



Impacts of FY 2017 Winter Weather

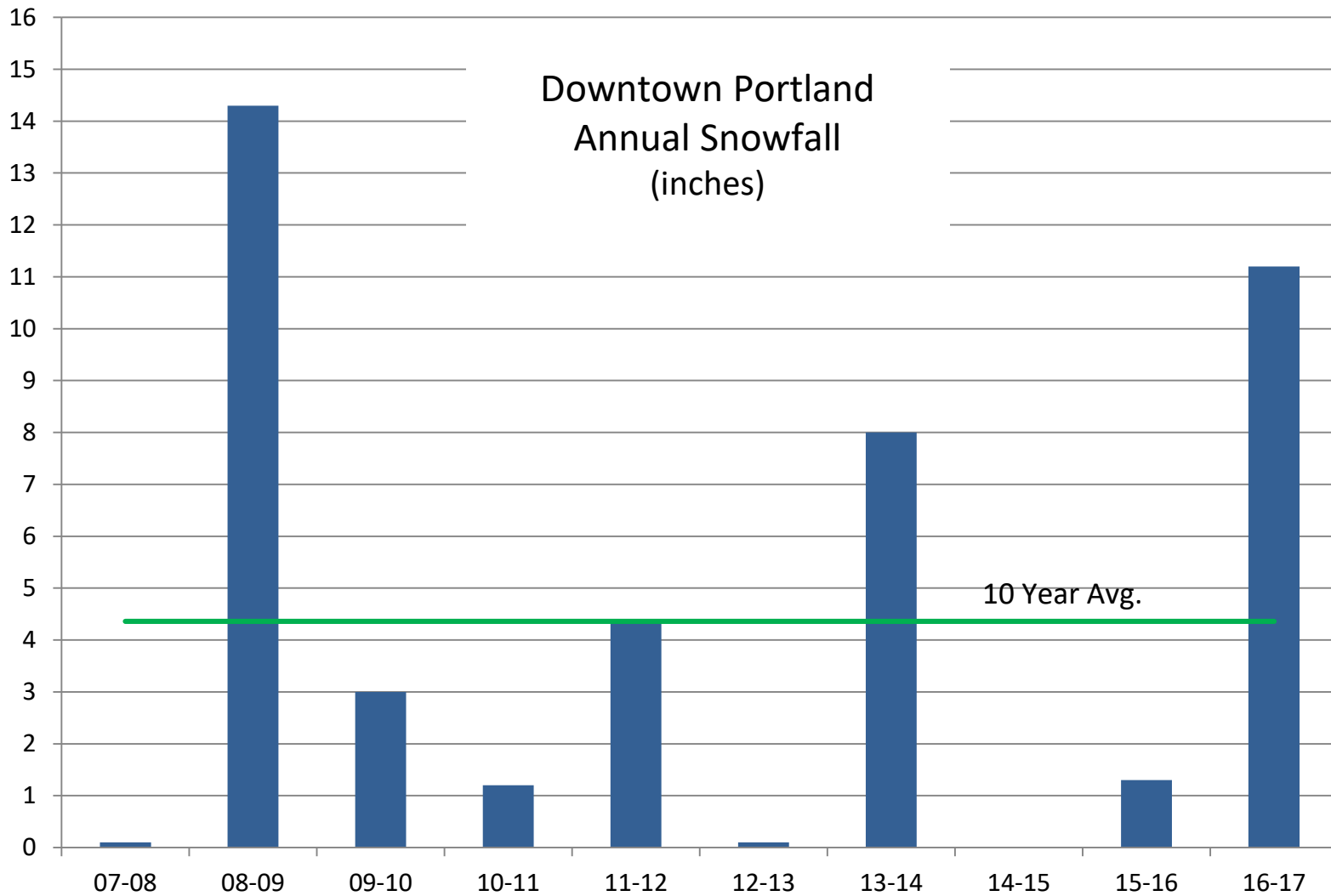
Transportation Division
Department of
Community Services
April 18, 2017

