr - Install Fire Curtains	Mandated Improvements	3,500	
3.	Stover House - Replace Roof Section	Deferred Maint/Major Repair	20,935	
4.	Stover House - Repair Foundation	Deferred Maint/Major Repair	30,500	
5.	Auke Lake Site - Repair/Replace Pedestrian Walks	Deferred Maint/Major Repair	53,000	
6.	Auke Lake Site - Install ADA Signage	Mandated Improvements	35,600	
7.	Knodel House - Foundation Replacement (Phase 1)	Deferred Maint/Major Repair	13,748	
subtotal			175,843	
<i>Ketchikan</i>				
1.	Ziegler Bldg. - Replace Roof Scuppers	Deferred Maint/Major Repair	21,836	
2.	Ziegler Bldg. - Replace Electric Heat (Phase 1)	Deferred Maint/Major Repair	42,377	
subtotal			64,213	
<i>Sitka</i>				
1.	Hanger 322 - Outside Lighting Upgrade (Phase 1)	Mandated Improvements	15,844	
University of Alaska Southeast Non-Residential Total				505,900
VON-RESIDENTIAL TOTAL				6,125,000

TABLE D

**FY97 DEFERRED MAINTENANCE
NON-RESIDENTIAL UNFUNDED PRIORITY LISTING
UNIVERSITY OF ALASKA ANCHORAGE**

Priority	Campus	Building	Project Title	Project Amount	Cumul. Total	Inflation to FY2000 6.1%	Cumul. Total
1	ANC	ENGINEERING	REPAIR SITE DRAINAGE SYSTEM	60,000	60,000	63660	63,660
2	ANC	WAREHOUSE	REPAIR VENTILATION DEFICIENCIES	75,000	135,000	79575	143,235
3	ANC	ADMIN	REPAIR HEATING SYSTEM & CONTROLS	150,000	285,000	159150	302,385
4	ANC	ALLIED HEALTH	PAINT/SEAL EXTERIOR	120,000	405,000	127320	429,705
5	ANC	LIBRARY	DDC STATIC CTRLS, LOW TEMP ALARMS	75,000	480,000	79575	509,280
6	MSC	SNODGRASS	REPAIR FIRE PROTECTION SYSTEMS	175,000	655,000	185675	694,955
7	MSC	KERTTULA	REPAIR FIRE PROTECTION SYSTEMS	175,000	830,000	185675	880,630
8	ANC	LIBRARY	REPLACE CARPET, 2nd FLOOR	375,000	1,205,000	397875	1,278,505
9	ANC	LIBRARY	REPAIR RESTROOMS	350,000	1,555,000	371350	1,649,855
10	ANC	MCDONALD	REPAIR RESTROOMS	175,000	1,730,000	185675	1,835,530
11	ANC	MONSERUD	REPAIR RESTROOMS	175,000	1,905,000	185675	2,021,205
12	ANC	HARTLIEB	REPAIR RESTROOMS	225,000	2,130,000	238725	2,259,930
13	ANC	SHORT	REPAIR RESTROOMS	175,000	2,305,000	185675	2,445,605
14	KOC	VO-TECH	REPAIR HVAC SYSTEM, PH III	25,000	2,330,000	26525	2,472,130
15	ANC	AUTO/DIESEL	REPAIR ROOF	375,000	2,705,000	397875	2,870,005
16	ANC	SCIENCE	REPLACE GALVANIZED DOMESTIC WATER PIPING	250,000	2,955,000	265250	3,135,255
17	ANC	LIBRARY	REPAIR HVAC SYSTEM/CONTROLS	200,000	3,155,000	212200	3,347,455
18	KPC	GOODRICH	REPLACE HVAC COMPONENTS	195,000	3,350,000	206895	3,554,350
19	ANC	VARIOUS	REPAIR NATURAL GAS DISTRIBUTION SYS	50,000	3,400,000	53050	3,607,400
20	KOC	VO-TECH	REPAIR/REPLACE HVAC CONTROLS	75,000	3,475,000	79575	3,686,975
21	ANC	WILLIAMSON	REPLACE BOILERS/HEATING EQUIPMT	75,000	3,550,000	79575	3,766,550
22	KOC	BENNY BENSON	REPAIR CENTRAL HTG PLANT/DDC CTRLS	150,000	3,700,000	159150	3,925,700
23	KOC	ALC	REPAIR/REPLACE WINDOWS	25,000	3,725,000	26525	3,952,225
24	ANC	ADMIN	REPLACE CARPET, PH II	190,000	3,915,000	201590	4,153,815
25	ANC	DIPLOMACY	REPAIR HVAC CONTROLS	250,000	4,165,000	265250	4,419,065
26	MSC	CAMPUS-WIDE	REPAIR ROADS/STREET/PARKING	200,000	4,365,000	212200	4,631,265
27	MSC	OKESON	PAINT EXTERIOR	50,000	4,415,000	53050	4,684,315
28	ANC	K	REPLACE ROOF, PH II	550,000	4,965,000	583550	5,267,865
29	ANC	K	REPAIR FIRE PROTECTION SYSTEM, PH II	70,000	5,035,000	74270	5,342,135
30	ANC	CAS	REPLACE ELEVATOR CONTROLS	50,000	5,085,000	53050	5,395,185
