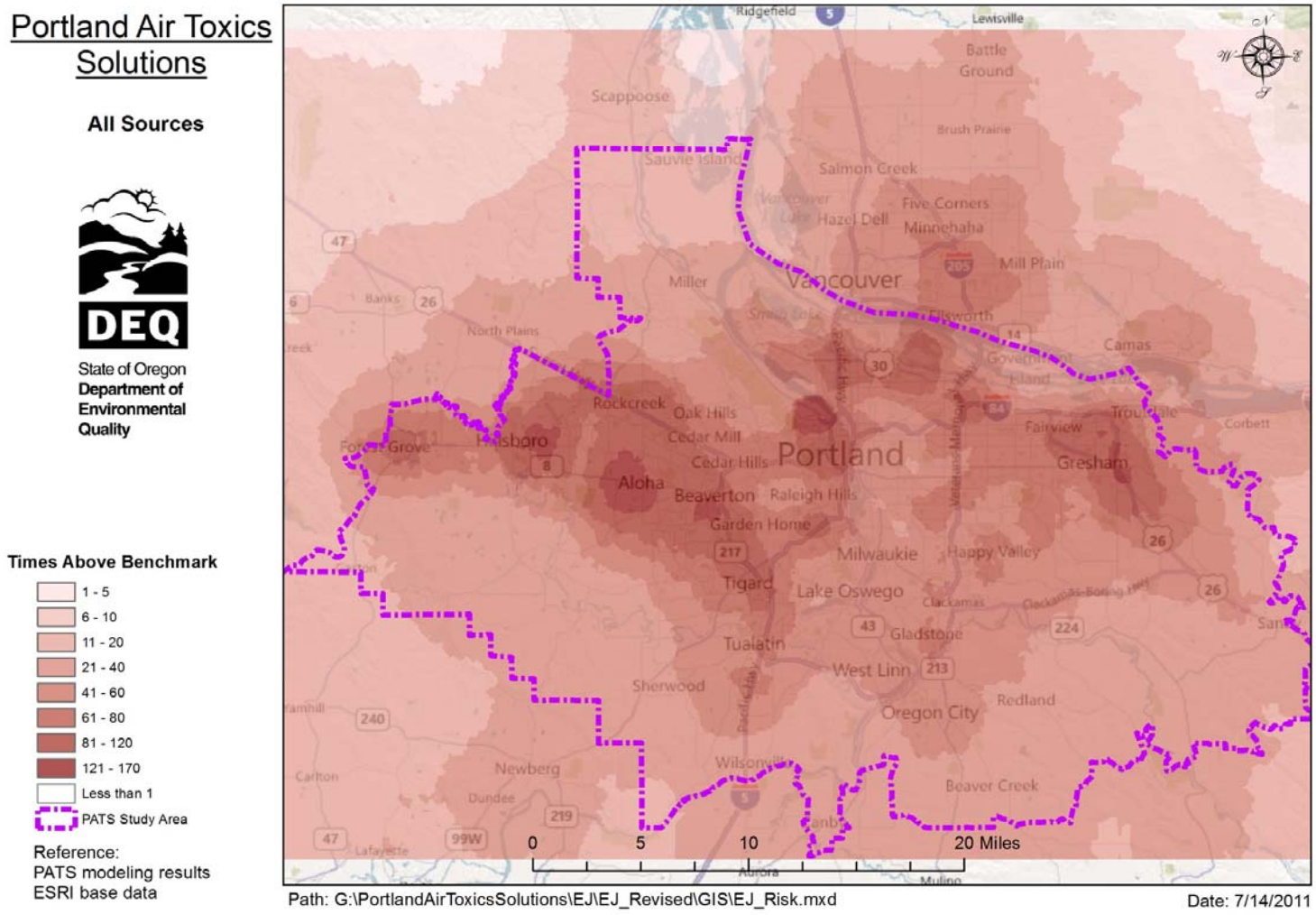
# Portland Air Toxics Solutions

# Portland Air Toxics Solutions
# 2017 Modeled Pollutant Estimates

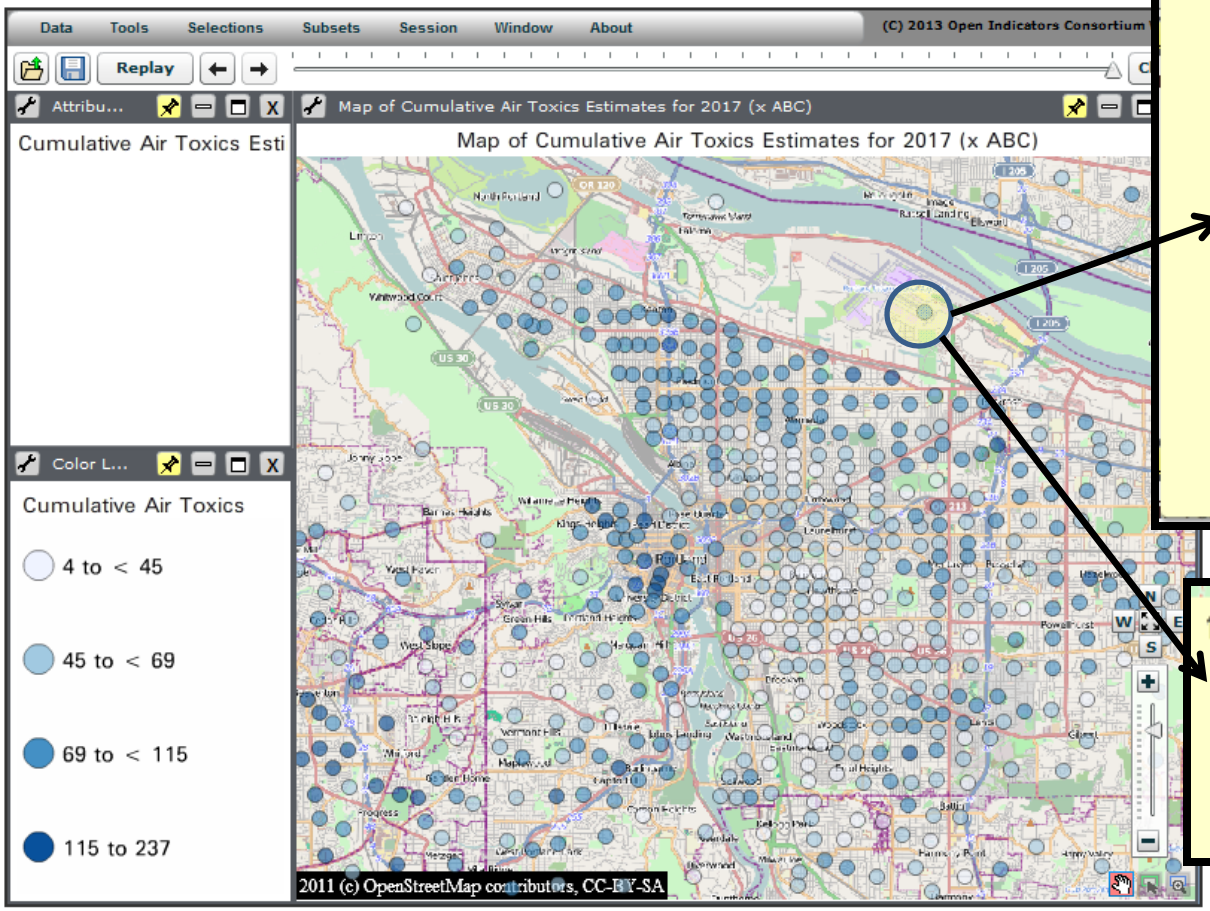
| Pollutant | Top Source | Impact Area |
|---|---|---|
| **More than 10 times over benchmark** | | |
| 1,3 butadiene | Cars and trucks | Region wide/neighborhood |
| Benzene | Cars and trucks | Region wide/neighborhood |
| Diesel Particulate | Non road engines, cars and trucks | Region wide/neighborhood |
| 15 PAH | Residential wood burning | Region wide |
| Naphthalene | Residential wood burning | Region wide/neighborhood |
| Cadmium | Industry | Neighborhood |
| Formaldehyde | Chemical formation in atmosphere | Region wide |
| Acrolein | Chemical formation in atmosphere | Region wide/neighborhood |
| **Between 1 and 10 times over benchmark** | | |
| Arsenic | Cars and trucks | Region wide/neighborhood |
| Manganese | Industry | Neighborhood |
| Nickel | Industry | Neighborhood |
| Chromium VI | Cars and trucks | Region wide/neighborhood |
| Dichlorobenzene | Solvents and pesticides | Region wide/neighborhood |
| Acetaldehyde | Chemical formation in atmosphere | Region wide |

