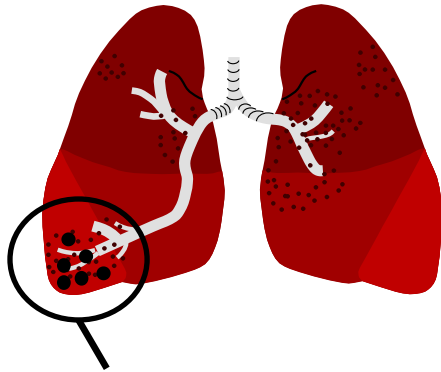


Air Pollutants of Concern in Oregon

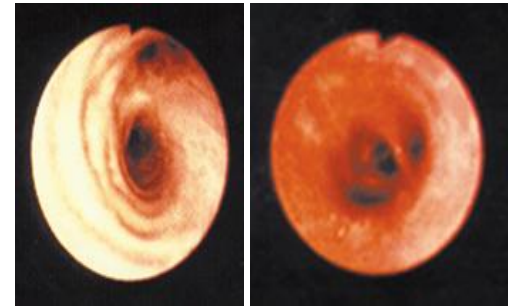
Particulate Matter



Fine particles enter deeply into the lungs

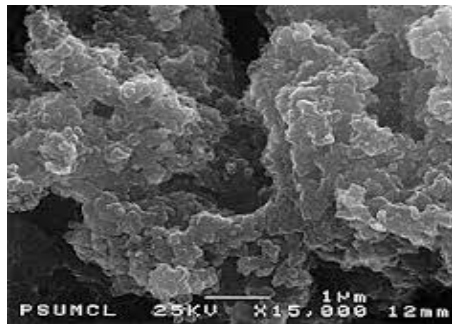


Ground Level Ozone

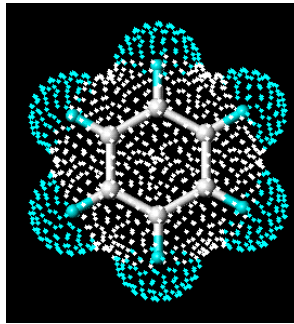


Healthy Airway Inflamed Airway

Toxic Air Pollutants



Diesel Particulate



Benzene

Industrial
metals
Graphic?

Metals

Pollution Affecting Climate Change (GHG)/ Ecosystems



Air Quality Program



Federal – State Roles

Clean Air Act

Criteria Pollutants

EPA Health Standards

Ozone, PM, Lead, CO, SO₂, NO₂
DEQ: monitors, works with at risk communities to meet standards (prevention and nonattainment)

Air Toxics

No federal health standards for air toxics

EPA Industrial Air Toxics Technology Standards (NESHAPs)

New Source and Existing Source Performance Standards

NESHAPs can also cover small businesses

(DEQ implements)

Industrial Source Permitting

Title V Operating Permits (for larger industries)

ACDP (Permits) (for smaller industries)

Motor Vehicles

Federal Motor Vehicle Emission Stds (Cars & Trucks)

Federal Fuel Stds. Gasoline & Diesel (*low sulfur*)

Oregon Initiatives

Air Toxics

DEQ AQ Health Benchmarks

Special monitoring studies (air quality, source identification, & health risks)

Clean Diesel Program. (vehicles, engines)

Ind. Source Permitting Program Reform.

Motor Vehicles

Clean Cars Program

Vehicle Inspection & Maintenance

Climate Change

Clean Power Plan

Clean Fuels (*low carbon*)

Legislative Initiatives (i.e. Cap & Trade Study)

GHG Emission Reporting

Key Partnerships: Essential to our work are collaborative partnerships with other federal and state agencies and local governments: EPA, Health Division, ODOE, PUC, ODF, ODA, USFS, and many others.

Federal – State Roles

Clean Air Act

Criteria Pollutants

EPA Health Standards

Ozone, PM, Lead, SO₂, NO₂
DEQ: monitors, works with at risk communities to meet standards (prevention and nonattainment)

Air Toxics

No federal health standards for air toxics

EPA Industrial Air Toxics Technology Standards (NESHAPs)

Industrial Sources

EPA New Source and Existing Source Performance Standards (NSPS, 111(d))

Title V Operating Permits (for larger industries)

ACDP (Permits) (for smaller industries)

Motor Vehicles

Federal Gasoline & Diesel Engine Standards

Oregon Initiatives

Air Toxics

DEQ AQ Health Benchmarks

Special monitoring studies (air quality, source identification, & health risk)

Clean Diesel Program.

