# Maintenance Program Overview

Scott Malone, Assistant District Engineer,

**Operations** 

**District Four** 



May 15, 2019

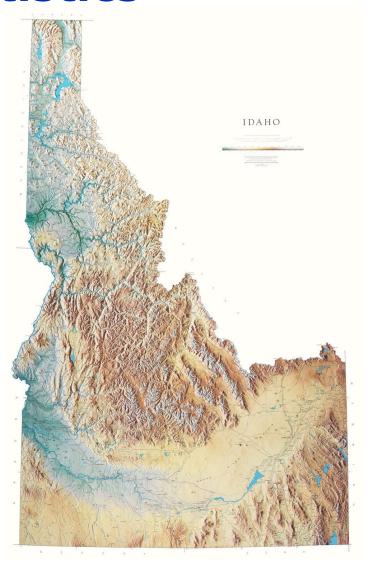
### **Topics**

- Idaho Statistics
- Organization
- Budget
- Maintenance Programs
- Strengths
- Challenges & Initiatives
- Questions



#### **Idaho Statistics**

- Population: 1.7 million
- Land Area: 83,569 square miles
- Federal Land: 33 mil. acres (62%)
- 14<sup>th</sup> in Area / 39<sup>th</sup> in Population
- Highest Elev: Borah Peak 12,662 ft.
- Lowest Elev: Lewiston 713 ft.
- Largest City: Boise (Pop. 226,570)
- Median Income: \$52,225k / 44<sup>th</sup>
- 2018 Fastest Growing State and Boise Fastest Growing City in USA





#### **ITD Vision**

**ITD's Vision:** 

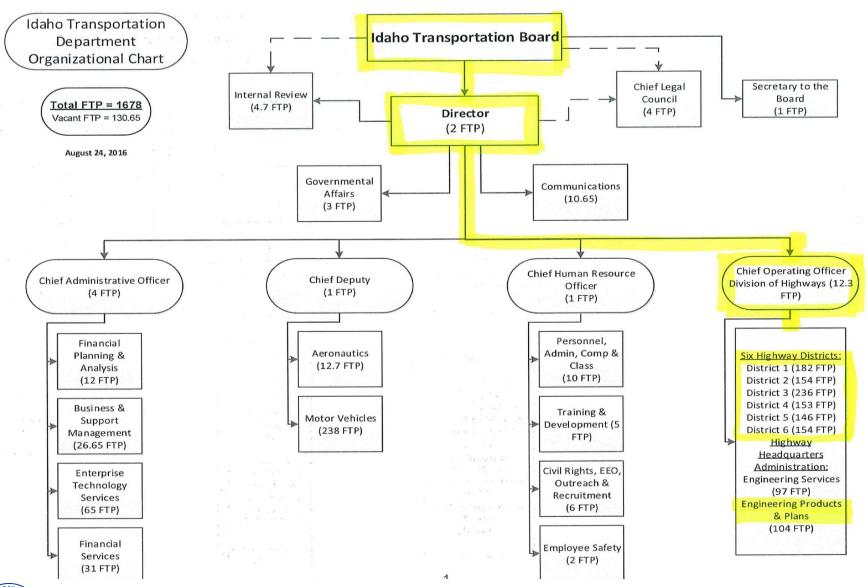
To be the best transportation department in the US

Highways' Supporting Vision: 'One Highways', Doing Things Better Every Day

- \* Collaborate seamlessly statewide
- \* Identify and implement best practices statewide
- \* Leverage the best technologies

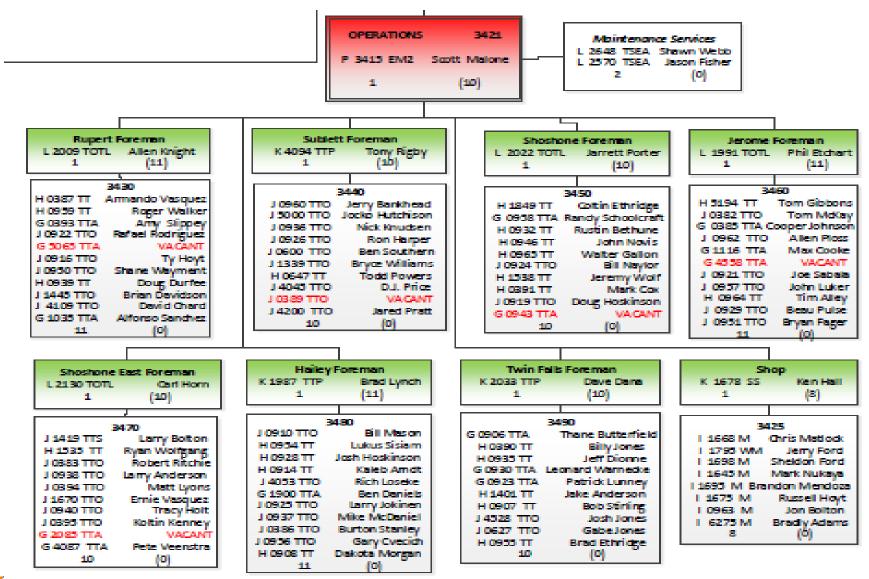


### ITD Organization





#### Typical ITD District Maintenance





# ITD Highways Funding

Contract Construction-

\$350M

Highway Operations-

\$202M

\$10.3M Equipment Appropriation,

\$7.0M Buy-Back Proceeds-

\$20.3M

Other Capital Facilities (buildings)

