



# **ROAD MAINTENANCE**

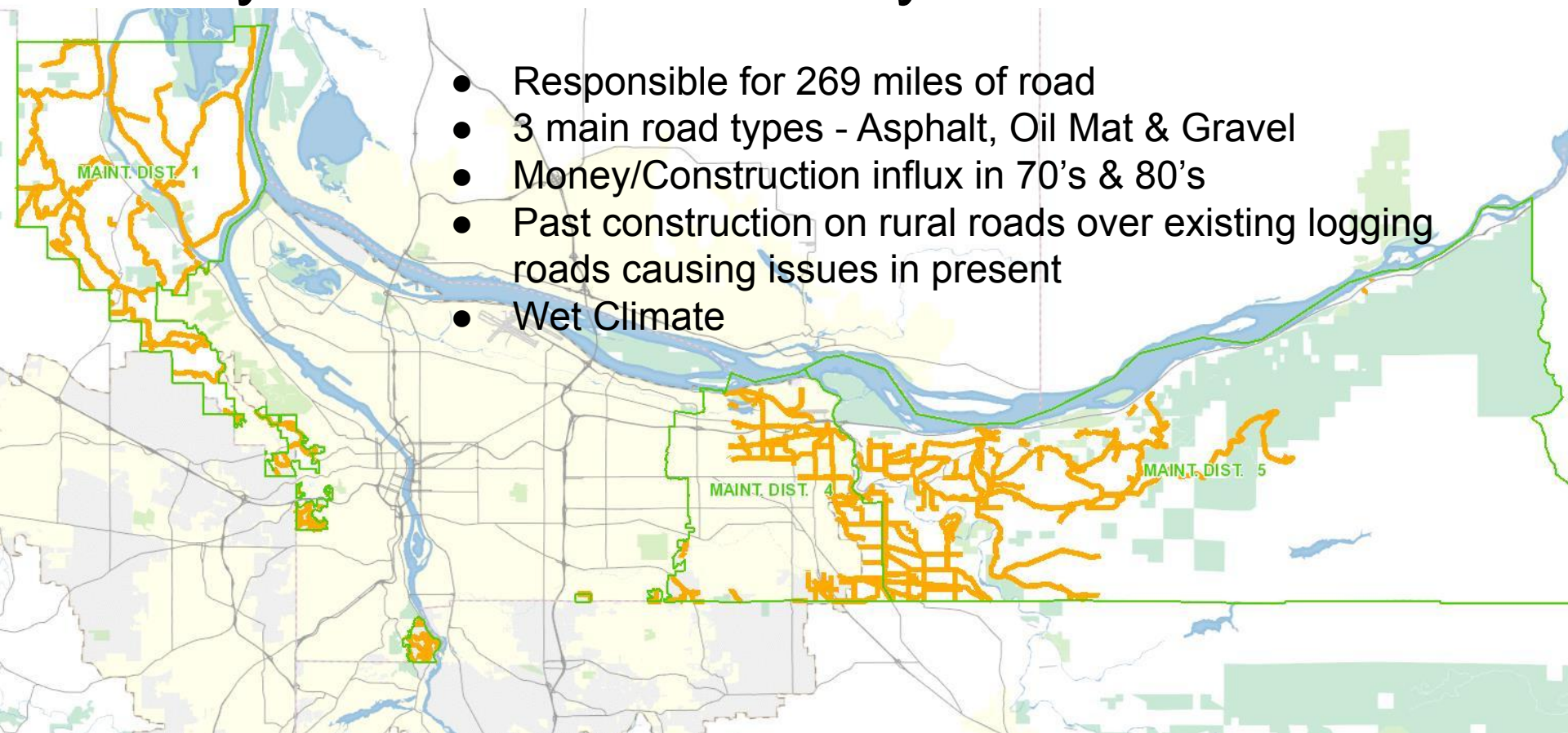
Pothole Presentation September 18, 2023

# Introductions

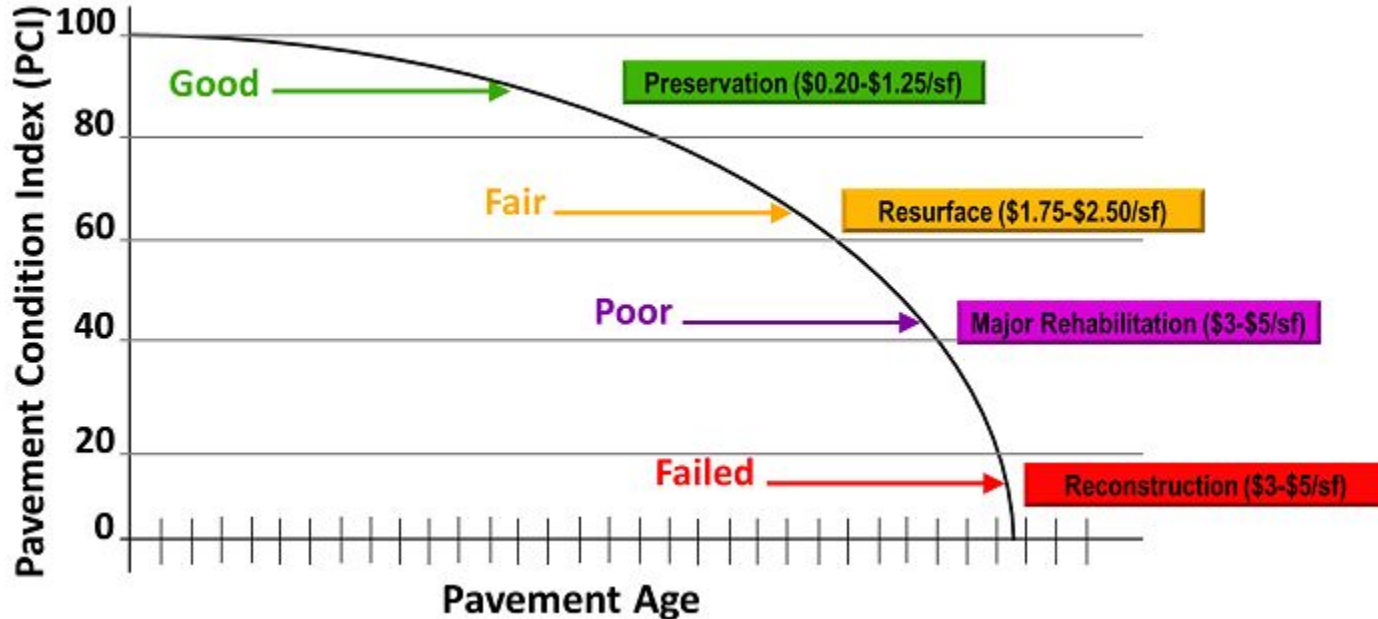


# History of Multnomah County Road Maintenance

- Responsible for 269 miles of road
- 3 main road types - Asphalt, Oil Mat & Gravel
- Money/Construction influx in 70's & 80's
- Past construction on rural roads over existing logging roads causing issues in present
- Wet Climate



# Road Lifespan



- 12-15 year lifespan without maintenance
- 25-30 year lifespan with ideal maintenance
- Maintenance expenses increase exponentially the worse the road condition
- Many rural Multnomah County roads are 40+ years old
- Many rural Multnomah County roads are not built for industrial traffic



# Pavement Condition Index (PCI)

## Estimated PCI by Functional Classification

Rural Roads PCI as of: 8/30/2023

	Total Segments	Centerline Miles	Lane Miles	PCI
Rural Local	187	119.85	239.70	56
Rural Collector	111	89.21	177.52	62
Rural Arterial	16	8.47	16.94	79