31	ANC	CAS	REPAIR FIRE PROTECTION SYSTEM	122,000	5,207,000	129442	5,524,627
32	ANC	WILLIAMSON	REPLACE ROOF	335,000	5,542,000	355435	5,880,062
33	ANC	SPORTS CENTER	REPAIR POOL GUTTERS & FILTER TANK	150,000	5,692,000	159150	6,039,212
34	PWS	GROUDEN-HARRISON	REPAIR BUILDING INSULATION	250,000	5,942,000	265250	6,304,462
35	ANC	CAMPUS CENTER	REPAIR/REPLACE ROOF	470,000	6,412,000	498670	6,803,132
36	ANC	ARTS	REPAIR OUTSIDE AIR DAMPERS	15,000	6,427,000	15915	6,819,047
37	ANC	CAS	REPLACE LIGHT FIXTURES	185,000	6,612,000	196285	7,015,332
38	ANC	K	REPAIR/REPLACE LIGHT FIXTURES PH II	52,000	6,664,000	55172	7,070,504
39	PWS	GROUDEN-HARRISON	REPAIR DOMESTIC WATER TREATMENT SYS	20,000	6,684,000	21220	7,091,724
40	ANC	HARTLIEB	REPAIR FIRE PROTECTION SYSTEM	225,000	6,909,000	238725	7,330,449
41	ANC	HARTLIEB	REPLACE STRIP LIGHTING FIXTURES	120,000	7,029,000	127320	7,457,769
42	ANC	ADMIN	REPAIR OVERHANG	235,000	7,264,000	249335	7,707,104
43	ANC	CAMPUS CENTER	REPAIR RESTROOMS	220,000	7,484,000	233420	7,940,524
44	ANC	K	REPAIR/REPLACE LIGHTING FIXTURES, STAIRWAY	15,000	7,499,000	15915	7,956,439
45	ANC	SCIENCE	REPAIR EMERGENCY POWER	35,000	7,534,000	37135	7,993,574
46	ANC	MCDONALD	REPLACE STRIP LIGHTING FIXTURES	160,000	7,694,000	169760	8,163,334
47	ANC	MCDONALD	REPLACE DOORS AND HARDWARE	100,000	7,794,000	106100	8,269,434
48	ANC	ALLIED HEALTH	REPAIR FIRE ALARM SYSTEM	70,000	7,864,000	74270	8,343,704
49	ANC	ARTS	REPAIR/REPLACE HUMIDIFICATION SYS	65,000	7,929,000	68965	8,412,669
50	ANC	CAMPUS CENTER	REPAIR HVAC SYSTEM	115,000	8,044,000	122015	8,534,684
1	ANC	ALLIED HEALTH	REPAIR/REPLACE VAV BOXES	35,000	8,079,000	37135	8,571,819
2	ANC	SPORTS CENTER	REPAIR/REPLACE GYM FLOOR, PH I	125,000	8,204,000	132625	8,704,444

**FY97 DEFERRED MAINTENANCE
NON-RESIDENTIAL UNFUNDED PRIORITY LISTING
UNIVERSITY OF ALASKA ANCHORAGE**

Priority	Campus	Building	Project Title	Project Amount	Cumul. Total	Inflation to FY2000 6.1%	Cumul. Total
103	ANC	K	CLEAN/SEAL EXTERIOR	24,000	17,920,000	25464	19,013,120
104	ANC	K	REPAIR DANCE FLOOR AIR VENT	5,000	17,925,000	5305	19,018,425
105	ANC	LIBRARY	REPAIR EXTERIOR SURFACES	60,000	17,985,000	63660	19,082,085
106	ANC	CAS	REPLACE ROOF, PH II	300,000	18,285,000	318300	19,400,385
107	ANC	ADMIN	REPLACE HUMIDIFICATION SYSTEM	150,000	18,435,000	159150	19,559,535
108	ANC	CAMPUS CENTER	REPLACE HUMIDIFICATION SYSTEM	150,000	18,585,000	159150	19,718,685
109	ANC	CAMPUS CENTER	REPAIR SLIDING PARTITIONS	150,000	18,735,000	159150	19,877,835
110	MSC	OKESON	REPAIR HVAC SYSTEM, DDC CONTROLS	150,000	18,885,000	159150	20,036,985
111	PWS	GROUDEN-HARRISON	REPAIR/REPLACE HVAC SYSTEM	100,000	18,985,000	106100	20,143,085
112	ANC	CUDDY	CLEAN/SEAL EXTERIOR	161,000	19,146,000	170821	20,313,906
113	ANC	SHORT	CLEAN/SEAL EXTERIOR	25,000	19,171,000	26525	20,340,431
114	PWS	GROUDEN-HARRISON	REPAIR/REPLACE PLUMBING	53,000	19,224,000	58233	20,396,664
115	KOC	VARIOUS	REPAIR INTERIOR FINISHES	75,000	19,299,000	79575	20,476,239
116	ANC	ENGINEERING	REPAIR/REPLACE EXTERIOR WINDOWS	356,000	19,655,000	377716	20,853,955
117	KPC	BROCKEL	REPAIR FIRE PROTECTION SYSTEM	40,000	19,695,000	42440	20,896,395
118	KOC	ALC	REPAIR ELECTRICAL SYSTEM	35,500	19,730,500	37665.5	20,934,061
119	KPC	WARD	REPAIR FIRE PROTECTION SYSTEM	90,000	19,820,500	95490	21,029,551