Motor Vehicles

Clean Cars Program

Vehicle Inspection & Maintenance

Climate Change

Clean Power Plan

Clean Fuels

Legislative Initiatives (i.e. Cap & Trade Study)

GHG Emission Reporting

Multi-Pollutant Connections and Strategies

Across spectrum of air quality work are opportunities for multi-pollutant reduction.

Woodstove Strategies Reduce: Fine Particulate + Air Toxics

Clean Diesel Reduces: Air Toxics + Fine Particulate + Climate Change pollution

Industrial emission standards & permitting can reduce: Criteria pollutants + air toxics + visibility impairing pollution

Clean vehicles/VIP reduce: ozone + GHG + air toxics

Key Partnerships: Essential to our future work are collaborative partnerships with other federal and state agencies and local governments: EPA, Health Division, ODOE, PUC, ODF, ODA, USFS, and many others.



Assessing Air Quality

2013 Oregon Air Quality Monitoring Network

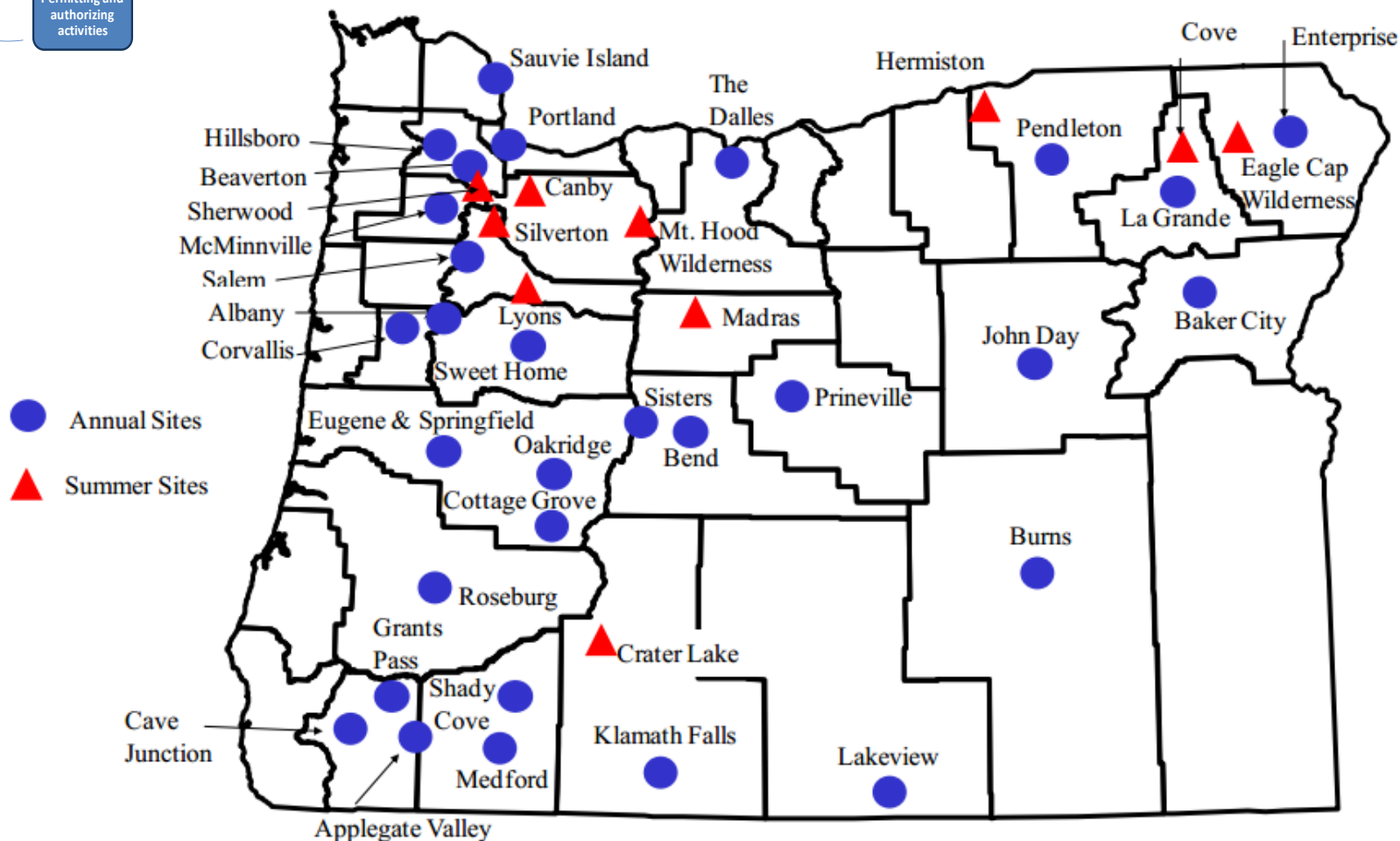


Figure 76. 2013 Ambient Air Monitoring Network.