Agenda

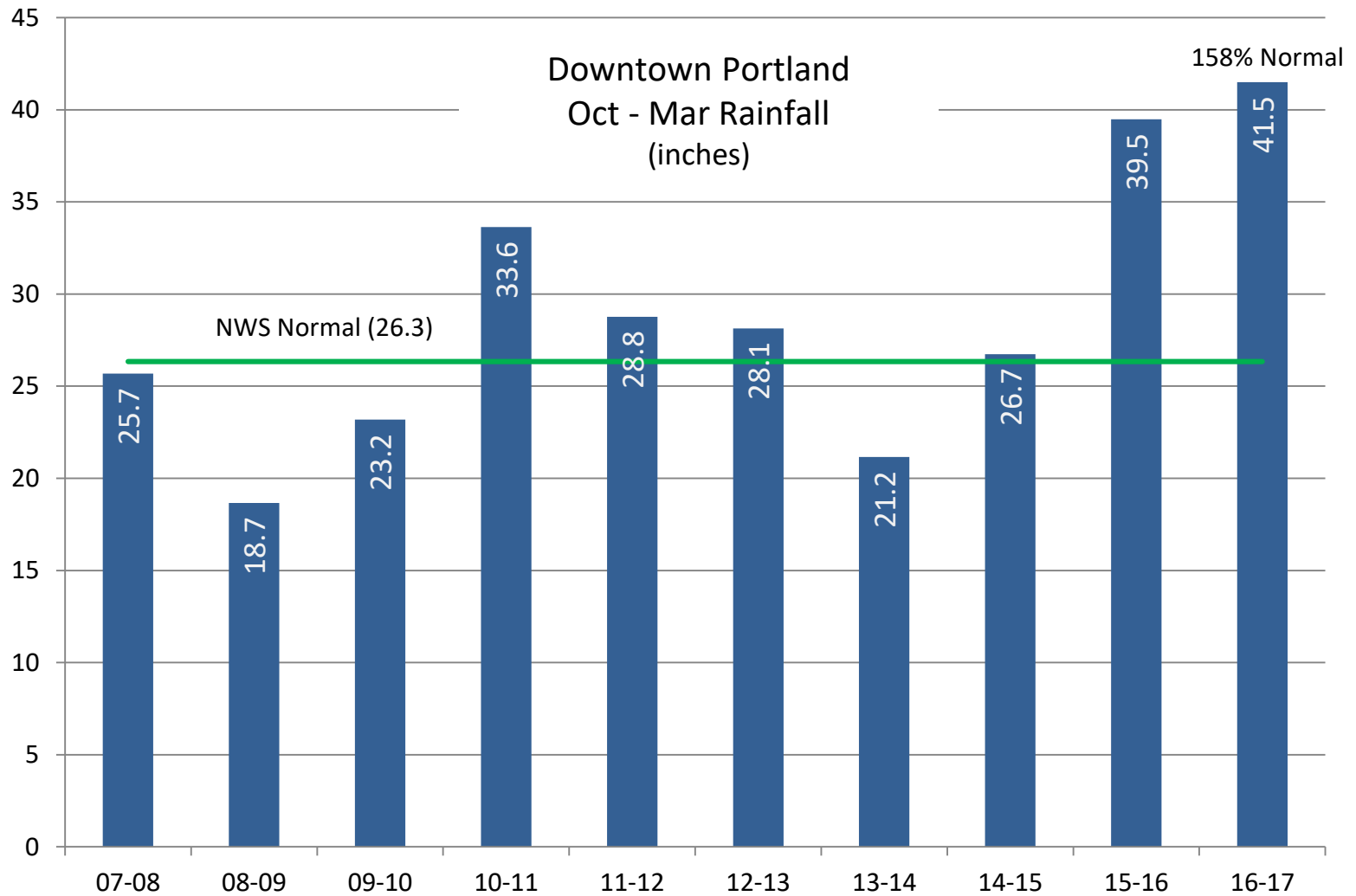
- Weather Background
- Preparation
- Response Effort
- Damaged Roadways
- Willamette River Bridge Response
- Summary



Winter 2016 - 2017 Snowfall



Winter 2016 - 2017 Rain



Prepare Equipment (Late October)

- Snow plows
- Sanding trucks
- Anti-icing trucks
- Tire chains, road barricades, chainsaws

Prepare for Event

- Apply anti-icing (magnesium chloride solution)
- Transition staff to 24/7 operations
- Coordinate with internal/external agencies



Anti-Icing

- Chemical applied to roadway surface prior to a freeze event
- County use's magnesium chloride solution

