

**State of Alaska
FY2004 Governor's Operating Budget**

**Department of Transportation/Public Facilities
Construction and CIP Support
Budget Request Unit Budget Summary**

Construction and CIP Support Budget Request Unit

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BRU Mission

The mission of the Construction and CIP Support division is to improve the transportation system in Alaska and protect the health and safety of the people of Alaska by constructing safe, environmentally sound, reliable and cost effective highways, airports, harbors, docks, and buildings.

BRU Services Provided

Each Construction and CIP Support component reports to a different region, and the services provided may vary from region to region. The following information is typical of services provided. See individual components for detail.

Construction Branch: Administers construction contracts, provides field inspection and construction oversight, provides quality assurance that construction documentation and materials are in conformance with contract requirements during construction and closeout of projects, and reports Disadvantaged Business Enterprises/Minority Business Enterprise activity on construction projects.

Contracts Branch: The Construction Contract Unit reviews construction documents, provides bid packages, advertises and awards contracts, prepares certified bid tabulations, and helps resolve bidding disputes. The Professional Services Agreement Unit coordinates, solicits, selects, prepares and administers Professional Services agreements.

Project Control Branch: Coordinates and programs project funding; administers state and federal grants; provides engineering management support; prepares and manages the component's operating budget; develops, enhances, maintains Oracle management reporting system for capital projects; provides regional network administration and desktop computer support; and processes time and equipment charges to projects.

BRU Goals and Strategies

To improve the transportation system and public facilities in Alaska:

- Advertise, award, and administer construction contracts for roads, airports, and facilities efficiently and in accordance with department policies and procedures.
- Construct and complete all projects on time and within budget.
- Prepare project documentation and provide construction administration in conformance with all laws, regulations, and requirements to ensure continuing federal funding.
- Monitor and forecast expenditures to assure funding is available for timely payment of contract obligations.
- Plan, design, construct, renovate, and repair public facilities managed by other state agencies to meet their respective needs and objectives.
- Transfer ownership of applicable roads and facilities to local governments upon completion of construction improvements.

To protect the health and safety of the people of Alaska:

- Ensure Americans with Disabilities Act (ADA) requirements are incorporated into all projects.
- Identify and correct existing safety related problems on road and facilities projects.
- Use appropriate "double fine" construction zones, use vehicle speed awareness equipment, and contract for increased enforcement in construction work sites.
- Inform the public of road closures and construction delays.

Key BRU Issues for FY2003 – 2004

- The increased level of Federal Highway Administration (FHWA) and Federal Aviation Administration (FAA) funds nationwide has necessitated the need for alternative methods of delivery of construction projects. The Department is anticipating delivering more jobs by the Design/Build method, as well as managing construction administration of

contracts through consultants, local or borough governmental agencies, Bureau of Indian Affairs (BIA), Alaska Department of Natural Resources, and in time, through contractor acceptance testing. This marks the gradual transition from active construction management by Department employees, to the role of quality assurance of the management of projects by others. The increased level of Federal Highway Administration (FHWA) funds nationwide has created competition across the country for trained and experienced engineering personnel. Increased demand for consultant services to provide construction administration has strained the available talent pool utilized by the consultants. Increased workload is making it hard to perform certain administrative tasks with current staffing levels.