Air Toxics Monitoring



Air toxics monitoring equipment

Year-long assessments

- Hillsboro
- North Portland

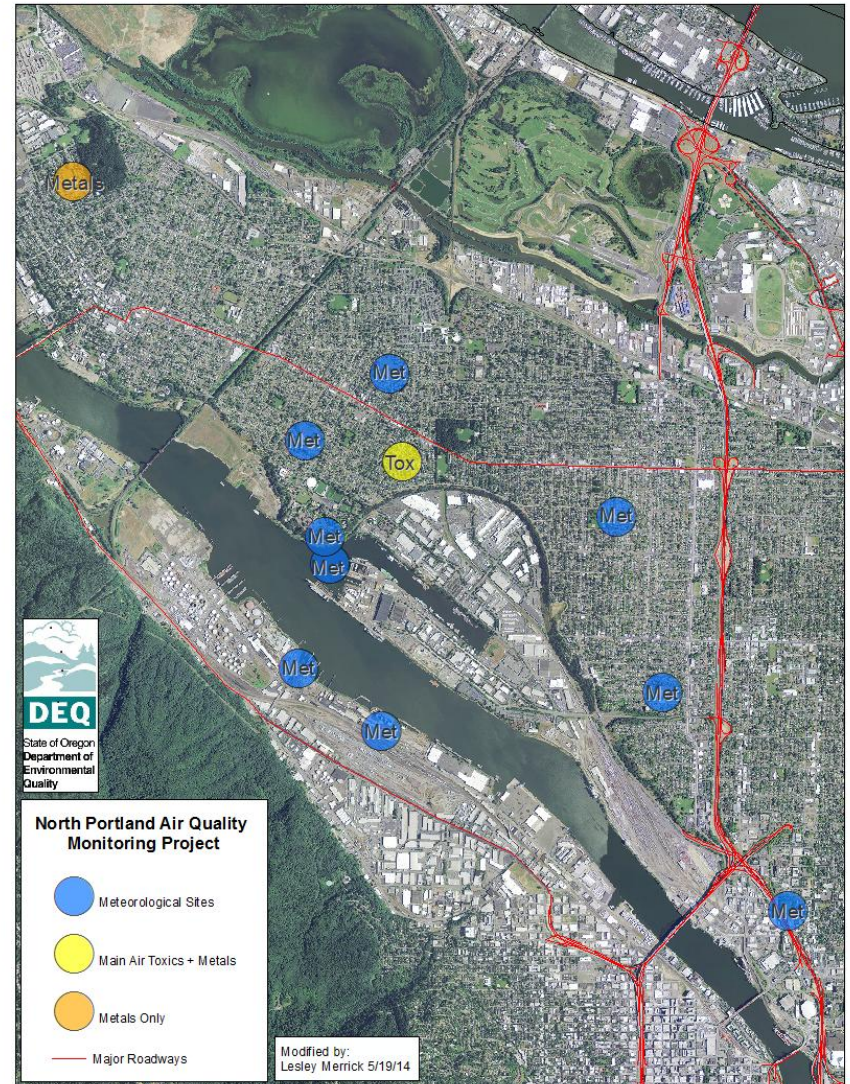
Longer-term monitors

- Portland
- La Grande

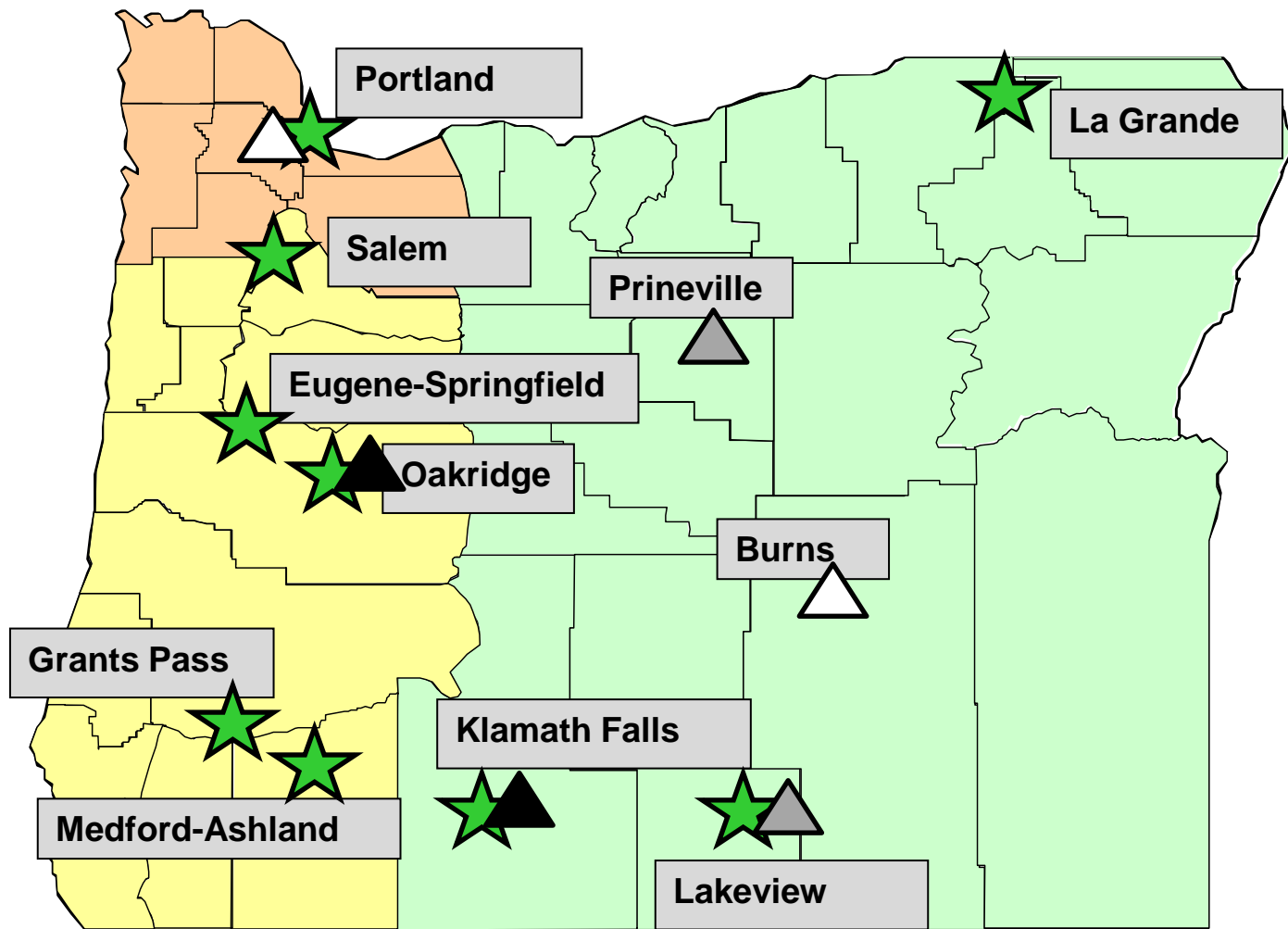
Special Studies

- SW Portland, North Portland

Community air toxics assessment in North Portland



