

**State of Alaska  
FY2006 Governor's Operating Budget**

**Department of Transportation/Public Facilities  
Highways and Aviation  
Results Delivery Unit Budget Summary**

**Highways and Aviation Results Delivery Unit**

**Contribution to Department's Mission**

Operate, maintain, safeguard and control the state's infrastructure system of highways, airports and harbors.

**Core Services**

- Winter snow and ice control including snow plowing, snow removal, sanding, anti-icing, avalanche control, snow fencing and culvert thawing.
- Summer maintenance including: grading, pothole patching, crack sealing, leveling of heaves and dips, brush clearing, sweeping, dust control, drainage cleaning and repair, fence and guardrail repair, bridge painting and repair, and sign maintenance.
- Road and airport lighting systems maintenance, including: traffic signals, intersection and road illumination, harbor electrical service and lighting, and runway and taxiway lights.
- Roadside litter control and trash removal at rest areas, turnouts and campgrounds.
- Access control to state rights of way for driveways, access roads, signs and utilities.
- Operation of certificated airports in compliance with 14 CFR Part 139.
- Maintenance of federally mandated security at state airports, including access controls, criminal history checks and badging, security fencing, communications, and law enforcement.

End Results	Strategies to Achieve Results
<p><b>A: Maintain State owned roads, highways and airports to appropriate department standards.</b></p> <p><u>Target #1:</u> Improve customer satisfaction by 3% with DOT&amp;PF services.  <u>Measure #1:</u> Change in customer satisfaction based on survey of customers.</p> <p><u>Target #2:</u> Keep the statewide average cost per line mile to maintain DOT&amp;PF highways and airports at \$5,223.  <u>Measure #2:</u> Statewide average cost per lane mile.</p>	<p><b>A1: Keep urban highways passable at all times.</b></p> <p><u>Target #1:</u> Clean up snow and ice from urban highways with 18 hours after end of snow storm.  <u>Measure #1:</u> Number of hours after end of storm before urban highways are cleanup up (shoulders and intersections clear and berms pushed back).</p> <p><b>A2: Ensure regulatory compliance at rural Part 139 airports.</b></p> <p><u>Target #1:</u> No major violations during annual Part 139 inspections.  <u>Measure #1:</u> Number of Part 139 inspection violations.</p> <p><b>A3: Carry out safe DOT&amp;PF operations.</b></p> <p><u>Target #1:</u> 10% increase in employees successfully completing required safety training.  <u>Measure #1:</u> Percent of employees completing required safety training.</p>

**Major Activities to Advance Strategies**

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| <ul style="list-style-type: none"> <li>• Deploy maintenance management system</li> <li>• Increase preventative maintenance</li> <li>• Implement technologies and use of anti-icing chemical for effective anti-icing program</li> <li>• Increase usage of magnesium chloride (anti-icer)</li> </ul> | <ul style="list-style-type: none"> <li>• Safety training</li> <li>• Develop policies and procedures for high injury related job tasks</li> <li>• Safety compliance monitoring</li> <li>• Deploy Alaska land mobile radios and receivers</li> </ul> |
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### FY2006 Resources Allocated to Achieve Results

FY2006 Results Delivery Unit Budget: \$106,517,000	<b>Personnel:</b>	
	Full time	506
	Part time	88
	<b>Total</b>	<b>594</b>

## Performance Measure Detail

### A: Result - Maintain State owned roads, highways and airports to appropriate department standards.

**Target #1:** Improve customer satisfaction by 3% with DOT&PF services.

**Measure #1:** Change in customer satisfaction based on survey of customers.

#### Customer Satisfaction

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4	YTD
2004	not available	not available	not available	not available	not available

**Analysis of results and challenges:** Results of annual surveys will be compared to surveys from previous years to establish a trend in customer satisfaction. The surveys will help us determine where additional maintenance efforts are needed. An RFP is being developed to contract for the survey.