120	ANC	MCDONALD	REPAIR/REPLACE MISC MECHANICAL	30,000	19,850,500	31830	21,061,381
121	ANC	MONSERUD	CLEAN/SEAL EXTERIOR, REPAIR/REPLACE WINDOWS	46,000	19,896,500	48806	21,110,187
122	ANC	CUDDY	REPAIR/REPLACE SOLID WASTE DISPOSAL SYSTEM	40,000	19,936,500	42440	21,152,627
123	ANC	ARTS	REPAIR HARDWARE	35,000	19,971,500	37135	21,189,762
124	ANC	MONSERUD	REPLACE ROOF	370,000	20,341,500	392570	21,582,332
125	ANC	ARTS	REPAIR RESTROOMS	220,000	20,561,500	233420	21,815,752
126	ANC	ENGINEERING	REPAIR CURTAIN WALLS	56,500	20,618,000	59946.5	21,875,698
127	KPC	MCLANE	REPAIR ELECTRICAL SYSTEM	74,000	20,692,000	78514	21,954,212
128	ANC	AUTO/DIESEL	CLEAN/SEAL EXTERIOR	60,000	20,752,000	63660	22,017,872
129	KOC	BENNY BENSON	REPAIR ELECTRICAL SYSTEM	61,000	20,813,000	64721	22,082,593
130	KPC	CAMPUS-WIDE	REPAIR FIRE PUMP SYSTEM	95,000	20,908,000	100795	22,183,388
131	ANC	WILLIAMSON	PAINT THEATER AND LOBBY	40,000	20,948,000	42440	22,225,828
132	ANC	WILLIAMSON	REPAIR/REPLACE DOORS & HARDWARE	250,000	21,198,000	265250	22,491,078
133	KPC	CAMPUS-WIDE	REPAIR PARKING LOTS	1,030,000	22,228,000	1092830	23,583,908
134	KPC	CAMPUS-WIDE	REPAIR SURFACE DRAINAGE SYSTEMS	150,000	22,378,000	159150	23,743,058
135	ANC	7&A	REPLACE ROOF	95,000	22,473,000	100795	23,843,853
136	HOM	CAMPUS-WIDE	REPAIR SITE DRAINAGE	85,000	22,558,000	90185	23,934,038
137	ANC	WILLIAMSON	REPAIR/REPLACE CEILING	750,000	23,308,000	795750	24,729,788
138	ANC	ALLIED HEALTH	PAINT INTERIOR	100,000	23,408,000	106100	24,835,888
139	ANC	AUTO/DIESEL	REPAIR/REPLACE DOORS/HARDWARE	56,000	23,464,000	59416	24,895,304
140	ANC	ALLIED HEALTH	REPAIR/REPLACE HARDWARE	100,000	23,564,000	106100	25,001,404
141	ANC	BOOKSTORE	REPAIR/REPLACE CEILING	20,000	23,584,000	21220	25,022,624
142	ANC	WILLIAMSON	REPAIR WALLS	500,000	24,084,000	530500	25,553,124
143	ANC	7&A	REPLACE CEILING SYSTEM	35,000	24,119,000	37135	25,590,259
144	MSC	SNODGRASS	PAINT INTERIOR/EXTERIOR	100,000	24,219,000	106100	25,696,359
145	MSC	SNODGRASS	REPAIR ROOF FLASHINGS	75,000	24,294,000	79575	25,775,934
146	ANC	SPORTS CENTER	REPLACE ROOF	1,400,000	25,694,000	1485400	27,261,334
147	ANC	SPORTS CENTER	REPAIR/REPLACE BLEACHER DRIVE MOTORS	80,000	25,774,000	84880	27,346,214
148	ANC	SPORTS CENTER	REPAIR SAUNAS	125,000	25,899,000	132625	27,478,839
149	ANC	SPORTS CENTER	REPLACE HUMIDIFICATION SYSTEM	150,000	26,049,000	159150	27,637,989
150	ANC	AVIATION CMLPX	REPAIR MECHANICAL SYSTEMS	67,000	26,116,000	71087	27,709,076
151	ANC	AVIATION CMLPX	REPAIR/REPLACE BOILER	40,000	26,156,000	42440	27,751,516
152	ANC	SPORTS CENTER	REPLACE DETERIORATED ALUMINUM POOL	2,500,000	28,656,000	2652500	30,404,016
153	ANC	SCIENCE	REPLACE MECHANICAL SYS CONTROLS	45,000	28,701,000	47745	30,451,761
154	ANC	SHORT	REPAIR/REPLACE VAT FLOORING	63,000	28,764,000	66843	30,518,604
155	MSC	KERTTULA	REPAIR CONTROLS/BALANCE HVAC SYS	176,000	28,940,000	186736	30,705,340

**FY97 DEFERRED MAINTENANCE
NON-RESIDENTIAL UNFUNDED PRIORITY LISTING
UNIVERSITY OF ALASKA FAIRBANKS**

Priority	Campus	Building	Description	D/M Estimate	Facility Total	Cumul. Total	Inflation to FY2000 6.1%	Cumul. Total
1	FAI	DUCKERING	Cooling System Repairs	530,000		530,000	562,330	562,330
1	FAI	DUCKERING	Ventilation Distribution Repairs	700,000		1,230,000	742,700	1,305,030
1	FAI	DUCKERING	Replace Air Handling Equipment	1,785,000		3,015,000	1,893,885	3,198,915