De-icing

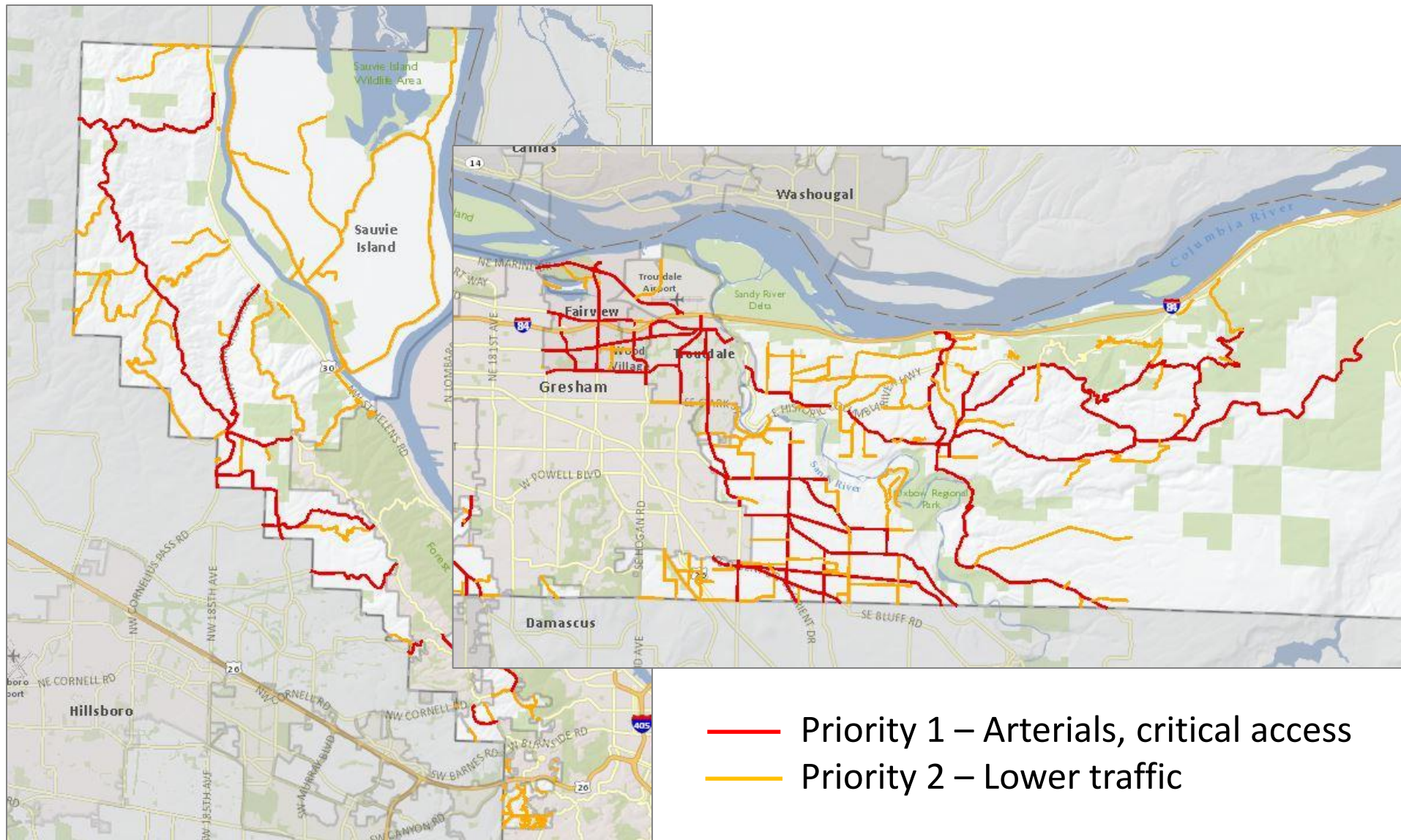
- Chemical applied to an ice/snow covered roadway to accelerate melting
- Typically solid sodium chloride (rock salt)
- Sodium chloride has negative environmental impacts

Abrasive

- Small gravel applied to packed snow/ice to enhance friction



DCS Transportation Division: Snow and Ice Plan



- Priority 1 – Arterials, critical access
- Priority 2 – Lower traffic



Local 88 Contract Provision


- Emergency
- Addendum D
- 2 x 12 hour shifts/day

12 to 14 staff per shift

6 a.m. to 6 p.m. – 6 p.m. to 6 a.m.

- 12/8 thru 12/10
- 12/14 thru 12/18
- 1/7 thru 1/15 (workweek started 1/3)



A black and white photograph showing a narrow, snow-covered road or path winding through a dense forest. The trees are heavily laden with snow, and their branches hang low over the path. A large, thick tree trunk lies horizontally across the road in the middle ground, blocking the way. The sky is visible in the background, appearing overcast. The overall scene conveys a sense of winter isolation and road closure.

