

State of Alaska FY2011 Governor's Operating Budget

Department of Transportation/Public Facilities Design and Construction Results Delivery Unit Budget Summary

Design and Construction Results Delivery Unit

Contribution to Department's Mission

Improve the transportation system in Alaska and protect the health and safety of the people of Alaska by developing transportation and public facilities projects and constructing safe, environmentally sound, reliable and cost effective highways, airports, harbors, docks, and buildings.

Core Services

- Design has primary responsibility for a project from its initial funding through the completion of a bid-ready set of plans, specifications for the legal and technical contract terms, and an engineer's estimate for the cost of construction. Design staff prepare geotechnical reports for the project site and materials sources, obtain necessary land interests and environmental clearances and permits, and prepare plans and obtain agreements with utility companies for required relocations.
- Design provides technical support functions to the department, other state and federal agencies, and local governments and the public. Examples include design assistance, traffic speed studies, bridge inspections, materials testing, processing of utility, right-of-way and traffic permits, preparation of environmental documents, a research program, and the Local Technical Assistance Program. The Design and Construction Standards section develops standards that are in use throughout the state.
- The Construction sections administer construction contracts, provide field inspection and construction oversight, provide quality assurance that construction documentation and materials are in conformance with contract requirements during construction and closeout of projects, and report Disadvantaged Business Enterprises/Minority Business Enterprise activity on construction projects.
- The Contracts staff review construction documents, provide bid packages, advertise and award contracts, prepare certified bid tabulations, and help resolve bidding disputes. This unit also coordinates, solicits, selects, prepares and administers professional services agreements.
- The Project Control sections coordinate and program project funding; administer state and federal grants; provide engineering management support; prepare and manage data within a management reporting system for capital projects; provide regional network administration and desktop computer support; and process time and equipment charges to projects.
- The Statewide Public Facilities office oversees all building planning, design and construction related activities and acts as the advocate for department-wide facility needs. This section provides cost estimates and management services necessary to renovate, repair or build new state-owned public facilities.

Results at a Glance

(Additional performance information is available on the web at <http://omb.alaska.gov/results.>)

END RESULT A: Improve department efficiency.

- The percent of administrative and engineering costs compared to total project costs was maintained at 20% in FFY2009, well within the department's target of 30%.
- 58% of new highway and aviation construction projects were advertised by April 30th, 2009, which is a decrease from the prior year and is still short of the goal of 75%.
- The percentage difference between bid and final contractor payments increased to 12% in 2009. By using the last three fiscal years for source data, the department has established a three year average of about 10% that is still short of the 8% goal.

Status of Strategies to Achieve End Result

- Design engineering costs were maintained at 8% in 2009 compared to 2008, well within the target range of 15% or less.
- The percentage of projects over \$1 million that had formal pre-authorization scope meetings decreased from 97% in 2008 to 92% in 2009.
- Construction engineering costs decreased to 12.6% of total project costs in 2009 from 13.6% in the prior year, still below the goal of 14.5%.
- The percentage of construction contracts closed during the fiscal year following project completion increased from 67% in 2008 to 73% in 2009, trending toward the target of 80%.

Major Activities to Advance Strategies

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| <ul style="list-style-type: none"> • Design roads to appropriate standards • Minimize in-house costs for preconstruction services • Manage consultant contracts in a cost effective manner • Timely close-out of construction projects • Compare and contrast cost of in-house construction engineering (CE) with consultant CE | <ul style="list-style-type: none"> • Cross training between Design and Construction • Involve Construction and Maintenance in design process from project scoping • Explore innovative contracting methods • Greater use of technology in the field |
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Key RDU Challenges

- The Federal Highway Administration (FHWA) Alaska Division and the department executed a new Stewardship and Oversight Agreement. The new agreement requires additional reporting and additional FHWA review and approvals for certain project development and construction tasks. The department will need to commit resources to track performance measures and generate the reports required by the new agreement. Limited FHWA resources to accomplish their new review and approval functions may impact project delivery schedules, construction progress, and construction costs.
- The Environmental Protection Agency (EPA) and U.S. Department of Justice coordination regarding Alaska's alleged Clean Water Act violations are resulting in significant construction costs and schedule impacts. Training, design requirements, and construction process requirements anticipated in a pending Consent Decree between the department and the USA have generated significant changes to our project delivery and construction processes. Ongoing staff resources and commitment are necessary to sustain compliance with the proposed terms of the consent decree.
- The American Recovery and Reinvestment Act (ARRA) program requires that the department does not supplant the existing federal and state funded programs. While continuing to deliver our standard program, department staff must accelerate the project delivery for ARRA projects in order to meet the program's compressed schedule for required obligation of construction funds. ARRA reporting for transparency and accountability requires significant commitment of staff resources.
- The department is assuming responsibility for approval of Categorical Exclusion environmental documents, with restrictions, under an agreement with the Federal Highways Administration (FHWA). The department elected to pursue the 6004 Memorandum of Understanding (MOU) in order to streamline the delivery of those projects subject to the cat-ex process in the MOU. There will be a learning curve for all engineering and environmental staff as the 6004 agreement is implemented.
- FHWA is also identifying high profile projects for which they will have more oversight. The selection and revised procedural requirements for high profile projects are part of the new 2009 Stewardship and Oversight (S&O) Agreement. The terms of the agreement were developed in collaboration with the department and the Alaska Division of FHWA; however the decision to revise the previous S&O agreement (1999) was compulsory.
- Federal funding uncertainties result in the STIP being a moving target and prioritizing work can be a challenge with no clear funding plan.
- A key challenge continues to be to retain experienced engineers, right-of-way agents, and environmental analysts. Many are reaching retirement age. It is difficult to find and retain qualified staff willing to take 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.