# Portland Air Toxics Solutions – Estimated Risk



# Portland Air Toxics Solutions
# Interactive Air Toxics Emission Map

http://www.deq.state.or.us/aq/toxics/patsmaps.htm




75 (Cumulative Air Toxics Estimates for 2017 (x ABC))
1 (Acetaldehyde (x ABC))
13 (Acrolein (x ABC))
7 (1,3-Butadiene (x ABC))
8 (Formaldehyde (x ABC))
8 (Naphthalene (x ABC))
5 (Benzene (x ABC))
2 (Dichlorobenzene (x ABC))
9 (Diesel PM (x ABC))
0 (TCE (x ABC))
1 (Arsenic (x ABC))
0 (Cadmium (x ABC))
1 (Chromium VI (x ABC))
0 (Lead (x ABC))
0 (Manganese (x ABC))
0 (Nickel (x ABC))
20 (PAH-15 (x ABC))

100 (Cumulative Air Toxics Estimates for 2017 (x ABC))
5 (Industry, Gas Stations, Dry Cleaners (% Contribution))
4 (Residential Wood Combustion (% Contribution))
32 (Area - e.g., solvents, fuel use (% Contribution))
36 (Cars and Trucks (% Contribution))
24 (Off Road Vehicles (% Contribution))

# Permitted Facilities
# (emitting one or more of the 19 PATS Pollutants)

**Portland Air Toxics Solutions**

DEQ
State of Oregon Department of Environmental Quality

**Cumulative Times Above Benchmark**

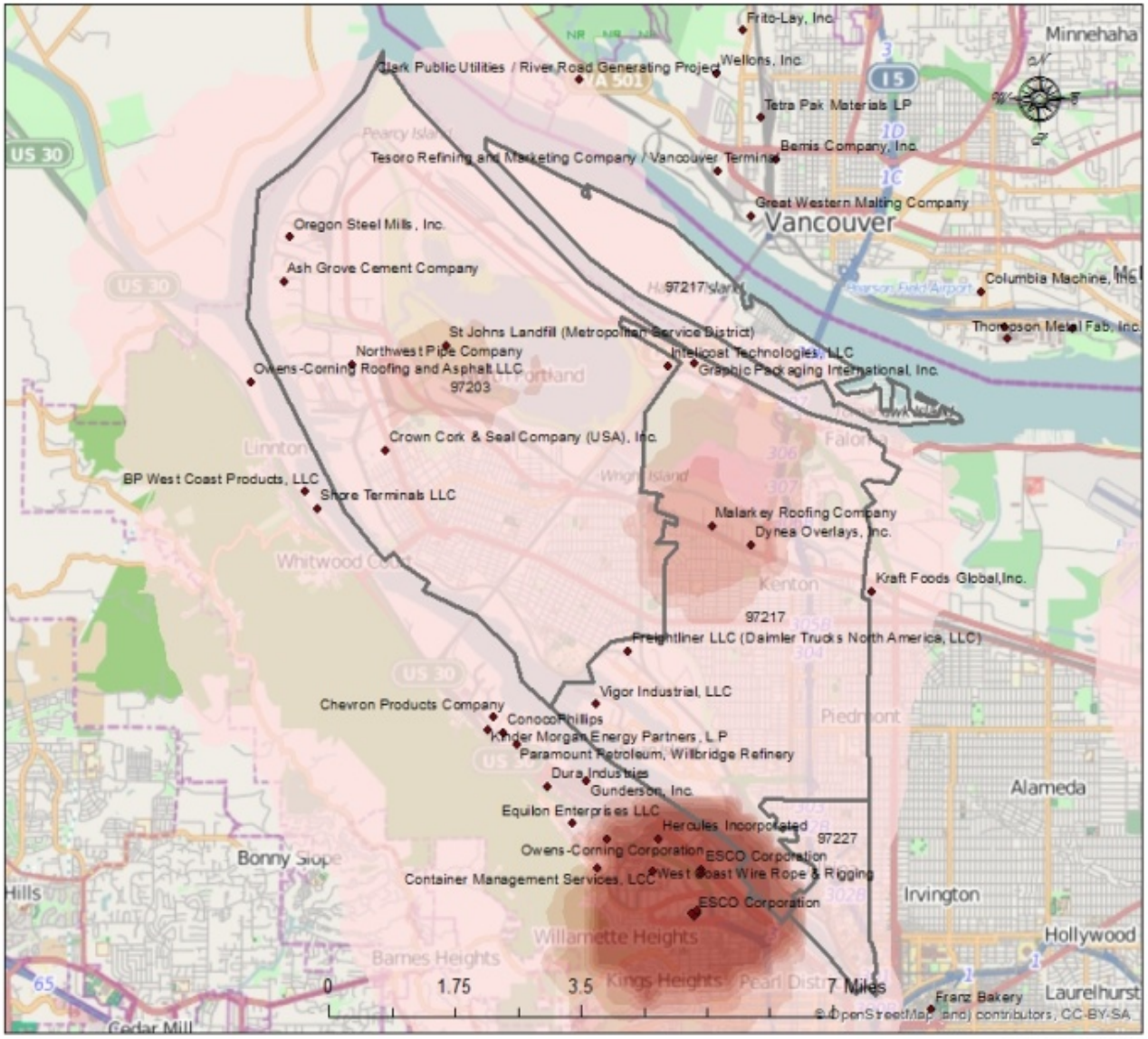
- Point_Sources

**Point Type Sources**

**<VALUE>**

- 1 - 5
- 6 - 10
- 11 - 20
- 21 - 40
- 41 - 60
- 61 - 80
- 81 - 120
- 121 - 170
- Less than 1

