

**State of Alaska**  
**FY2005 Governor's Operating Budget**

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

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**Highways and Aviation Results Delivery Unit**

**Contribution to Department's Mission**

The mission is to 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 including: maintenance of 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.
- Control access to state rights of way for driveways, access roads, signs and utilities.
- Maintain 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>(1) Reduce injuries, fatalities and property damage.</b></p> <p><u>Target:</u> Remove snow from all urban NHS routes within 8 hours of a snowstorm.</p> <p><u>Measure:</u> Number of hours after the snow storm before NHS routes are clear of snow.</p>	<p><b>(1) Maintain State owned roads, highways and airports to appropriate department standards.</b></p> <p><u>Target:</u> Reduce by 3% the number of lane miles per operator (responsibilities).</p> <p><u>Measure:</u> Percent change in number of lane miles per operator.</p>

Major Activities to Advance Strategies	
<ul style="list-style-type: none"> <li>• Complete and implement MMS</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> </ul>

FY2005 Resources Allocated to Achieve Results		
<p><b>FY2005 Results Delivery Unit Budget: \$96,732,600</b></p>	<p><b>Personnel:</b></p>	
	Full time	475
	Part time	89
	<b>Total</b>	<b>564</b>

**Performance Measure Detail**

**(1) Result: Reduce injuries, fatalities and property damage.**

**Target:** Remove snow from all urban NHS routes within 8 hours of a snowstorm.

**Measure:** Number of hours after the snow storm before NHS routes are clear of snow.

#### Average Hours Needed to Remove Snow on Urban NHS Routes

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4	YTD Total
2003	not available	not available	not available	not available	not available

**Analysis of results and challenges:** The NHS routes are predominantly the high speed (posted), high volume (traffic) highways in the state and carry the vast majority of commuters and intrastate commercial trucking. To prevent significant economic loss of productivity from traffic delays, it is important to keep these routes properly maintained. Snow removal must be done efficiently and effectively to keep the road surface from becoming or remaining slippery. Clearing snow and preventing delays during periods of high traffic is difficult. As more lane miles of roads are added to the system, more resources will be required to maintain this level of service.

### (1) Strategy: Maintain State owned roads, highways and airports to appropriate department standards.

**Target:** Reduce by 3% the number of lane miles per operator (responsibilities).

**Measure:** Percent change in number of lane miles per operator.

#### Average Number of Lane Miles per Operator

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4	YTD Total
2003	not available	not available	not available	not available	not available

**Analysis of results and challenges:** The capital program has been very successful in constructing new highways and airports that are safer and meet new design standards. The newer highways include wider lanes, paved shoulders, turning lanes and roadside features like luminaries, variable message signs, and roadside viewing areas. The airports runways are wider, longer and lighted. This has placed more responsibilities onto the workforce, i.e., more lane miles per operator. The department must find ways to reduce operator responsibilities by: 1) transferring roads and airports to other entities; 2) outsource some or all of the responsibilities; and/or 3) increase the workforce - all without additional resources. The number of maintenance positions has remained flat during this expansion of new facilities. Without additional resources, it will be difficult to retain the level of service currently provided.

## Key RDU Challenges

- Protecting Alaska's investment in its transportation infrastructure is 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 \$258 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.
- 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 five 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 unsafe due to structural deficiencies. Temporary facilities are being used and funded with emergency funds, however they are insufficient for properly maintaining equipment. Preliminary design efforts are underway but full funding is necessary to finish detail design and start construction this summer.

### Significant Changes in Results to be Delivered in FY2005

Although funds are included in this budget request to cover the increasing costs of employee benefits, equipment usage, and maintaining new lane miles, reductions will also occur in purchase of paint, aggregate, and winter chemicals, as well as in snow hauling and operator overtime.

### Major RDU Accomplishments in 2003

- Implemented the new department safety manual with prescribed safety training requirements and policies.
- Repaired road and highways by: applying chip seal, hot mix, or high float asphalt to 336.1 lane miles of road; applying crack sealant to 1,334 lane miles of road; and repairing various components on 44 bridges; cutting brush along 4,700 shoulder miles.
- Repaired 155 lane miles of gravel surface and cutting 534 lane miles of brush on airports.
- Eight Road Weather Information Systems (RWIS) were deployed in Anchorage. These weather stations allow foremen to direct crews to more efficiently apply anti-icing agents and remove snow and ice. An additional 31 weather stations are being installed along portions of the Glen, Richardson, Seward, Parks, and Alaska Highways and road segments in Southeast.
- Continued to coordinate parts delivery with State Equipment Fleet at remote camps by using Maintenance and Operations employees to perform this service.
- Continued to grow the Adopt-a-Highway system with new volunteer groups enthusiastically participating in clean up of selected segments of highways. A safety video has been developed and distributed. A policies and procedures manual for Adopt-a-Highway programs is currently being developed.
- Met all new fingerprinting requirements at the certified airports.
- Performed extensive ditching and brushing on roads and airports.

#### Contact Information

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**Highways and Aviation  
RDU Financial Summary by Component**

*All dollars shown in thousands*

	FY2003 Actuals				FY2004 Authorized				FY2005 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	28,377.0	323.9	5,064.8	33,765.7	28,777.8	1,936.3	3,793.2	34,507.3	29,315.0	1,955.4	3,958.8	35,229.2
Northern Highways & Aviation	37,851.3	382.5	4,785.2	43,019.0	39,558.6	479.4	5,700.7	45,738.7	40,567.0	501.8	5,854.3	46,923.1
Southeast Highways & Aviation	8,733.2	0.0	1,644.0	10,377.2	8,902.7	0.0	1,668.5	10,571.2	9,185.0	0.0	1,577.4	10,762.4
Whittier Access & Tunnel	0.0	0.0	0.0	0.0	100.0	0.0	3,706.8	3,806.8	100.0	0.0	3,717.9	3,817.9
<b>Totals</b>	<b>74,961.5</b>	<b>706.4</b>	<b>11,494.0</b>	<b>87,161.9</b>	<b>77,339.1</b>	<b>2,415.7</b>	<b>14,869.2</b>	<b>94,624.0</b>	<b>79,167.0</b>	<b>2,457.2</b>	<b>15,108.4</b>	<b>96,732.6</b>

**Highways and Aviation  
Summary of RDU Budget Changes by Component  
From FY2004 Authorized to FY2005 Governor**

*All dollars shown in thousands*

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
<b>FY2004 Authorized</b>	<b>77,339.1</b>	<b>2,415.7</b>	<b>14,869.2</b>	<b>94,624.0</b>
<b>Adjustments which will continue current level of service:</b>				
-Central Highways and Aviation	-251.1	19.1	165.6	-66.4
-Northern Highways & Aviation	-50.0	22.4	153.6	126.0
-Southeast Highways & Aviation	0.0	0.0	-91.1	-91.1
-Whittier Access & Tunnel	0.0	0.0	11.1	11.1
<b>Proposed budget decreases:</b>				
-Central Highways and Aviation	-563.0	0.0	0.0	-563.0
-Northern Highways & Aviation	-610.0	0.0	0.0	-610.0
-Southeast Highways & Aviation	-117.0	0.0	0.0	-117.0
<b>Proposed budget increases:</b>				
-Central Highways and Aviation	1,351.3	0.0	0.0	1,351.3
-Northern Highways & Aviation	1,668.4	0.0	0.0	1,668.4
-Southeast Highways & Aviation	399.3	0.0	0.0	399.3
<b>FY2005 Governor</b>	<b>79,167.0</b>	<b>2,457.2</b>	<b>15,108.4</b>	<b>96,732.6</b>