- The department jointly with the FHWA and the FAA created a task force to streamline the closeout process. The task force developed consistency in several aspects of FHWA and FAA closure paperwork, implementing a tracking system and notification system to ensure the priority of closing out projects. The task force eliminated documentation required by the Right of Way section that was redundant. There is an ongoing commitment to paperwork reduction and improved processes.
- The regional construction offices have experienced difficulty in finding and retaining qualified staff willing to take long-term assignments to remote sites. At the engineering journey level (Engineering Assistant III), staff turnover recently has increased as a result of the unattractive nature of long-term assignments to remote sites, often requiring exhaustive overtime and on site presence for up to six months during the summer with little time off. The retirement of long-time employees formerly willing and able to manage this type of project has left a void in the current organization which has resulted in the need to hire private consultants to manage some projects, and assigning multiple projects to managers willing to travel between them. This causes travel costs to increase and has some impact on the quality of oversight due to limited project manager presence.
- Increased rural community involvement has resulted in increased contract costs, engineering costs, and an increase in local requests for contract changes due to heightened community awareness. Mandatory post award meetings require travel by both project engineers and contractors to remote sites, and the resolution of issues raised often requires some reengineering.
- Increased security measures at airports will involve a more detailed and costly screening process prior to security badges being issued for all personnel that work on the airport. This will involve all state personnel assigned to airport projects, as well as contractors. Construction staff will probably be required to attend a more in-depth training process before working in and around the airport. Access to the airport by construction equipment will be restricted to specific secured gates that will need to be manned by state or contractor personnel whenever gates are unlocked.

Major BRU Accomplishments in 2002

- Received \$259.4 million (\$172.3 Central Region, \$87.1 Northern Region) in federal highway construction authorization in FFY02.
- Received \$104.4 (\$65.6 CR, \$38.8 NR) million in federal aviation authorization in FFY02, of which the majority was allocated to the construction phase.
- Completed runway, taxiway, lighting, environmental and safety improvements at rural airports in Chevak, Clarks Point, Kalskag, Kodiak, Levelock, McGrath, Brevig Mission, Deadhorse, Kiana Airport, Nome Airport, Hoonah, and Yakutat.
- Completed rehabilitation, rut repair and resurfacing of National Highway System (NHS) routes including the Glenn Highway - McCarrey Street to Hiland Drive; New Seward Highway - Dimond Blvd. to Tudor Road; and various locations on the Seward Highway between MP 25 and 116.6.
- Increased safety for traveling public with installation of continuous highway lighting on the Glenn Highway through the Palmer Hay Flats.
- Completed procurement process for a design/build contract to replace the Alaska Psychiatric Institute in Anchorage with a new facility estimated to cost over \$41.8 million dollars.
- Began construction work on the Parks Hwy/Glenn Highway Interchange design/build project.
- Awarded \$12.3 million dollar construction contract for Richardson Highway, Badger Interchange.
- Completed Eagle Beach State Park Trailhead & Wayside project in Juneau.
- Worked in concert with the City of Homer to construct their new Multipurpose Ocean Dock which accommodates AMHS ferries as well as other clients.
- Completed three significant harbor upgrades (Hydaburg, Ouzinkie, Larsen Bay).