Progress Meeting Federal Air Standards



Ozone and PM10
attainment &
maintenance
areas



PM 2.5 non-
attainment
areas




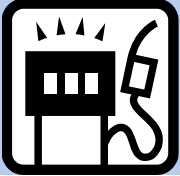

Violating PM 2.5 but not
officially designated non-
attainment



PM2.5 Areas
of Concern

Merlyn's Presentation

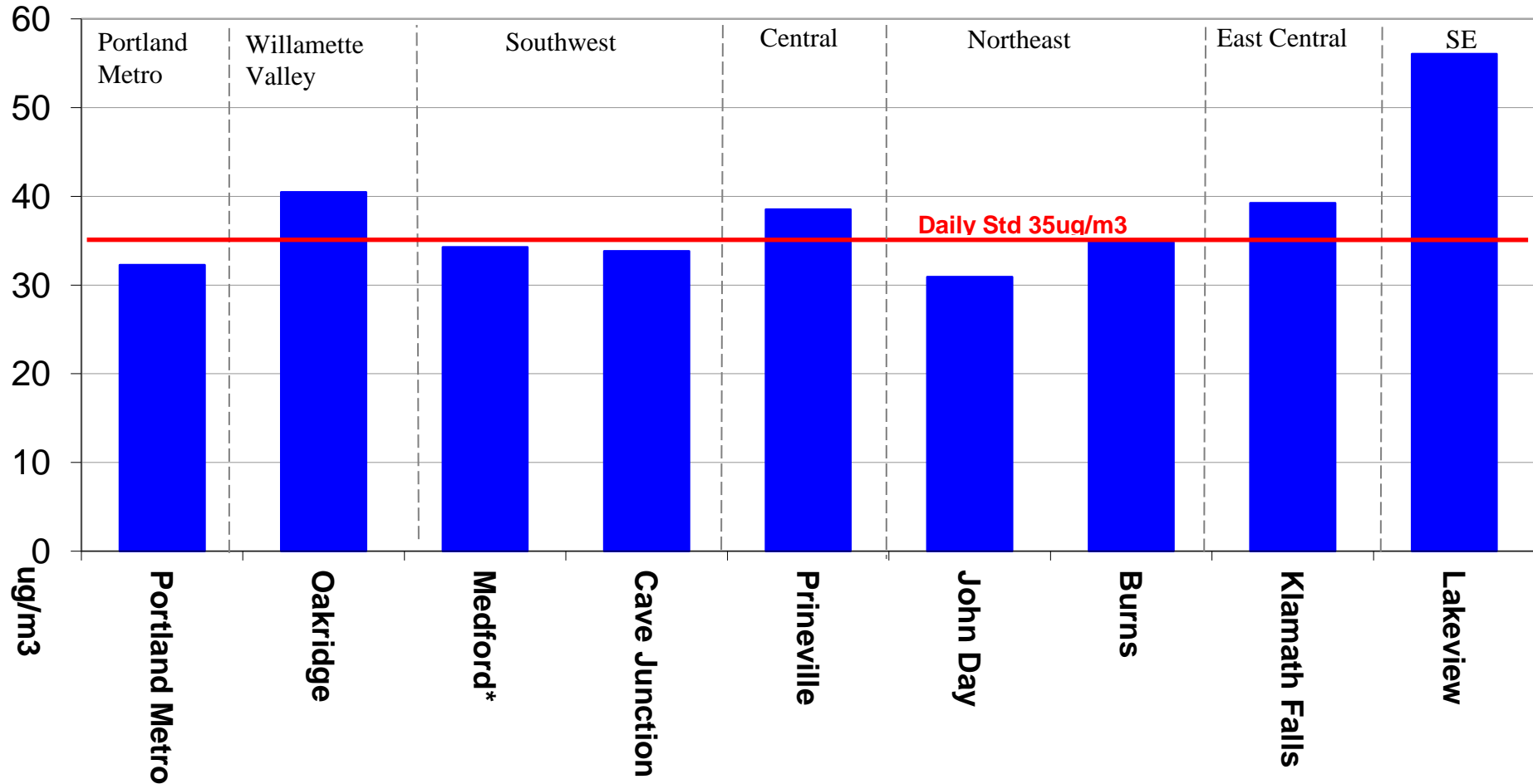
Multipollutant Opportunities

| | Particulate | Air Toxics | Ozone | Greenhouse Gases | Regional Haze/Visibility |
|--|-------------|------------|-------|------------------|--------------------------|
|  Clean engines | ✓ | ✓ | ✓ | ✓ | ✓ |
|  Clean fuels | ✓ | ✓ | ✓ | ✓ | ✓ |
|  Smoke controls | ✓ | ✓ | | | ✓ |
|  Industrial regulations | ✓ | ✓ | ✓ | ✓ | ✓ |