1	FAI	DUCKERING	Replace propane, RO and air piping	300,000		3,315,000	318,300	3,517,215
			Provide isolation valves for equipment, individual utilities, etc.	162,750		3,477,750	172,678	3,689,893
1	FAI	DUCKERING	Hydronic System Repairs	168,000		3,645,750	178,248	3,868,141
1	FAI	DUCKERING	Replace Sewer Lines in Basement	95,000		3,740,750	100,795	3,968,936
1	FAI	DUCKERING	Replace Outdoor Lighting Fixtures	35,000		3,775,750	37,135	4,006,071
1	FAI	DUCKERING	Repair /replace Lighting	498,750		4,274,500	529,174	4,535,245
1	FAI	DUCKERING	Replace Curtain Wall Panels	1,460,000		5,734,500	1,549,060	6,084,305
1	FAI	DUCKERING	Repair and Paint Concrete Walls	75,000		5,809,500	79,575	6,163,880
1	FAI	DUCKERING	Floor Covering Replacement	600,000		6,409,500	636,600	6,800,480
1	FAI	DUCKERING	Ceiling Repairs	60,000		6,469,500	63,660	6,864,140
1	FAI	DUCKERING	ADA Improvements	183,750		6,653,250	194,959	7,059,098
1	FAI	DUCKERING	Code Corrections	1,584,500		8,237,750	1,681,155	8,740,253
1			DUCKERING TOTAL:		8,237,750	8,237,750		8,740,253
2	FAI	RASMUSON LIB	HVAC System Repair/Repairs	5,800,000		14,037,750	6,153,800	14,894,053
2	FAI	RASMUSON LIB	Photo Lab Repair/Repairs	250,000		14,287,750	265,250	15,159,303
2	FAI	RASMUSON LIB	Walking Deck Waterproofing	75,000		14,362,750	79,575	15,238,878
2	FAI	RASMUSON LIB	Exterior Envelope Repairs	950,000		15,312,750	1,007,950	16,246,828
			Emergency Power System and Electrical Repairs	550,000		15,862,750	583,550	16,830,378
2	FAI	RASMUSON LIB	Floor Covering Replacement	875,000		16,737,750	928,375	17,758,753
2	FAI	RASMUSON LIB	Interior Wall Finishes	750,000		17,487,750	795,750	18,554,503
2	FAI	RASMUSON LIB	Suspended Ceiling System Repair	850,000		18,337,750	901,850	19,456,353
2	FAI	RASMUSON LIB	Repair Water/Fire Lines	175,000		18,512,750	185,675	19,642,028
2	FAI	RASMUSON LIB	Repair and Replace Lighting System	685,380		19,198,130	727,188	20,369,216
			ADA Improvements incidental to DM work	350,000		19,548,130	371,350	20,740,566
2	FAI	RASMUSON LIB	Fire Alarm Repair	437,000		19,985,130	463,657	21,204,223
2	FAI	RASMUSON LIB	Electrical / Sewer / Water Repairs	375,000		20,360,130	397,875	21,602,098
2	FAI	RASMUSON LIB	Door and Hardware Replacement	116,000		20,476,130	123,076	21,725,174
2			RASMUSON LIBRARY TOTAL:		12,238,380	20,476,130		21,725,174
			Repair / replace Area and Theatre Lighting Systems	375,000		20,851,130	397,875	22,123,049
3	FAI	FINE ARTS	HVAC System Repairs - Theater	1,500,000		22,351,130	1,591,500	23,714,549
			Exterior Insulation/VB Replacement - Theater	175,000		22,526,130	185,675	23,900,224
3	FAI	FINE ARTS	Electrical System Repairs - Theater	150,000		22,676,130	159,150	24,059,374
			Floor Covering Replacement - Theater	600,000		23,276,130	636,600	24,695,974
3	FAI	FINE ARTS	Ceiling Repairs	600,000		23,876,130	636,600	25,332,574
			Door & Hardware Replacement - Theater	45,000		23,921,130	47,745	25,380,319
			Repair Area and Concert Hall Lighting Systems	360,000		24,281,130	381,960	25,762,279
3	FAI	FINE ARTS	HVAC System Repairs - Music	1,100,000		25,381,130	1,167,100	26,929,379
			Mechanical Room Floors Repairs - Music	36,000		25,417,130	38,196	26,967,575
3	FAI	FINE ARTS	Floor Covering Replacement - Music	400,000		25,817,130	424,400	27,391,975
3	FAI	FINE ARTS	Interior Finishes Repairs - Music	170,000		25,987,130	180,370	27,572,345