**Target #2:** Keep the statewide average cost per line mile to maintain DOT&PF highways and airports at \$5,223.

**Measure #2:** Statewide average cost per lane mile.

#### Statewide average cost per lane mile

Year	YTD
2003	\$5,223
2004	

**Analysis of results and challenges:** The cost of labor, material, and contracted services continues to rise. The H&A budget has not kept up with these cost increases. H&A managers are challenged to keep the cost of highway and airport maintenance at its current level while providing the same level of service. Managers must implement innovative ways to perform maintenance at lower cost.

### A1: Strategy - Keep urban highways passable at all times.

**Target #1:** Clean up snow and ice from urban highways with 18 hours after end of snow storm.

**Measure #1:** Number of hours after end of storm before urban highways are cleanup up (shoulders and intersections clear and berms pushed back).

#### Average Number of Hours

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4	YTD
2004	not available	not available	not available	not available	not available

**Analysis of results and challenges:** Urban highways receive priority snow and ice control service due to the large volume of traffic on these routes. Maintenance managers must ensure that maintenance assets are mobilized to clear these routes on a timely basis and that snow and ice control is completed on these routes within 18 hours after a winter storm subsides. A completed winter road provides safe driving conditions and will be either a bare road or a plowed road with an adequate amount of sand applied for traction. Intersections and turn lanes will be cleared of snow in the driving lanes.

Currently most major urban highway winter maintenance is completed within 24 hours of the end of a winter storm. The 18 hour target will require intense management of assets. Maintenance manager are challenged to apply enough resources at the right time to deal with the storm without overstressing the capabilities of the operators or over-expending funds. They must address additional needs on non-urban roads, keep crews working safely, and be ready to respond to future storms.

### A2: Strategy - Ensure regulatory compliance at rural Part 139 airports.

**Target #1:** No major violations during annual Part 139 inspections.

**Measure #1:** Number of Part 139 inspection violations.

#### Number of violations

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4	YTD
2004	0	0	0	0	0

**Analysis of results and challenges:** State of Alaska rural airports which provide Part 139 service (air carriers with aircraft of over 30 seats) must meet rigid FAA standards to maintain their certificates. Each airport is inspected annually by FAA. Failures to meet FAA standards for airport operations, called "violations", can result in fines or suspension of the airport's certificate. DOT&PF's goal is to maintain the airports at a level of compliance that will ensure no violations occur.

Currently, we are successful in meeting this goal. Maintaining this level of service requires skillful management of airport maintenance assets and extensive training of airport maintenance crews. Costs of airport maintenance continue to rise as FAA regulatory requirements increase.

### A3: Strategy - Carry out safe DOT&PF operations.

**Target #1:** 10% increase in employees successfully completing required safety training.

**Measure #1:** Percent of employees completing required safety training.

#### Percentage of employees completing safety training

Year	YTD
2003	51%
2004	47.6%

**Analysis of results and challenges:** Seeing an increase in accidents and workers compensation claims, the department undertook a review of the safety program in 2002. The result was the production of a new safety manual that includes required safety training elements. The new manual became policy in 2003. Previously, each region, section and safety officer within the department held training events including periodic safety meetings and briefings on new equipment and procedures as needed. Increased funding will be necessary for travel, lodging and additional equipment to comply with the employee specific job training requirements. Required training is expected in other areas, e.g., homeland security drills, etc.

Required safety training, as identified in the safety manual, is being implemented over a 5 year period. Through additional safety training, we expect a reduction in work related injuries and workers compensation claims.

Highway and airport maintenance duties are inherently dangerous. OSHA and State OSH have established numerous training requirements to help ensure that maintenance workers stay safe. Meeting numerous and changing training requirements is challenging for managers who have limited time and resources. It is difficult to provide complete and regular safety training to a workforce that is spread out across the state in 70 different locations and that has to meet its regular workload obligations. It is our goal to incrementally increase the training level of maintenance workers while still providing a full level of service on our highways and airports.

This is a new measure that has required time and resources to identify and document required baseline information. The FY03 and FY04 data relates to employees' participation in department safety meetings. Future data will look at all required safety training.