Reference:
ACS 2005-2009 and
ESRI base data
PATS study




Date: 3/10/2014

# On Road Engines

**Portland Air Toxics Solutions**

DEQ
State of Oregon Department of Environmental Quality

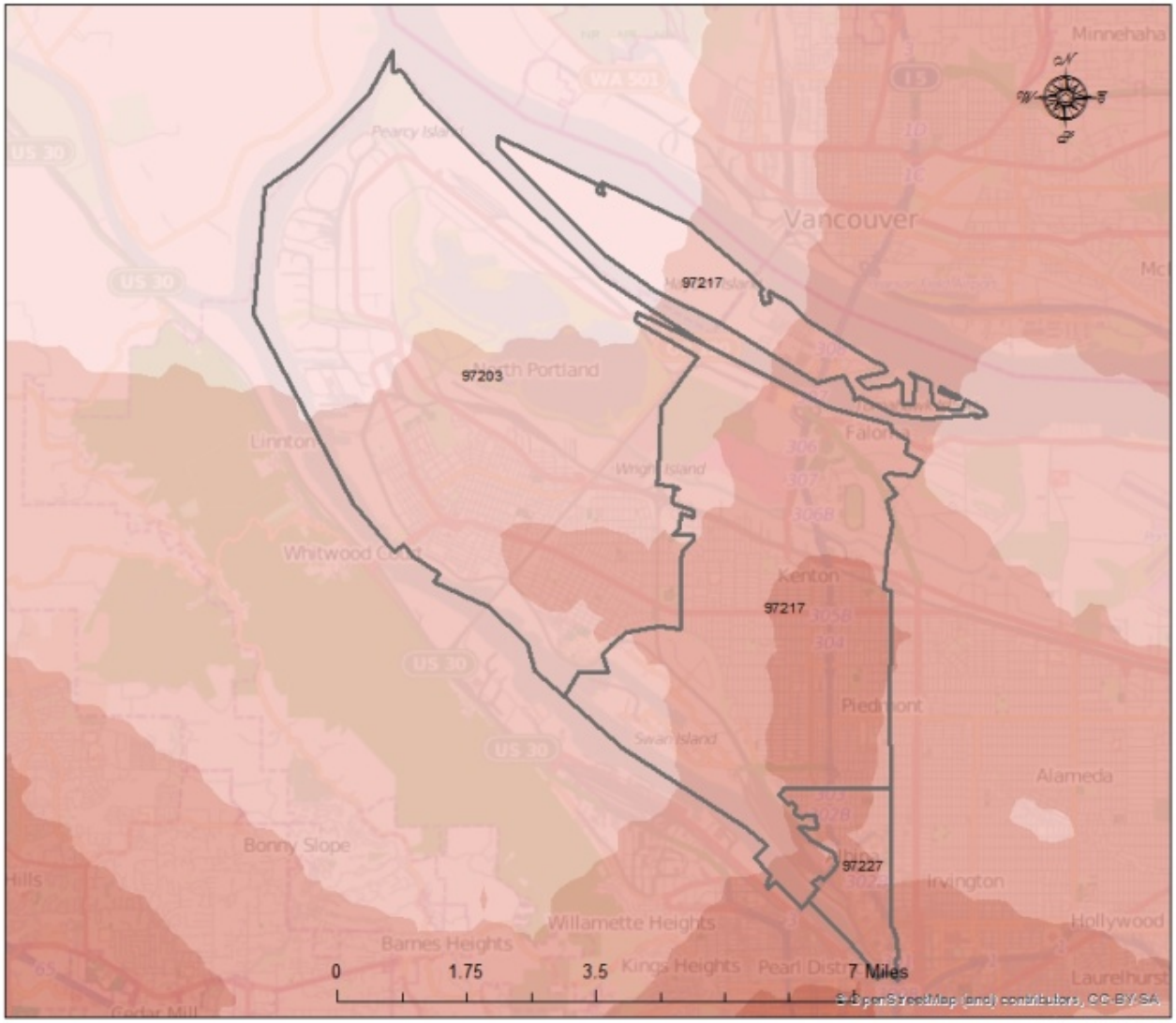
**Cumulative Times Above Benchmark**

**On-road mobile**

**<VALUE>**

- 3 - 5
- 6 - 10
- 11 - 20
- 21 - 40
- 41 - 60
- 61 - 80
- 81 - 120
- 121 - 170
- Less than 1