3	FAI	FINE ARTS	Ceiling Repairs	400,000		26,387,130	424,400	27,996,745
			Door & Hardware Replacement - Music	60,000		26,447,130	63,660	28,060,405
			Electrical System Repairs / reconfiguration	250,000		26,697,130	265,250	28,325,655
3	FAI	FINE ARTS	HVAC System Repairs - Art	1,500,000		28,197,130	1,591,500	29,917,155
			Floor Covering Replacement - Art	300,000		28,497,130	318,300	30,235,455
3	FAI	FINE ARTS	Ceiling Repairs	300,000		28,797,130	318,300	30,553,755

**FY97 DEFERRED MAINTENANCE
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UNIVERSITY OF ALASKA FAIRBANKS**

Priority	Campus	Building	Description	D/M Estimate	Facility Total	Cumul. Total	Inflation to FY2000 6.1%	Cumul. Total
7	FAI	IRVING I	ADA Improvements	116,078		52,196,611	123,159	55,592,804
7	FAI	IRVING I	Elevator Rehabilitation	150,000		52,346,611	159,150	55,751,954
7	FAI	IRVING I	Upgrade Service Transformer	75,000		52,621,611	79,575	55,831,529
7	FAI	IRVING I	Code Corrections	1,836,768		54,458,379	1,948,811	57,780,340
			Storm Drain Repairs (No. & East of O'Neill & Irving)	38,400		54,496,779	40,742	57,821,083
7			IRVING I TOTAL:		6,856,849	54,496,779		57,821,083
8	FAI	IRVING II	Lab Ventilation Repair	800,000		55,296,779	848,800	58,669,883
8	FAI	IRVING II	High Voltage Repair	180,000		55,476,779	190,980	58,860,863
8	FAI	IRVING II	Secondary Voltage Repairs/Repair	300,000		55,776,779	318,300	59,179,163
8	FAI	IRVING II	Replace lighting	108,300		55,885,079	114,906	59,294,069
8	FAI	IRVING II	Fenestration Renovation	75,000		55,960,079	79,575	59,373,644
8	FAI	IRVING II	Exterior Envelope Repairs	200,000		56,160,079	212,200	59,585,844
8	FAI	IRVING II	Foundation Waterproofing	85,000		56,245,079	90,185	59,676,029
8	FAI	IRVING II	Ceiling Replacement	209,760		56,454,839	222,555	59,898,584
8	FAI	IRVING II	Floor Covering Replacement	228,000		56,682,839	241,908	60,140,492
8	FAI	IRVING II	ADA Improvements	39,900		56,722,739	42,334	60,182,826
8	FAI	IRVING II	Elevator Repairs	75,000		56,797,739	79,575	60,262,401
8	FAI	IRVING II	HVAC System Repairs	200,000		56,997,739	212,200	60,474,601
8	FAI	IRVING II	Code Corrections	59,280		57,057,019	62,896	60,537,497
8			IRVING II TOTAL:		2,560,240	57,057,019		60,537,497
9	FAI	GRUENING	HVAC System Repair	2,750,000		59,807,019	2,917,750	63,455,247
9	FAI	GRUENING	Lighting Control System Repairs	310,000		60,117,019	328,910	63,784,157
9	FAI	GRUENING	Door & Hardware Replacement	97,800		60,214,819	103,766	63,887,923
9	FAI	GRUENING	Repair Walls	438,300		60,653,119	465,036	64,352,959
9	FAI	GRUENING	Plumbing System Repairs	295,000		60,948,119	312,995	64,665,954
9	FAI	GRUENING	Repair/Replace Electrical Systems	325,000		61,273,119	344,825	65,010,779
			Exterior Envelope Crack					
9	FAI	GRUENING	Repair/Window Sealing	131,000		61,404,119	138,991	65,149,770
9	FAI	GRUENING	Repair Water/Fire Lines	157,000		61,561,119	166,577	65,316,347
9	FAI	GRUENING	Electrical Switchgear Renovation	220,000		61,781,119	233,420	65,549,767
9	FAI	GRUENING	Storm Drain Repairs	122,050		61,903,169	129,495	65,679,262
			Replace Stairwell Incandescent to HPS	42,000		61,945,169	44,562	65,723,824
9	FAI	GRUENING	Elevator Repairs	225,000		62,170,169	238,725	65,962,549
9			GRUENING TOTAL:		5,113,150	62,170,169		65,962,549
10	FAI	PATTY CENTER	HVAC System Repair	1,200,000		63,370,169	1,273,200	67,235,749