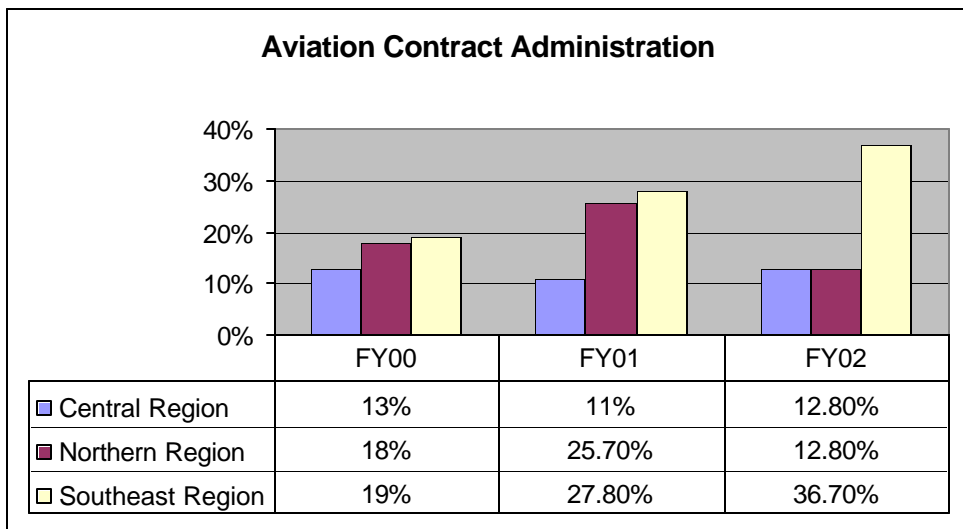
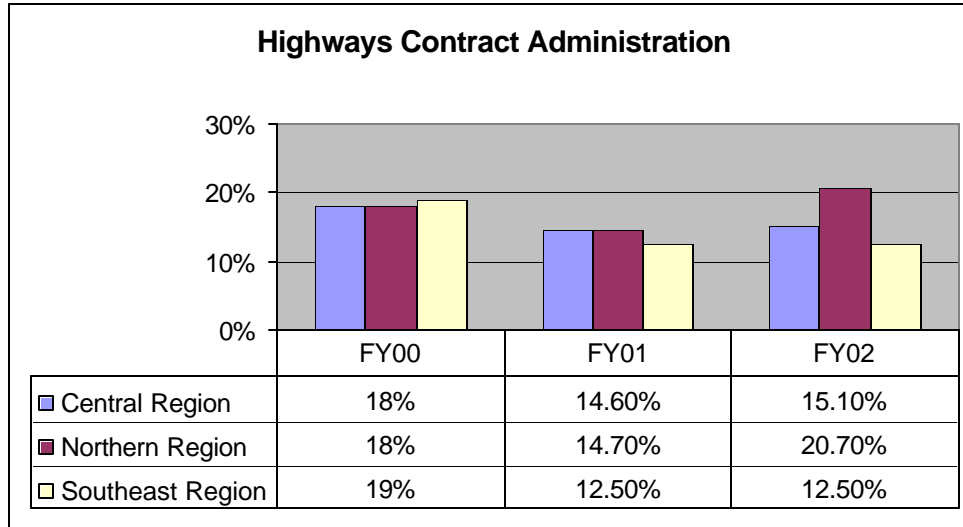
Key Performance Measures for FY2004

Measure:

Percentage of the total construction costs that were spent on contract administration.

Sec 145(b)(1) Ch 124 SLA 2002(HB 515)

Alaska's Target & Progress:



Southeast Region's Aviation percentage only reflects one small (less than \$100,000) project closed out which caused the number to be uncharacteristically high. The overall percentage for that region is below 13%, because many more highway projects were closed than aviation projects.

Benchmark Comparisons:

There is no established benchmark at this time. However, up until recently the FHWA had a benchmark of 15%, which has been considered an industry standard.

Background and Strategies:

This measure can only be accurately determined after the project is closed and all project charges are accounted for. Construction closed out 90 projects during FY02 as compared to 105 projects during FY01. Historically, contract administration costs run at about 14.5%.

This measure is always a challenge because of the remoteness of most of the projects (increasing travel and transportation costs), and because the requirements of the federal funding agencies and the expectations of the traveling public tend to increase over time. All of these factors drive administrative costs up. This measure will change from year to year based on the type and size of projects completed. Small urban projects may require the same level of oversight, i.e., staff, as large rural projects. Projects that consist primarily of asphalt paving are typically completed in a short time resulting in low engineering costs compared to the contract value. The need to supplement regional staff with consultants will have a direct impact on future construction engineering costs.

In FY02, a Statewide task force of members from DOT&PF in conjunction with FHWA and FAA developed a method to streamline the closeout process of federal projects. This should further reduce contract administration costs. We are also continuing the effort to reduce our contract administration costs by using staff as efficiently as possible, for example using one construction engineer to manage multiple small projects, thus reducing the engineering costs for each individual project.

Measure:

Percentage of the total construction costs that were spent on change orders.

Sec 145(b)(2) Ch 124 SLA 2002(HB 515)

Benchmark Comparisons:

There is no established benchmark at this time. However, past internal policy was to keep total contract adjustments, including change orders and quantity overruns, at less than 10%. Since this measure can often be dictated by uncontrollable circumstances, we will strive to keep our total construction costs spent on change orders for controllable conditions as small as possible.