Cornelius Pass Road
(Closed 5 days)

Logie Trail Road
(Closed 13 days)



DCS Transportation Division: Roads Response

- 9,500 of 13,300 regular hours in December, January, February on weather response
- \$366,000 – regular time for weather response (\$1.9M budgeted for staff for entire fiscal year)
- 2,790 OT hours/\$113,000 on weather response (\$48,000 budget)
- Over 200 pothole repair requests, 140 closed
- \$78,000 for gravel, anti-icer, asphalt
- 17,000 gallons of anti-icing solution
- 1,300 tons of gravel
- 325 tons of asphalt



Thompson Road (Short term)



DCS Transportation Division: Road Closures

Short Term

- Larch Mountain
- Corbett Hill Road
- 238th Avenue
- Marine Drive
- SE Altman
- Cornelius Pass Road
- Germantown Road
- Logie Trail
- McNamee Road
- Thompson Road

Long Term

- Pipeline Road –
(Open with temp. repair)
- Lusted Road
- Newberry Road





Thompson Road (Long term)

- Monitor for now
- Estimate - \$1,100,000



Germantown Road



- Design, ROW- 2017
- Construction - 2017
- Estimate - \$120,000



Newberry Road



- Design, ROW- 2017
- Construction - 2018
- Estimate - \$1.8 million



Pipeline Road



- Design, ROW- 2017
- Construction - 2018
- Estimate - \$90,000 to \$800,000



Lusted Road



- Design- 2017
- Construction - 2017
- Estimate - \$100,000



Road Maintenance

- 2 month loss of work plan
- \$113,000 overtime
- Damaged pavement, potholes
- Deferred shoulder, ditch, culvert, sign, vegetation, guardrail maintenance

Road Capital

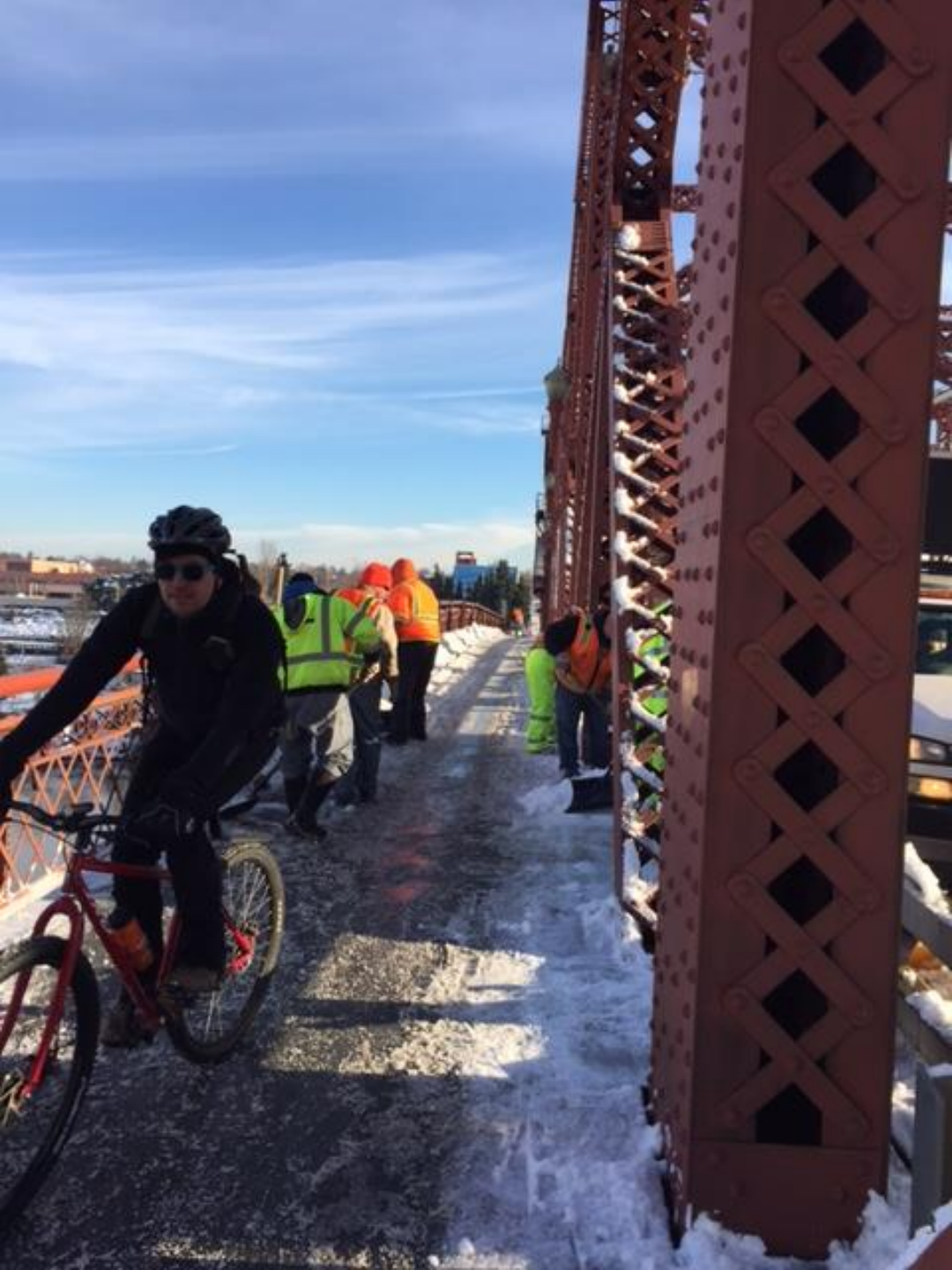
- Unanticipated workload (5 new projects added to 14 in current work-plan)
- \$3.9 million unanticipated capital repair projects