			Restore Exterior Wall Envelope/Vapor Barrier	650,000		64,020,169	689,650	67,925,399
10	FAI	PATTY CENTER	Suspended Ceiling Replacement	400,000		64,420,169	424,400	68,349,799
10	FAI	PATTY CENTER	Repair Entrances	120,000		64,540,169	127,320	68,477,119
			Electrical Secondary Distribution Renovation	175,000		64,715,169	185,675	68,662,794
10	FAI	PATTY CENTER	Floor Covering Replacement	105,950		64,821,119	112,413	68,775,207
10	FAI	PATTY CENTER	Door & Hardware Replacement	35,000		64,856,119	37,135	68,812,342
			Rifle Range Walking Deck Replacement	75,000		64,931,119	79,575	68,891,917
10	FAI	PATTY CENTER	Handball Courts Repairs	145,000		65,076,119	153,845	69,045,762
10	FAI	PATTY CENTER	Main Entrance Walking Deck Repairs	60,000		65,136,119	63,660	69,109,422
			Pool & Support Systems Repair/Replacement	2,500,000		67,636,119	2,652,500	71,761,922
			Replace Service Conductors and Add cableway	50,000		67,686,119	53,050	71,814,972
10	FAI	PATTY CENTER	Fire Alarm System Repairs	200,000		67,886,119	212,200	72,027,172
10	FAI	PATTY CENTER	Site Drainage Emergency Repairs	69,000		67,955,119	73,209	72,100,381
			Sewer Main Distr. Repairs (collection)	242,000		68,197,119	256,762	72,357,143
10			PATTY CENTER TOTAL:		6,026,950	68,197,119		72,357,143
1	FAI	PATTY ICE ARENA	HVAC System Repair	750,000		68,947,119	795,750	73,152,893
11	FAI	PATTY ICE ARENA	Floor Covering Repairs	210,000		69,157,119	222,810	73,375,703

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Priority	Campus	Building	Description	D/M Estimate	Facility Total	Cumul. Total	Inflation to FY2000 6.1%	Cumul. Total
15	FAI	EIELSON	Modify and repair South Entry Lighting	25,000		76,201,449	26,525	80,849,737
15	FAI	EIELSON	Replace Deteriorating Exterior Lighting	30,000		76,231,449	31,830	80,881,567
15			EIELSON TOTAL:		1,685,000	76,231,449		80,881,567
			Lighting Controls					
16	FAI	ELVEY	Renovation/Replacement	500,000		76,731,449	530,500	81,412,067
			Electrical Control and Distribution					
16	FAI	ELVEY	Repairs	250,000		76,981,449	265,250	81,677,317
16	FAI	ELVEY	Exterior Column Repairs	120,000		77,101,449	127,320	81,804,637
16	FAI	ELVEY	HVAC System Repairs	2,500,000		79,601,449	2,652,500	84,457,137
16	FAI	ELVEY	Foyer/Annex Roof/Termination	100,000		79,701,449	106,100	84,863,237
16	FAI	ELVEY	Exterior Envelope Repairs	450,000		80,151,449	477,450	85,040,687
16	FAI	ELVEY	Foundation Waterproofing	100,000		80,251,449	106,100	85,146,787
16	FAI	ELVEY	Floor Covering Replacement	900,000		81,151,449	954,900	86,101,687
16	FAI	ELVEY	Ceiling Repairs	900,000		82,051,449	954,900	87,056,587
16	FAI	ELVEY	Exterior Walkway Reconstruction	90,000		82,141,449	95,490	87,152,077
16	FAI	ELVEY	Exterior Steps Reconstruction	50,000		82,191,449	53,050	87,205,127
16	FAI	ELVEY	Replace service transformers	90,000		82,281,449	95,490	87,300,617
16	FAI	ELVEY	Hydronic System Repairs	800,000		83,081,449	848,800	88,149,417
16	FAI	ELVEY	Sewer Main Distr. Repairs (MH K)	368,050		83,449,499	390,501	88,539,918
16			ELVEY TOTAL:		7,218,050	83,449,499		88,539,918
17	FAI	INTER CAMPUS-HARPER	Electrical Repair	145,000		83,594,499	153,845	88,693,763
17	FAI	INTER CAMPUS-HARPER	Repair/Replace ACM Panels	95,000		83,689,499	100,795	88,794,558
17	FAI	INTER CAMPUS-HARPER	Renovate HBO System	75,000		83,764,499	79,575	88,874,133
