

What we do

- Snow and Ice Control, Snow Plowing and Removal, Anti-icing and Deicing, Sanding
- Avalanche Mitigation
- Asphalt Repairs: Hi-Float, AC, Potholes, Crack Sealing, etc.
- Blading and Gravel Resurfacing
- Drainage: Thaw and clean culverts, drainage ditch maintenance, and Erosion Control
- Vegetation Management

- Paint Striping/Pavement Marking
- Bridge Maintenance and Repair
- Signs, Delineation, Guardrail, and Markers
- Traffic Signal and Light Maintenance
- Airport Management
- Aircraft Rescue and Fire Fighting
- Airport Security
- Airport Lighting Maintenance



Statewide Level of Service Consistency

Roadway Priorities and Levels of Service

Priority 1: High volume, high-speed roadways, such as expressways and safety corridors

Priority 2: Major highways and arterials connecting communities

Priority 3: Major local roads or collector roads

Priority 4: Minor local roads that primarily provide residential or recreational access

Priority 5: Roadways that are designated as "No Winter Maintenance" routes, such as Denali Highway and Taylor Highway





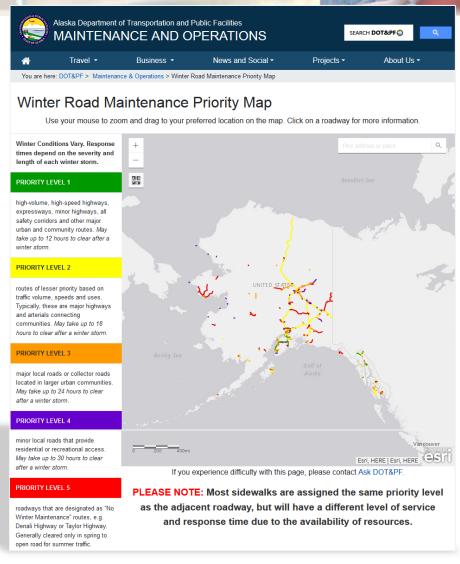








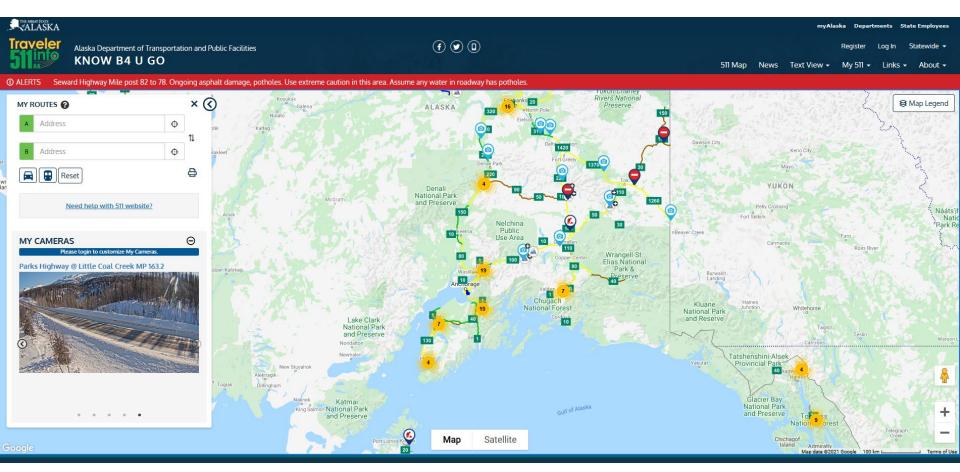
Statewide Level of Service Consistency



http://dot.alaska.gov/stwdmno/wintermap/







https://511.alaska.gov

Resources Required

To meet the challenges of maintaining Alaska's highways and airports, the department requires an arsenal of equipment, new technologies, sand and chemicals, and the best weapon of all, a highly trained and professional maintenance staff.



Maintenance and Operations Challenges

- Extreme Temperatures: -80F to +100F
- Extreme Snowfall: 1.5' to 80'
- Extreme Geography: Maritime to Arctic
- Extreme Cost:
 - Materials
 - Diesel \$9-\$10/gal in Villages
 - Equip Shipping
- Changing Climate
- Managing Fiscal Constraint







Winter Maintenance Efficiencies

- **RWIS Installations**
- **Highway Anti-icing Program**
- Airport De-icing
- Tow Plows
- Ice Breakers
- **Telematics**
- GPS Guidance systems snow removal equipment.
- Alaska Specific eMDSS
- Cooperation with FAA and National Weather Service for additional weather system information.