DCS Transportation Division: Bridge Response

- City of Portland plows bridge roadways
- Bridge maintenance clears sidewalks
- Bridge maintenance clears lift spans
 - Unable to operate bridges for 4 days



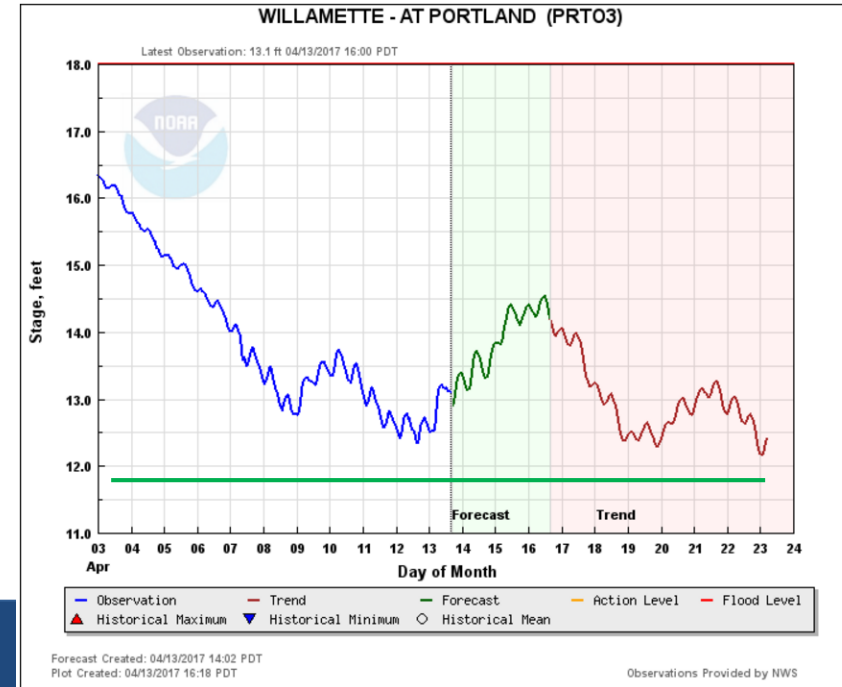






DCS Transportation Division: High Water

- Ordinary Operation –
 - Hawthorne – on demand – staffed 24-7
 - Other bridges – 1 or 2 hour notice – Morrison staffed outside normal business hours
- High Water Operation – 33CFR 117.897
 - Water above 12 feet
 - All bridges on demand, staffed 24/7
 - February 10 through 12
 - February 22 through 24
 - March 10 to ???
- High water cost
 - \$2,000 extra/day (doubles daily cost of bridge operating staff)
 - 45 days (as of 4/17) = \$90,000



Deferred maintenance leads to accelerated system deterioration

- **Unplanned costs**
 - ✓ Overtime - \$113,000
 - ✓ Material - \$77,000
 - ✓ Capital repair projects – up to \$3.9M
 - ✓ Prioritize – Newberry Road, Germantown Road
- **Funding possibilities**
 - ✓ Cannot redirect project targeted funding
 - ✓ Federal Emergency Management Agency
 - ✓ Federal High Way Administration
 - ✓ Rural Surface Transportation Program - \$890,000
 - ✓ Eliminate FY 2018 overlay program - \$550,000
 - ✓ Eliminate FY2018 chip seal program - \$400,000
 - ✓ Legislature



DCS Transportation – FY 2017 Winter Weather Summary

- Deferred maintenance
- Unplanned expenses
- Challenging funding
- Climate Change
- Outstanding Staff Effort
 - ✓ Road and Bridge Maintenance
 - ✓ Bridge Operations
 - ✓ Road Engineering



Questions?