17	FAI	INTER CAMPUS-HARPER	Replace/Relocate Sewer Lift Station	15,000		83,779,499	15,915	88,890,048
17	FAI	INTER CAMPUS-HARPER	Renovate Exterior Window System	38,000		83,817,499	40,318	88,930,366
17	FAI	INTER CAMPUS-HARPER	Floor covering replacement / repairs	165,150		83,982,649	175,224	89,105,591
17			INTERIOR CAMPUS-HARPER TOTAL:		533,150	83,982,649		89,105,591
18	FAI	HEALTH/SAFETY	HVAC Renovation	350,530		84,333,179	371,912	89,477,503
18	FAI	HEALTH/SAFETY	Electrical System Repair	185,000		84,518,179	196,285	89,673,788
18	FAI	HEALTH/SAFETY	Ceiling Repair	110,000		84,628,179	116,710	89,790,498
18	FAI	HEALTH/SAFETY	Floor Covering Replacement	180,000		84,808,179	190,980	89,981,478
18	FAI	HEALTH/SAFETY	Wall Repairs/Patch & Paint	87,000		84,895,179	92,307	90,073,785
18	FAI	HEALTH/SAFETY	Door & Hardware Replacement	22,000		84,917,179	23,342	90,097,127
18	FAI	HEALTH/SAFETY	Plumbing System Repairs	135,000		85,052,179	143,235	90,240,362
18			HEALTH/SAFETY TOTAL:		1,069,530	85,052,179		90,240,362
19	FAI	WOOD CENTER	HVAC System Repair	725,000		85,777,179	769,225	91,009,587
19	FAI	WOOD CENTER	Building Envelope Vapor Barrier	700,000		86,477,179	742,700	91,752,287
19	FAI	WOOD CENTER	Roof Replacement/Repairs	800,000		87,277,179	848,800	92,601,087
19	FAI	WOOD CENTER	Repair Kitchen walk-in Coolers	60,000		87,337,179	63,660	92,664,747
19	FAI	WOOD CENTER	Replace Hot Water Heater	55,000		87,392,179	58,355	92,723,102
19	FAI	WOOD CENTER	Main Entrance Walking Deck Repairs	400,000		87,792,179	424,400	93,147,502
19	FAI	WOOD CENTER	Lighting/Controls Repairs	300,000		88,092,179	318,300	93,465,802
19	FAI	WOOD CENTER	Floor Covering Replacement	120,000		88,212,179	127,320	93,593,122
19	FAI	WOOD CENTER	Ceiling Repairs	200,000		88,412,179	212,200	93,805,322
19	FAI	WOOD CENTER	Wall Finishes	240,000		88,652,179	254,640	94,059,962
19	FAI	WOOD CENTER	Door & Hardware Replacement	125,000		88,777,179	132,625	94,192,587
19	FAI	WOOD CENTER	Lift Station Repairs	25,000		88,802,179	26,525	94,219,112
19	FAI	WOOD CENTER	Plumbing Piping Repair	165,000		88,967,179	175,065	94,394,177
19	FAI	WOOD CENTER	Electrical Repairs	150,000		89,117,179	159,150	94,553,327
19	FAI	WOOD CENTER	Replace Aluminum Feeder Cables	50,000		89,167,179	53,050	94,606,377
9	FAI	WOOD CENTER	Ballroom PA System Repairs	55,000		89,222,179	58,355	94,664,732
19	FAI	WOOD CENTER	Bathroom Fixture Replacement	43,000		89,265,179	45,623	94,710,355

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Priority	Campus	Building	Description	D/M Estimate	Facility Total	Cumul. Total	Inflation to FY2000 6.1%	Cumul. Total
20	NOME	NORTHWEST CMP	Replace Doors & Hardware	15,000		92,740,679	15,915	98,397,860
20	NOME	NORTHWEST CMP	Interior Finishes Replacement	25,000		92,765,679	26,525	98,424,385
20	NOME	NORTHWEST CMP	Flooring Replacement	8,000		92,773,679	8,488	98,432,873
20	NOME	NORTHWEST CMP	Repair Greenhouse	9,000		92,782,679	9,549	98,442,422
20	NOME	NORTHWEST CMP	Flooring Replacement	5,000		92,787,679	5,305	98,447,727
20	NOME	NORTHWEST CMP	Flooring Replacement	5,000		92,792,679	5,305	98,453,032
20	NOME	NORTHWEST CMP	Flooring Replacement	5,000		92,797,679	5,305	98,458,337
20	NOME	NORTHWEST CMP	HVAC Repairs	75,000		92,872,679	79,575	98,537,912
20	NOME	NORTHWEST CMP	Flooring Replacement	5,000		92,877,679	5,305	98,543,217