Back Pocket Slides

Particulate Pollution Statewide

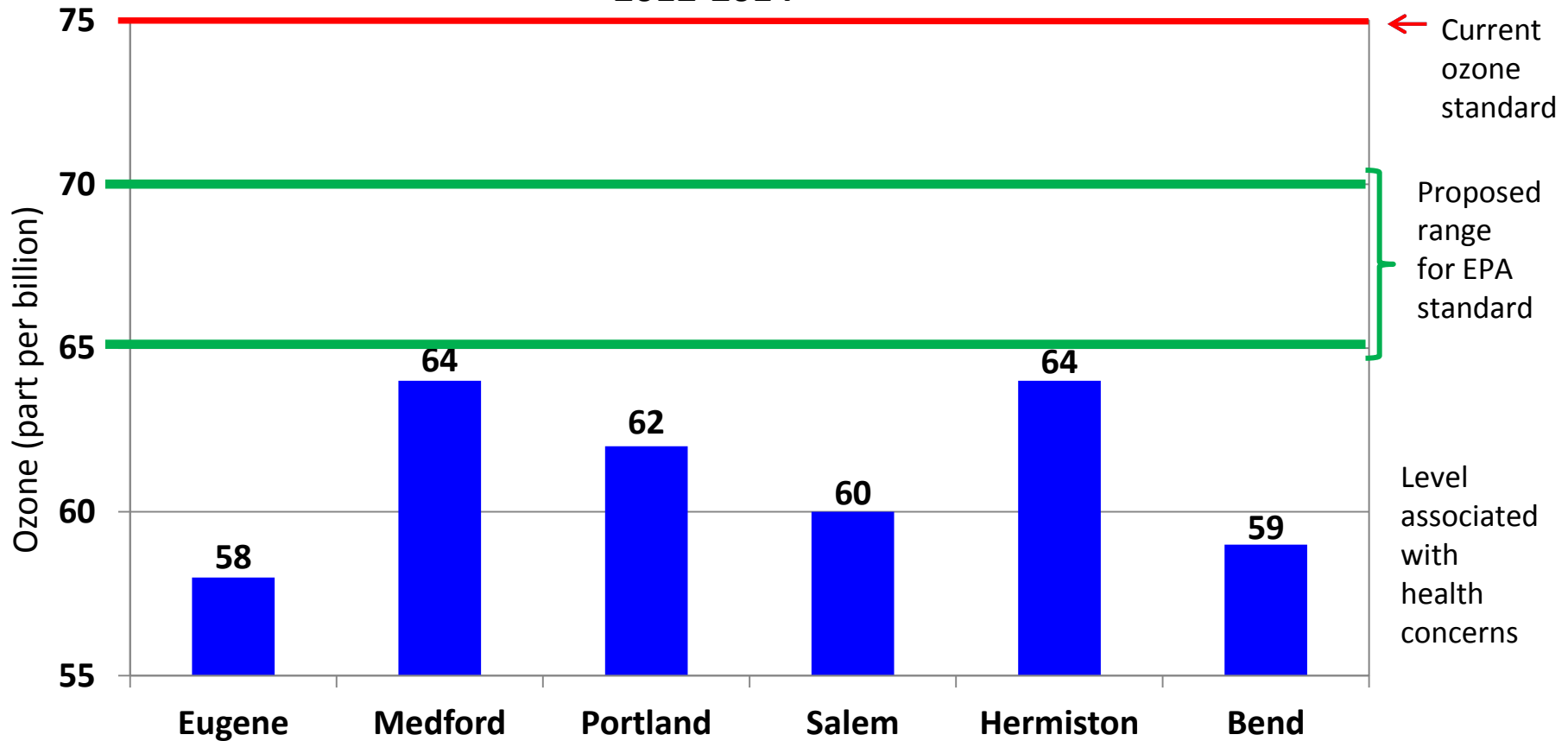
2011-2013 Oregon Cities Compared to the Daily PM_{2.5} Standard