Background and Strategies:

This measure can only be accurately determined after the project is closed and all project charges are accounted for. Historically, total contract adjustments, including change orders and quantity overruns, run at about 5.4%.

This measure is always a challenge because: 1) efforts to reduce design costs inevitably result in an increase in construction change order costs and quantity overruns; 2) local governments, utilities, and maintenance forces often don't recognize or request needed enhancements or utility adjustments until the projects are underway; and 3) upper management sometimes isn't aware of opportunities for enhancements until the projects are under construction. All of these factors are beyond the control of this construction program.

Measure:

The number of miles of gravel roads that are surfaced with chip seal, hot mix, or high float asphalt for the first time, reported regionally.

Sec 149(b)(1) Ch 124 SLA 2002(HB 515)

Alaska's Target & Progress:

The number of lane miles of gravel road surfaced with chip seal, hot mix or high float asphalt for the first time during FY02 is as follows:

	by Highways & Aviation	by Construction	Total (lane miles)
Central Region	80	62	142
Northern Region	5	305	310
Southeast Region	10	0	10
TOTAL	95	367	462

Benchmark Comparisons:

We are unaware of any specific benchmark at this time. The number of miles of roads that are surfaced is dependent upon amount of funds budgeted through the Statewide Transportation Improvement Program (STIP).

Background and Strategies:

The Road Paving Program established in FY99 implements the Administration's goal of reducing maintenance costs and improving the quality of life for Alaskans by hard surfacing state owned/maintained Non National Highway System (NHS) gravel roads, as well as those NHS roads also identified under the STIP. The scope of this work represents limited shoulder work, drainage and other work related to preserving the road structure. This is an extremely important program and will provide great benefit to many Alaskans. The Department of Transportation and Public Facilities also benefits directly from this program through reduced maintenance costs. Roads are selected for this program based on cost, condition of the roads, and traffic levels.

**Construction and CIP Support
BRU Financial Summary by Component**

All dollars in thousands

	FY2002 Actuals				FY2003 Authorized				FY2004 Governor			
	General Funds	Federal Funds	Other Funds	Total Funds	General Funds	Federal Funds	Other Funds	Total Funds	General Funds	Federal Funds	Other Funds	Total Funds
<u>Formula Expenditures</u>	None.											
<u>Non-Formula Expenditures</u>												
Central Construction & CIP	255.3	0.0	13,160.6	13,415.9	246.9	0.0	15,018.6	15,265.5	222.5	0.0	15,444.9	15,667.4
Northern Construction & CIP	309.1	0.0	10,545.9	10,855.0	298.6	0.0	11,598.2	11,896.8	268.9	0.0	11,806.2	12,075.1
Southeast Region Construction	168.0	0.0	4,204.8	4,372.8	172.1	0.0	4,485.0	4,657.1	155.6	0.0	4,599.5	4,755.1
Totals	732.4	0.0	27,911.3	28,643.7	717.6	0.0	31,101.8	31,819.4	647.0	0.0	31,850.6	32,497.6

Construction and CIP Support
Proposed Changes in Levels of Service for FY2004

FY04 budget decisions pending.

Construction and CIP Support
Summary of BRU Budget Changes by Component
From FY2003 Authorized to FY2004 Governor

All dollars in thousands

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
FY2003 Authorized	717.6	0.0	31,101.8	31,819.4
Adjustments which will continue current level of service:				
-Central Construction & CIP	0.3	0.0	149.3	149.6
-Northern Construction & CIP	0.2	0.0	125.3	125.5
-Southeast Region Construction	0.7	0.0	114.5	115.2
Proposed budget decreases:				
-Central Construction & CIP	-24.7	0.0	0.0	-24.7
-Northern Construction & CIP	-29.9	0.0	0.0	-29.9
-Southeast Region Construction	-17.2	0.0	0.0	-17.2
Proposed budget increases:				
-Central Construction & CIP	0.0	0.0	277.0	277.0
-Northern Construction & CIP	0.0	0.0	82.7	82.7
FY2004 Governor	647.0	0.0	31,850.6	32,497.6