## Key RDU Challenges

- Protecting Alaska's investment in its transportation infrastructure continues to be a key concern. The State's investments in roads, harbors and airports are eroding each year due to insufficient maintenance. As the transportation infrastructure continues to age, M&O is faced with an ever-increasing list of deferred maintenance work. Other demands include increases in the cost of labor, materials, electricity and fuel; cost of maintaining new infrastructure such as airport taxiways and lighting systems and highway traffic signals; and finally, the increasing burden of new laws and regulations. The M&O budget has not kept up with these increased demands and is inadequate to sustain basic preventative maintenance of our roads and airports. Our list of deferred maintenance items currently exceeds \$250 million. Adequate and stable funding is mandatory to properly maintain our infrastructure and provide a suitable level of service to the public.
- Transportation security is a major issue following the events of September 11, 2001 and continued acts of international terrorism. Requirements for security have changed to comply with the Transportation Security Administration's (TSA) mandated emergency amendments to airport, road and bridge security programs regulations. Personnel perform mandated functions such as security management, inspection, law enforcement, access control, and perimeter patrols, and administrative functions. Considerable costs continue to be incurred to provide security fences, lighting equipment, access controls and additional security vehicles. All persons who require unescorted access to aircraft secure areas now must have a fingerprint-based criminal history records check. TSA is now inspecting all state airports multiple times a year and requires immediate reaction to any discrepancies found. This places a large burden on the existing staff to coordinate and follow up with TSA. Additional staff is needed to intercede with TSA regulators and inspectors.
- Increased costs have been offset slightly through increased productivity and other efficiencies. They are offset to a larger extent by increased reliance on capital funds. General Funds for capital improvements have dwindled in recent years to insignificant levels. Highways and Aviation has made maximum use of federal highway funding to achieve improvements in road surfaces (chip sealing), which decreases maintenance costs for the short term. These funds are limited to specific maintenance activities such as asphalt and bridge repair and are not available for routine activities such as guardrail repair or snow and ice control. Operating costs, however, have continued to increase and still outweigh the sum of our cost reducing efforts, the infusion of capital funds, and our operating revenues.
- The H&A workforce is aging and nearing retirement. Within the next four years over 30% of the H&A foreman, equipment operators and mechanics will be eligible for retirement. This is the front wave of baby boomers whose departure from the work force will leave a significant gap. There are not sufficient skilled employees within our ranks to fill these vacancies. Recruitment for these positions may also become a problem. Other states are currently unable to hire skilled personnel to fill their needs. The department previously had various grades of operators and mechanics from heavy duty to light duty and laborers. This allowed employees a natural progression as they acquired skills. During previous budget reductions, these lesser skilled positions were deleted to retain higher skilled operators and mechanics. The State must be proactive in planning for departure of skilled workforce so the level of service on our transportation system is not adversely impacted.
- The department must replace the maintenance stations at Chandalar, East Fork, Willow and Nome that were deemed unsafe due to structural deficiencies. Temporary facilities are being used, however they are expensive to operate and are insufficient for properly maintaining equipment. Construction of the Chandalar and Willow stations will begin using initial funding allocated by the legislature. Each building project will be constructed in phases as funding becomes available.

## Significant Changes in Results to be Delivered in FY2006

Funds are included in this budget request to cover the increasing costs of employee benefits, equipment usage, and maintaining new lane miles. Analysis of total impact on service levels has not yet been determined. The Highways and Aviation budget has remained flat for the past ten years.

## Major RDU Accomplishments in 2004

- Repaired road and highways by: applying chip seal, hot mix, or high float asphalt.; applying crack sealant; and repairing various components bridges; and cutting brush.
- Repaired 155 lane miles of gravel surface and cut brush on airports.

