



# Alaska Department of Transportation & Public Facilities

## Senate Finance Subcommittee State Equipment Fleet (SEF)

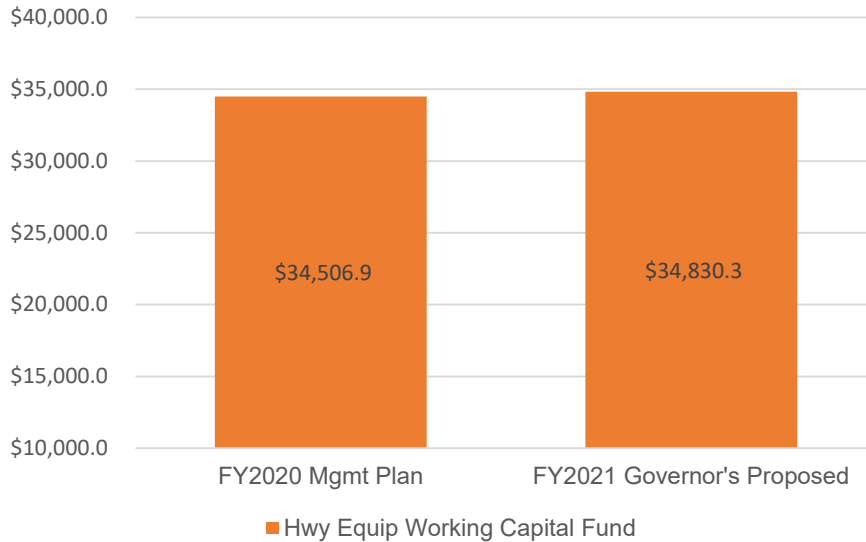
Brad Bylsma, State Equipment Fleet Manager

March 11, 2020

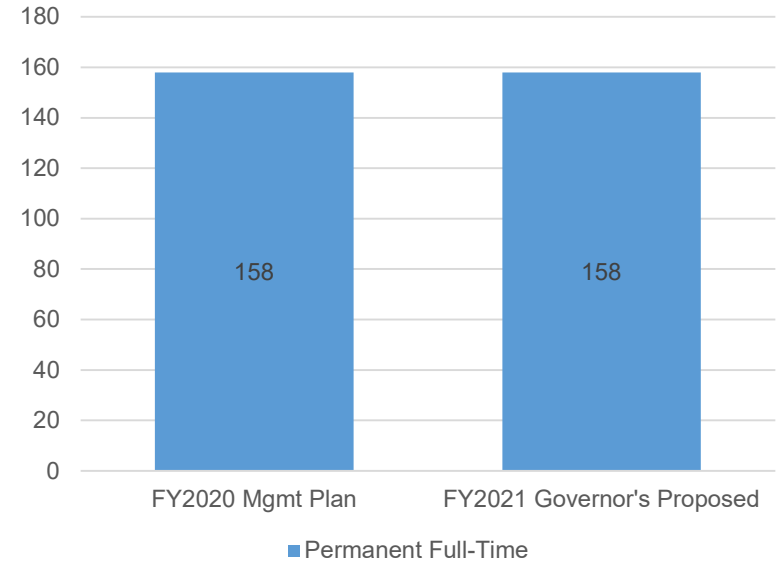
Our mission is to ***Keep Alaska Moving*** through service and infrastructure.

# Funding and Position Count Comparisons

Funding Comparison  
(\$ in Thousands)



Position Comparison





# **Who We Are and What We Do**

**158 Positions**

**126 mechanics in 54 shops located from Kotzebue to Ketchikan**

**32 support staff-  
contracting, parts,  
administration and  
technical support,  
managers**

**Shared Service supporting all departments**

- **Contracting, Procurement, Disposal**
- **Maintenance, Repair, Modification**
- **Fuel Card Management and Billing**
- **Labor Resource Pool:**
  - **Maintenance and Operations  
6,880 hours in 2019**
  - **Department of Natural  
Resources 4,847 hours in 2019**