Towplows

Benefits

- Increased efficiency and production (One pass clearing, improved cycle times, wider clearing path)
- Reduction in manpower and equipment
- Environmental benefits from using less fuel
- Safety improvements due to improved cycle times
- Longer service life than snowplow trucks







Need for Ice Breaking Technologies







Ice Breaking Technology



Additional Efficiencies

- Maximizing Federal Funding (Federal Highway Administration and Federal Aviation Administration)
- Multi-modal Crews (Highways and Aviation)
- Anti-Idling Policy















Extreme Conditions







Extreme Conditions











Emergency Response









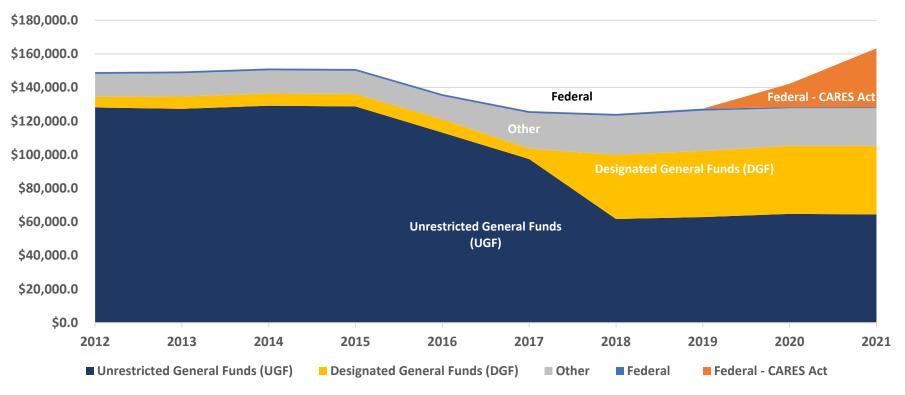








Regional Highways & Aviation

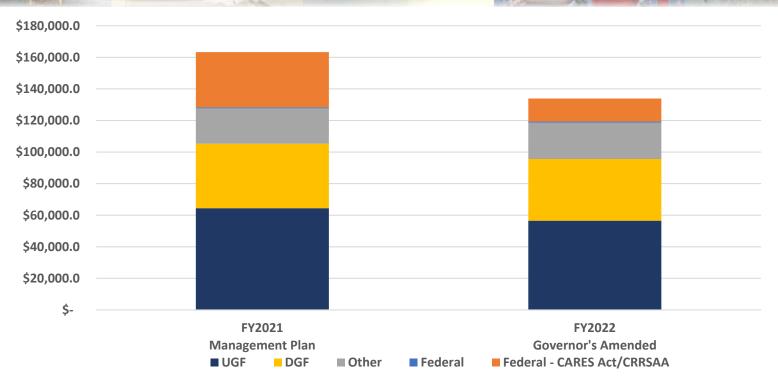


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Unrestricted General Funds (UGF)	\$128,114.1	\$127,300.1	\$129,146.9	\$128,728.9	\$113,145.6	\$97,396.1	\$61,715.6	\$62,852.1	\$64,799.1	\$64,440.9
Federal - CARES Act	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$14,000.0	\$35,000.0
Designated General Funds (DGF)	\$6,441.7	\$7,358.2	\$7,371.6	\$7,447.9	\$7,904.4	\$6,222.9	\$38,225.4	\$39,407.3	\$40,513.9	\$40,822.7
Other	\$13,509.8	\$13,798.8	\$13,684.7	\$13,739.0	\$13,876.2	\$21,204.7	\$23,213.6	\$23,956.2	\$22,302.5	\$22,401.6
Federal	\$1,102.4	\$1,086.1	\$1,091.8	\$1,094.3	\$1,094.3	\$1,092.1	\$1,094.5	\$1,163.4	\$649.0	\$650.1
Total:	\$149,168.0	\$149,543.2	\$151,295.0	\$151,010.1	\$136,020.5	\$125,915.8	\$124,249.1	\$127,379.0	\$142,264.5	\$163,315.3



\$ in Thousands (1,000)