Reference:
ACS 2005-2009 and ESRI base data
PATS study




Date: 3/10/2014

# Non Road Engines

**Portland Air Toxics Solutions**

DEQ
State of Oregon Department of Environmental Quality

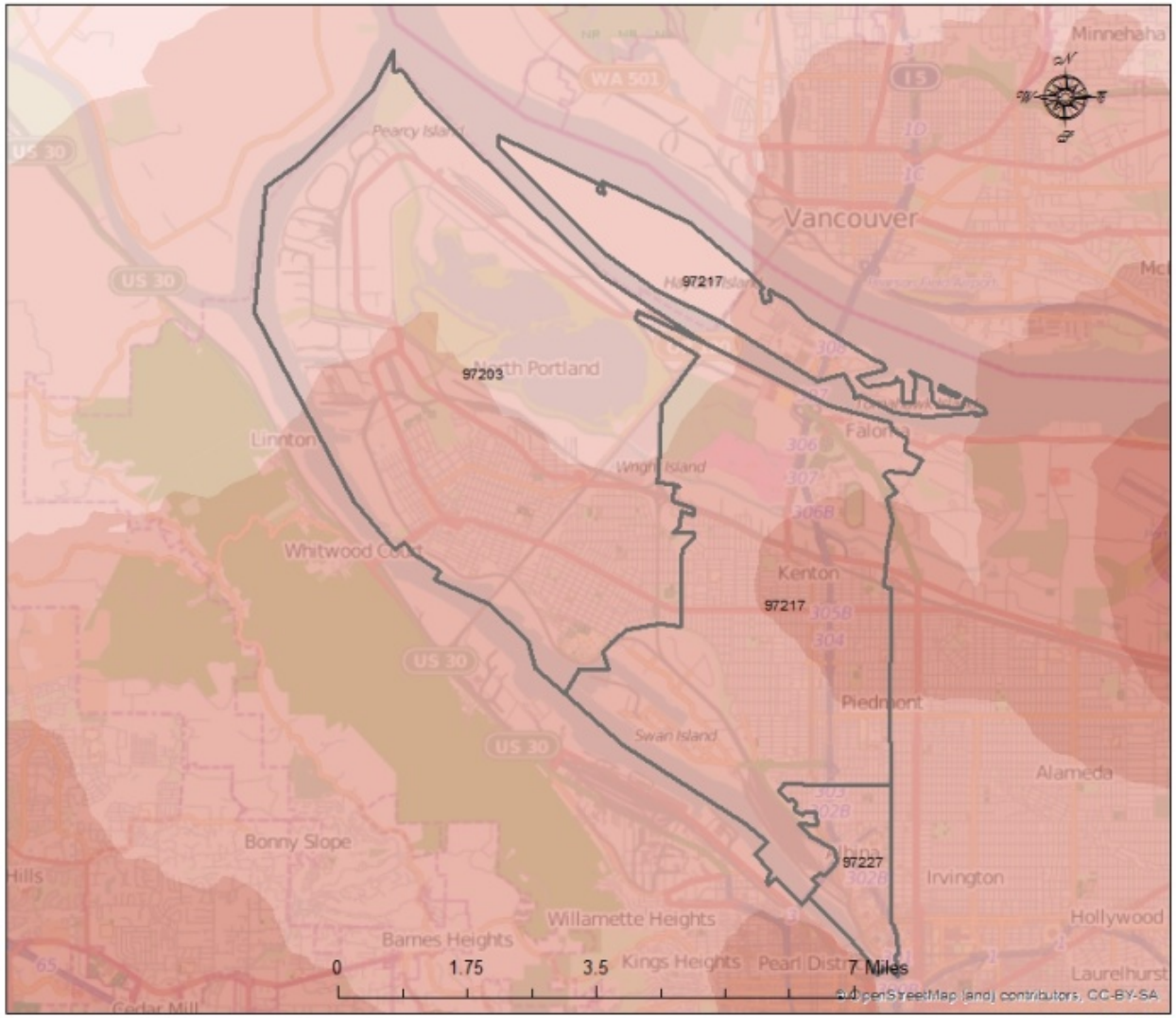
**Cumulative Times Above Benchmark**

**Non Road**

**<VALUE>**

- 1 - 5
- 6 - 10
- 11 - 20
- 21 - 40
- 41 - 60
- 61 - 80
- 81 - 120
- 121 - 170
- Less than 1