# HEWCF (HF)

## Highway Equipment Working Capital Fund

- Internal Service Fund created to maintain the fleet and replace fleet vehicles
- SEF receives no direct General Fund appropriation; funding comes from fees paid by state agencies
- SEF is a shared service, our customers include:
  - All Executive Branch departments have SEF vehicles and equipment
  - SEF also provides asset management services for Alaska Housing Finance Corporation, University of Alaska, Alaska Railroad, Alaska Aerospace
  - 85% of SEF revenue generated by DOT&PF, 80% from Maintenance and Operations





# Shared Service for all Departments

<u>Assets by Department</u>	
01 Governor's Office	9
02 Administration	37
03 Law	12
04 Revenue	2
05 Education	10
06 Health & Social Services	253
07 Labor	77
08 Commerce & Econ Dev	17
09 Military & Veterans Affairs	93
10 Natural Resources	631
11 Fish & Game	924
12 Public Safety	735
18 Environmental Conservation	67
20 Corrections	340
25 Transportation	4,170
31 Legislative Affairs	9
41 Court System	5
99 UA, AHFC, AEA, AIDEA	899
<b>Total Fleet Assets</b>	<b>8,290</b>

*Full life - replaceable asset*



*X-Status - already replaced*





# SEF Challenges

## Staffing Challenges

- Difficult to recruit in rural areas
- Shifting more to hub style staffing with week on week off shifts
- New staff coming on board with less experience than in the past
- Multiple vacancies in major shops (Anchorage, Fairbanks, Valdez)

## Technology and Reliability Challenges

- New equipment requires more computer diagnostic skills than wrench-turning
- Electronics are not always built for severe climate conditions
- Tier IV Emissions for all equipment has brought new training challenges for operators and mechanics
- Equipment being asked to do more than ever before

# Challenges - Diagnostics

- 33 Different Diagnostic Programs:
  - Some programs require exclusive laptops
  - Requires multiple laptops at single station
  - Laptops are shared between shops which can cause delays
  - Admin rights required - requires Office of Information Technology assistance
  - FY2020 Renewal Costs \$174.0



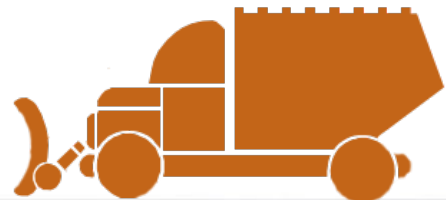
\$ in Thousands

# Challenges - Reliability

- Grader Rebuild Program
  - V#31024 – 1993 Caterpillar 14G
    - Complete rebuild February 2020 at 15k hours
    - Cost of rebuild \$315.0; replacement cost: \$650.0
    - Extended life 10-12 years
  - V#35286 – 2005 Caterpillar 14H
    - Complete rebuild April 2018 at 20k hours
    - Cost of Rebuild \$227.0; replacement cost \$650.0
    - Extend life 10-12 years
  - Four grader rebuilds completed, three more scheduled



\$ in Thousands



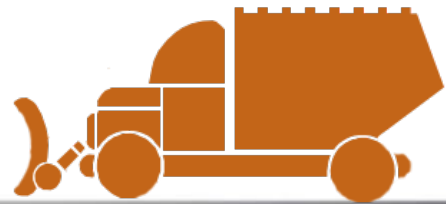


# Challenges - Reliability

- Plow Truck Chassis Swaps
  - V#38393 – 2012 Plow Truck 4,718 Hours
    - Removed Dump Box, Belly Blade, Plow and Hydraulics and installed on a 2020 Chassis
    - 61% Reduction in Operating Rate from FY2018 – FY2020 (\$5,850.00/month to \$2,313.00/month)
    - Cost for new chassis & conversion: \$160.0
    - 10-12 years additional life for implements
  - Two swaps completed, many more planned



\$ in Thousands





# Thank You

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Thompson Pass M&O crew. Photo by Alaska DOT&PF