FY2022 Operating Budget Comparison Regional Highways & Aviation



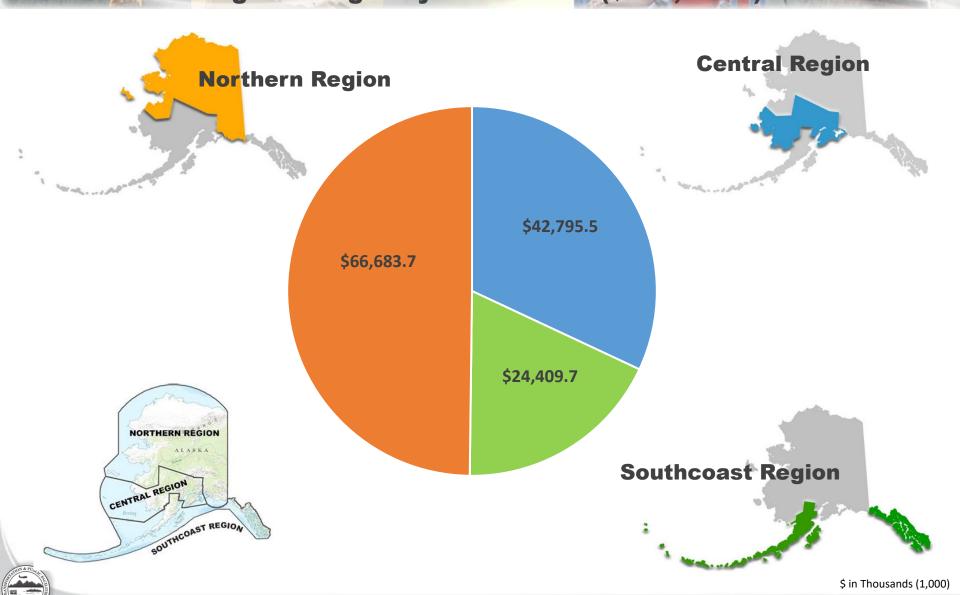
	FY2021	FY2022	\$ Difference Between	% Difference Between	
Fund Types	Management Plan	Governor's Amended	FY2021 & FY2022	FY2021 & FY2022	
UGF	\$ 64,440.9	\$ 56,514.2	\$ (7,926.7)	-12.3%	
Federal - CARES Act/CRRSAA	\$ 35,000.0	\$ 14,579.7	\$ (20,420.3)	-58.3%	
DGF	\$ 40,822.7	\$ 39,090.8	\$ (1,731.9)	-4.2%	
Other	\$ 22,401.6	\$ 23,054.1	\$ 652.5	2.9%	
Federal	\$ 650.1	\$ 650.1	\$ -	0.0%	
Total	\$ 163,315.3	\$ 133,888.9	\$ (29,426.4)	-18.0%	

^{*}Budgeted, Management Plan - FY2021 includes FAA CARES Act RPL authority

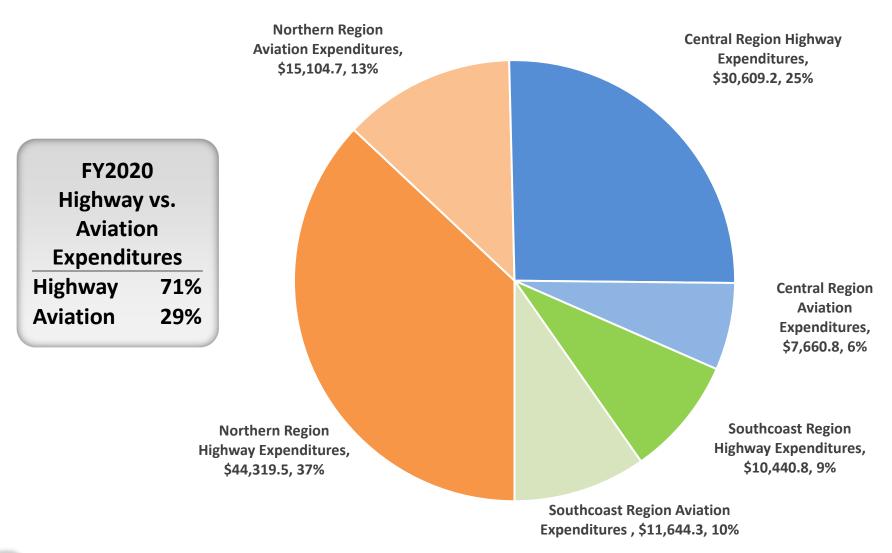


\$ in Thousands (1,000)

FY2022 Governor's Amended Operating Budget Regional Highways & Aviation (\$133,888.9)



FY2020 Regional Highways and Aviation Actual Expenditures All Fund Sources (\$119,779.3)





\$ in Thousands (1,000)

FY2022 Highways Budgetary Actions

Reopening of Chitina & Birch Lake Maintenance Stations (794.6 Fed - CRRSAA)

Reopening of Silvertip Maintenance Station (620.0 Fed - CRRSAA)

Dalton District Shift Change - Two Week On/Two Week Off (1,298.6 Fed - CRRSAA)

Add Authority to Cover Collective Bargaining Unit Increases for 37.5 to 40-hour Work Week (716.0 UGF)

Projected Motor Fuel Shortfall (-502.8 DGF/502.8 UGF)

Delete Unrealized Motor Fuel Tax Authority (-1,232.2 DGF)



\$ in Thousands (1,000)

Thank You.

Dom Pannone

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 $\textit{Mat-Su valley seen from Independence Mine.} \ \textit{Photo by Chuck Eldridge, Alaska DOT\&PF}$