- Deployed twenty eight Road Weather Information Systems (RWIS) around the state along portions of the Glen, Richardson, Seward, Parks, and Alaska Highways and road segments in Southeast. These weather stations allow foremen to direct crews to more efficiently apply anti-icing agents and remove snow and ice.
- Continued administration of Adopt-a-Highway program with volunteer groups participating in clean up of selected segments of highways. A policies and procedures manual for Adopt-a-Highway programs is currently being developed.
- Met all new fingerprinting requirements at the certified airports.
- Under the “Gravel to Black” program, paved Dillingham to Aleknagik Road in Central Region.
- Provided emergency repairs at numerous locations, including: Haines Highway river erosion threat to destroy 1 mile of road, Indian River Bridge (Sitka), Zimovia Highway bank erosion (Wrangell), and Alsak Road (Yakutat).
- Assisted in extensive forest fire control efforts by providing labor and equipment.
- Performed extensive ditching and brushing on roads and airports.
- Deployed the Maintenance Management System in all regions. This will allow the department to better plan for maintenance work and track costs of activities. All station foremen have been trained on use of the Maintenance Management System
- Entered into partnership with Department of Labor & Workforce Development (DLWD) to improve workplace safety in DOT&PF facilities. This sister agency partnership will allow the department to consult with the state Occupational Safety and Health office and be proactive in improving facility safety.

Contact Information
<p><b>Contact:</b> Frank Richards, State Maintenance and Operations Engineer <b>Phone:</b> (907) 465-3906 <b>Fax:</b> (907) 586-8365 <b>E-mail:</b> Frank_Richards@dot.state.ak.us</p>

### Highways and Aviation RDU Financial Summary by Component

*All dollars shown in thousands*

	FY2004 Actuals				FY2005 Management Plan				FY2006 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
<b>Formula Expenditures</b>	None.											
<b>Non-Formula Expenditures</b>												
Central Highways and Aviation	28,952.8	370.4	3,674.3	32,997.5	29,005.2	457.0	5,471.6	34,933.8	31,818.7	469.8	5,551.0	37,839.5
Northern Highways & Aviation	39,554.3	381.5	6,028.6	45,964.4	40,338.2	503.9	6,007.9	46,850.0	46,421.2	519.2	6,243.3	53,183.7
Southeast Highways & Aviation	8,900.9	0.0	1,756.7	10,657.6	9,096.0	0.0	1,583.0	10,679.0	10,012.3	15.0	1,620.5	11,647.8
Whittier Access and Tunnel	100.0	0.0	3,705.4	3,805.4	100.0	0.0	3,718.8	3,818.8	100.0	0.0	3,746.0	3,846.0
Adak Airport	0.0	554.9	0.0	554.9	0.0	9,445.2	0.0	9,445.2	0.0	0.0	0.0	0.0
<b>Totals</b>	<b>77,508.0</b>	<b>1,306.8</b>	<b>15,165.0</b>	<b>93,979.8</b>	<b>78,539.4</b>	<b>10,406.1</b>	<b>16,781.3</b>	<b>105,726.8</b>	<b>88,352.2</b>	<b>1,004.0</b>	<b>17,160.8</b>	<b>106,517.0</b>

**Highways and Aviation  
Summary of RDU Budget Changes by Component  
From FY2005 Management Plan to FY2006 Governor**

*All dollars shown in thousands*

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
<b>FY2005 Management Plan</b>	<b>78,539.4</b>	<b>10,406.1</b>	<b>16,781.3</b>	<b>105,726.8</b>
<b>Adjustments which will continue current level of service:</b>				
-Central Highways and Aviation	363.5	12.8	79.4	455.7
-Northern Highways & Aviation	522.5	15.3	170.4	708.2
-Southeast Highways & Aviation	125.3	0.0	37.5	162.8
-Whittier Access and Tunnel	0.0	0.0	7.2	7.2
-Adak Airport	0.0	-9,445.2	0.0	-9,445.2
<b>Proposed budget increases:</b>				
-Central Highways and Aviation	2,450.0	0.0	0.0	2,450.0
-Northern Highways & Aviation	5,560.5	0.0	65.0	5,625.5
-Southeast Highways & Aviation	791.0	15.0	0.0	806.0
-Whittier Access and Tunnel	0.0	0.0	20.0	20.0
<b>FY2006 Governor</b>	<b>88,352.2</b>	<b>1,004.0</b>	<b>17,160.8</b>	<b>106,517.0</b>