Significant Changes in Results to be Delivered in FY2011

No significant changes are anticipated.

Major RDU Accomplishments in 2009

- Received \$118.4 million of ARRA highway funds and \$73.4 million of ARRA aviation funds to-date.
- Awarded \$475 million construction contracts in FFY09.
- Completed \$360 million of construction improvements in FFY09.
- Paved 19.5 lane miles (10 centerline miles) of gravel roads.
- Repaved 296 lane miles (148 centerline miles) of roads.
- Reconstructed 69.4 lane miles (34.7 centerline miles) of roads.
- Built 14.9 lane miles (7.5 centerline miles) of new roads.

- Transferred three state-owned harbors to local governments: Loring Float in Ketchikan; Kake Dock and Seaplane Float; and Jakolof in Seldovia.
- Completed 16 research projects and facilitated implementation of recommendations.
- Provided training to 2,000 participants from the Department of Transportation and Public Facilities, local governments, consultants and other transportation agencies.

Contact Information
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**Design and Construction
RDU Financial Summary by Component**

All dollars shown in thousands

	FY2009 Actuals				FY2010 Management Plan				FY2011 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
Formula Expenditures None.												
Non-Formula Expenditures												
Statewide Public Facilities	123.0	0.0	3,446.5	3,569.5	125.5	0.0	3,723.7	3,849.2	125.5	0.0	3,723.7	3,849.2
SW Design & Engineering Svcs	1,049.7	0.0	7,705.0	8,754.7	1,163.0	0.0	9,027.4	10,190.4	1,439.5	0.0	8,798.0	10,237.5
Central Design & Eng Svcs	611.4	0.0	18,052.5	18,663.9	624.6	0.0	19,787.4	20,412.0	624.6	0.0	19,748.1	20,372.7
Northern Design & Eng Svcs	412.6	0.0	12,443.4	12,856.0	422.5	0.0	16,004.5	16,427.0	422.5	0.0	15,852.8	16,275.3
Southeast Design & Eng Svcs	452.1	0.0	7,790.2	8,242.3	460.2	0.0	9,365.1	9,825.3	460.2	0.0	9,371.3	9,831.5
Central Construction & CIP	449.9	0.0	17,636.6	18,086.5	461.9	0.0	18,667.7	19,129.6	463.9	0.0	18,531.6	18,995.5
Northern Construction & CIP	546.9	0.0	14,716.2	15,263.1	557.5	0.0	15,250.5	15,808.0	558.5	0.0	15,140.5	15,699.0
Southeast Region Construction	231.6	0.0	7,019.5	7,251.1	164.2	0.0	7,653.4	7,817.6	164.2	0.0	7,653.4	7,817.6
Totals	3,877.2	0.0	88,809.9	92,687.1	3,979.4	0.0	99,479.7	103,459.1	4,258.9	0.0	98,819.4	103,078.3

Design and Construction
Summary of RDU Budget Changes by Component
From FY2010 Management Plan to FY2011 Governor

All dollars shown in thousands

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
FY2010 Management Plan	3,979.4	0.0	99,479.7	103,459.1
Adjustments which will continue current level of service:				
-SW Design & Engineering Svcs	1.5	0.0	0.6	2.1
-Southeast Design & Eng Svcs	0.0	0.0	6.2	6.2
-Central Construction & CIP	2.0	0.0	0.0	2.0
-Northern Construction & CIP	1.0	0.0	0.0	1.0
Proposed budget decreases:				
-SW Design & Engineering Svcs	0.0	0.0	-230.0	-230.0
-Central Design & Eng Svcs	0.0	0.0	-99.4	-99.4
-Northern Design & Eng Svcs	0.0	0.0	-151.7	-151.7
-Central Construction & CIP	0.0	0.0	-136.1	-136.1
-Northern Construction & CIP	0.0	0.0	-110.0	-110.0
Proposed budget increases:				
-SW Design & Engineering Svcs	275.0	0.0	0.0	275.0
-Central Design & Eng Svcs	0.0	0.0	60.1	60.1
FY2011 Governor	4,258.9	0.0	98,819.4	103,078.3