<b>Total</b>	<b>314</b>	<b>217.53</b>	<b>434.16</b>	<b>60</b>

## Estimated PCI by Functional Classification

Urban Roads PCI as of: 8/30/2023

	Total Segments	Centerline Miles	Lane Miles	PCI
Urban Local	47	10.11	20.01	58
Neighborhood Collector	20	8.46	16.22	60
Major Collector	37	16.76	32.59	69
Principal Arterial	1	0.23	0.47	75
Minor Arterial	24	10.58	27.06	82
Major Arterial	9	5.02	15.63	84
<b>Total</b>	<b>138</b>	<b>51.16</b>	<b>111.97</b>	<b>68</b>

## Estimated PCI by Functional Classification

Overall Network PCI as of: 8/30/2023

	Total Segments	Centerline Miles	Lane Miles	PCI
Rural Local	187	119.85	239.70	56
Urban Local	47	10.11	20.01	58
Neighborhood Collector	20	8.46	16.22	60
Rural Collector	111	89.21	177.52	62
Major Collector	37	16.76	32.59	69
Principal Arterial	1	0.23	0.47	75
Rural Arterial	16	8.47	16.94	79
Minor Arterial	24	10.58	27.06	82
Major Arterial	9	5.02	15.63	84
<b>Total</b>	<b>452</b>	<b>268.69</b>	<b>546.13</b>	<b>62</b>



# Types of Fixes



## Cold Mix

Pros:

- Easy application
- 1 to 2 crew members
- Works in wet weather

Cons:

- Poor road adherence
- Expensive
- Temporary



# Types of Fixes

## Asphalt

### Pros:

- Cheap material cost
- Good wear surface
- Removal of problem area

### Cons:

- Large crew needed
- Large equipment needed
- Needs to be sealed
- Time consuming  
depending on location
- Dry weather only



# Types of Fixes

## Mastic

### Pros:

- Medium material cost
- Medium size crew
- Good wear surface and seal

### Cons:

- Extremely Slow
- Working around material causing issues
- Can be slick in wet conditions or high heat without extra material added for traction
- Dry weather only





# Types of Fixes



## Tar Pot Patch

Pros:

- Very cheap material cost
- Small Crew

Cons:

- Slow
- Results vary
- Not ideal for asphalt
- Messy
- Dry weather only

<<< not a tarpot patching pic



# Current Struggles



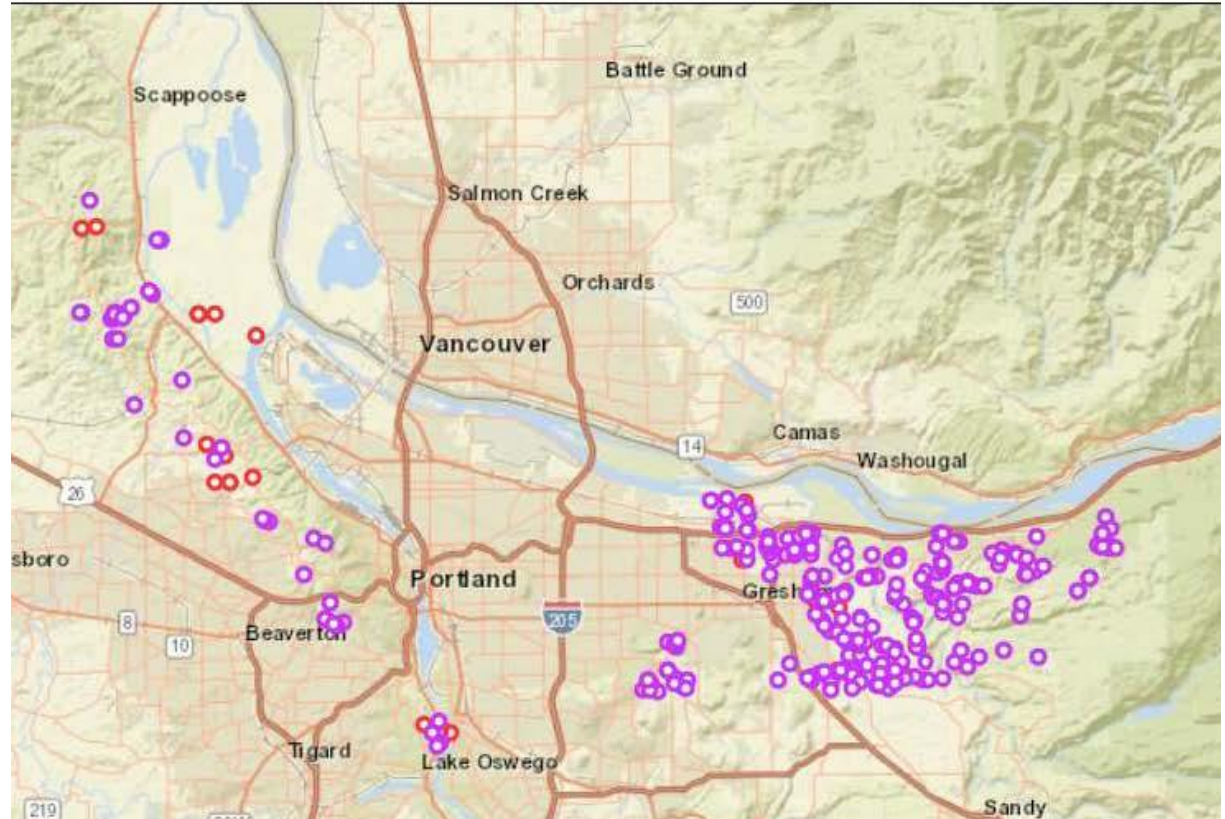
- Small crew/vacant positions/green workers
- Outdated budget/Inflation of costs
- COVID
- Loss of inmate workers
- Increase in maintenance needs
- New regulations slowing processes
- Crew taking heat for poor road conditions from angry citizens



# How do we prioritize work?

Request Map

- Required
- Safety
- Funding
- Ability
- Cartograph Information/Inspections
- Request from small cities
- See Click Fix
- Seasonal





Questions?