* Without 2013 Forest Fire Days

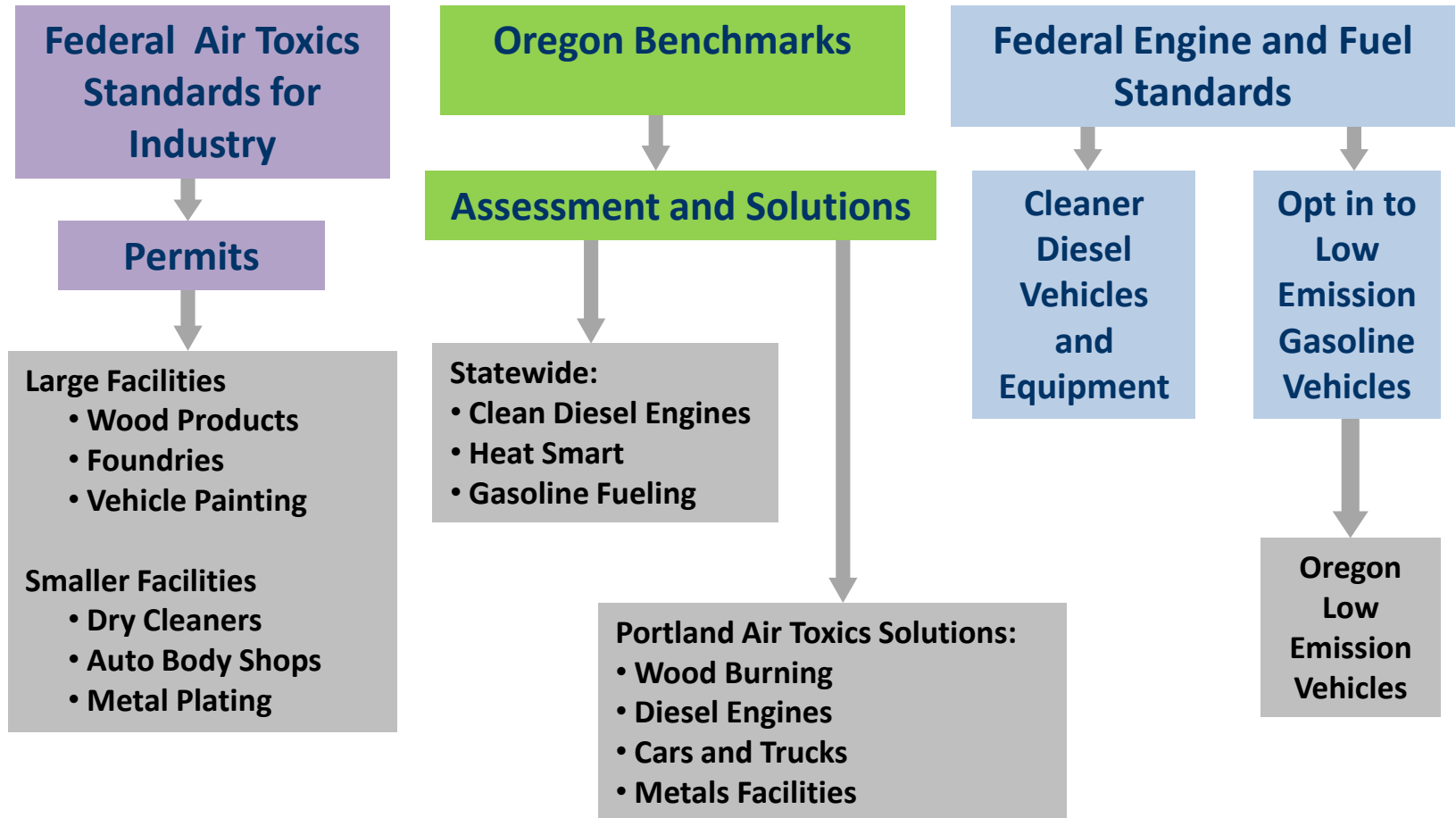
Ozone Pollution Statewide

Ozone Levels in Oregon
2012-2014



Three Year Average of Fourth Highest Eight Hour Average Ozone

Oregon's Air Toxics Program



Federal – State Roles