\$ 3.5M

Total Highways Budget -

\$575M

Total ITD Budget -

\$725M



### Maintenance Responsibilities

Centerline Miles of Highway: 4983

Lane Miles of Highway: 12,314

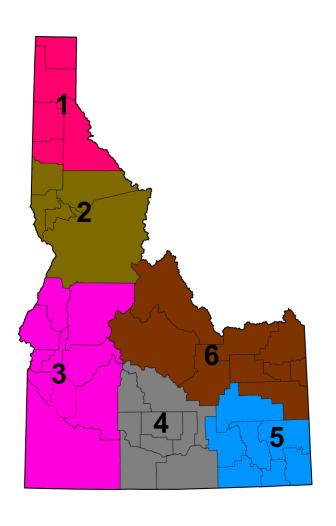
• Bridges: 1824

• Ports of Entry: 12

• Rest Areas: 31

• Building Facilities: 680

• Vehicle Fleet: 3710





# Maintenance Programs & Activities

- Pavement Repairs
  - State forces patching
  - Contract milling, inlays, overlay patches
- Bridge Repairs & Cleaning
  - Small repairs
  - Deck sealing
- Mowing
- Brush & Tree Trimming
- Ditch Cleaning and Repair
- Fence Repairs
- Delineators



# Maintenance Programs & Activities

- Drainage Systems
  - Cleaning and smaller culvert replacements
- Rest Areas
  - Building repairs and mowing
  - Contract cleaning
- Striping Crews
  - 5 District striping trucks paint 6 districts
- Vegetation Crews
  - Weed control
  - Some seeding
- Sign Crews



# Maintenance Programs & Activities

- Signals & Lighting
  - Traffic Section electricians
  - Some contract electricians
- RWIS & Other ITS
  - Maintained by HQ contract
- Emergency Response
  - Traffic control for crashes
  - Brooming & clean up
  - Knock downs
  - Almost 50% of crew time on unplanned work



# Challenges

- Idaho's population is rapidly increasing
  - (26% and +460K since 2000)
- Staffing
  - Steady reduction of FTE's for many years
    - Less people to do the work
    - Loss of specialty crews & expertise
      - Statewide bridge maintenance
      - Signing
      - Vegetation
  - Small candidate pool
    - Weak wages
    - Lose trained personnel to cities, counties, and contractors for better pay.
    - Horizontal Career Paths have helped.



# Challenges

- Steady maintenance budget, while cost of doing business is ever increasing
- ITD has increased levels of service for winter maintenance leaving less funding for other programs
  - Increased salt and fuel costs
- Aging Infrastructure
  - Nearly 50% of bridges over 50 years old
  - 12% of pavements need rehabilitation
- Recent Turnovers
  - New Governor and half the Transportation Board Members this year.
  - 3 of 6 District Engineers retire in 2019 (Maybe 4)



#### Strengths & Initiatives

- Department Emphasis on Changing to a Constructive Culture
  - Clear Mission & Vision
  - Safety first attitude
  - Reduced turnover
- Horizontal Career Paths for Engineering & Mtce. Staff
  - Maintenance Technicians, Foremen, and soon Equipment Technician (Mechanics)
  - Entry to Journeyman level pay in 3 to 5 years.
- New Equipment Operator Training Program
  - 2 week training for loader, dump truck, & snowplow truck.
  - Upon completion and testing, operators will have certifications from NCCER.



#### Strengths & Initiatives

- Purchased New Stock Pile App for iPhone
  - Inventory measuring and calculating quantities
  - Will allow rapid monitoring of stockpile inventory
  - Driver was winter salt
- Mechanic's Tools
  - Currently mechanics provide
  - Looking to purchase and own tools for mechanic use
- Inmate Labor
  - Agreements with multiple Idaho correctional institutions
- Innovate ITD Program





#### **Innovation Scorecard**

• Employee Ideas: 1,468

• Implemented Innovations: 1,022

Savings/efficiencies: \$8.8 million\*

• Hours saved: 256,846

• Customer-service improvements: 590

As of March 31, 2019

\* Savings/efficiencies are invested back into Idaho roads and bridges or customer-service improvements for the citizens of Idaho.



#### Port-A Rail Realignment



The maintenance crew in Caldwell has a perennial job of realigning jersey barriers that are hit by cars. It takes them days to cover the miles of barriers within the urban Interstate 84 corridor. The crew machined a hydraulic attachment for a plow truck that is much safer and faster than the old method.



# **Questions?**