20	NOME	NORTHWEST CMP	Exterior Envelope Renovation	10,000		92,887,679	10,610	98,553,827
20	NOME	NORTHWEST CMP	Window Replacement	30,000		92,917,679	31,830	98,585,657
20	NOME	NORTHWEST CMP	Flooring Replacement	5,000		92,922,679	5,305	98,590,962
20			NORTHWEST CAMPUS (NOME) TOTAL:		348,000	92,922,679		98,590,962
20	PALMER	RESEARCH CTR	Interior Surface Rehabilitation	250,000		93,172,679	265,250	98,856,212
20	PALMER	RESEARCH CTR	Roof Replacement	40,000		93,212,679	42,440	98,898,652
20	PALMER	RESEARCH CTR	Exterior Restoration	75,000		93,287,679	79,575	98,978,227
20	PALMER	RESEARCH CTR	Interior Rehabilitation	80,000		93,367,679	84,880	99,063,107
20	PALMER	RESEARCH CTR	HVAC Repairs	250,000		93,617,679	265,250	99,328,357
20	PALMER	RESEARCH CTR	Replace Roofing	20,000		93,637,679	21,220	99,349,577
20	PALMER	RESEARCH CTR	Replace Roofing	28,000		93,665,679	29,708	99,379,285
20	PALMER	RESEARCH CTR	Replace Roofing	28,000		93,693,679	29,708	99,408,993
20	PALMER	RESEARCH CTR	Replace Roofing	20,000		93,713,679	21,220	99,430,213
20	PALMER	RESEARCH CTR	Replace Roofing	20,000		93,733,679	21,220	99,451,433
20	PALMER	RESEARCH CTR	Replace Roofing	20,000		93,753,679	21,220	99,472,653
20	PALMER	RESEARCH CTR	Replace Roofing	20,000		93,773,679	21,220	99,493,873
20	PALMER	RESEARCH CTR	Replace Roofing	28,000		93,801,679	29,708	99,523,581
20			PALMER RESEARCH CENTER TOTAL:		879,000	93,801,679		99,523,581
20	SEWARD	MARINE CENTER	Roof Repairs	180,000		93,981,679	190,980	99,714,561
20	SEWARD	MARINE CENTER	HVAC Repairs	50,000		94,031,679	53,050	99,767,611
20	SEWARD	MARINE CENTER	Laboratory Furnishings Renovation	10,000		94,041,679	10,610	99,778,221
20	SEWARD	MARINE CENTER	New Wet Labs Drain	20,000		94,061,679	21,220	99,799,441
20	SEWARD	MARINE CENTER	Exterior Lighting	15,000		94,076,679	15,915	99,815,356
20	SEWARD	MARINE CENTER	Restroom Rehabilitation	30,000		94,106,679	31,830	99,847,186
20	SEWARD	MARINE CENTER	Replace Carpet (213 S4)	12,000		94,118,679	12,732	99,859,918
20	SEWARD	MARINE CENTER	Aquaculture Pond Repair	20,000		94,138,679	21,220	99,881,138
20	SEWARD	MARINE CENTER	Furnace Repairs/Heating Repair	25,000		94,163,679	26,525	99,907,663
20	SEWARD	MARINE CENTER	Entryway Repairs	50,000		94,213,679	53,050	99,960,713
20	SEWARD	MARINE CENTER	Exterior Lighting Repairs	20,000		94,233,679	21,220	99,981,933
20			SEWARD MARINE CENTER TOTAL:		432,000	94,233,679		99,981,933
21	FAI	WHITTAKER (Fire Dept)	Exterior Window Repairs	35,000		94,268,679	37,135	100,019,068
21	FAI	WHITTAKER (Fire Dept)	Floor Covering Repairs	25,000		94,293,679	26,525	100,045,593
21	FAI	WHITTAKER (Fire Dept)	Replace Hot Water Heating Piping	15,000		94,308,679	15,915	100,061,508
21	FAI	WHITTAKER (Fire Dept)	Replace Bathroom Fixtures	28,000		94,336,679	29,708	100,091,216
21	FAI	WHITTAKER (Fire Dept)	Repair Fire Alarm System	7,000		94,343,679	7,427	100,098,643
21	FAI	WHITTAKER (Fire Dept)	Hydronic Heating System Repairs	175,000		94,518,679	185,675	100,284,318
21	FAI	WHITTAKER (Fire Dept)	Paint Exterior Surfaces	15,000		94,533,679	15,915	100,300,233
21	FAI	WHITTAKER (Fire Dept)	Replace Interior Lighting	55,000		94,588,679	58,355	100,358,588
21	FAI	WHITTAKER (Fire Dept)	Overhead Door Replacement	75,000		94,663,679	79,575	100,438,163
21	FAI	WHITTAKER (Fire Dept)	HVAC System Repairs	190,000		94,853,679	201,590	100,639,753