Reference:
ACS 2005-2009 and
ESRI base data
PATS study

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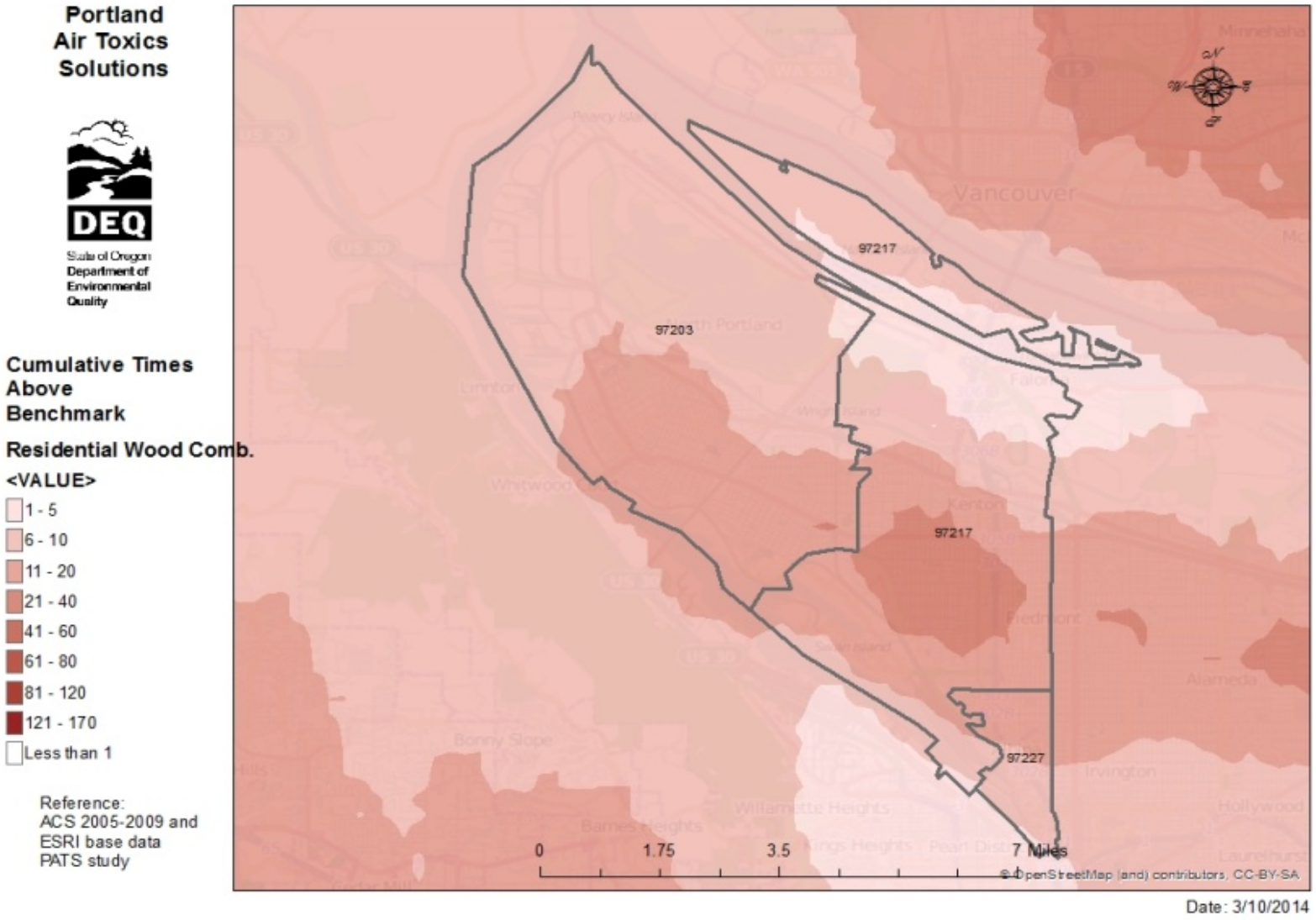
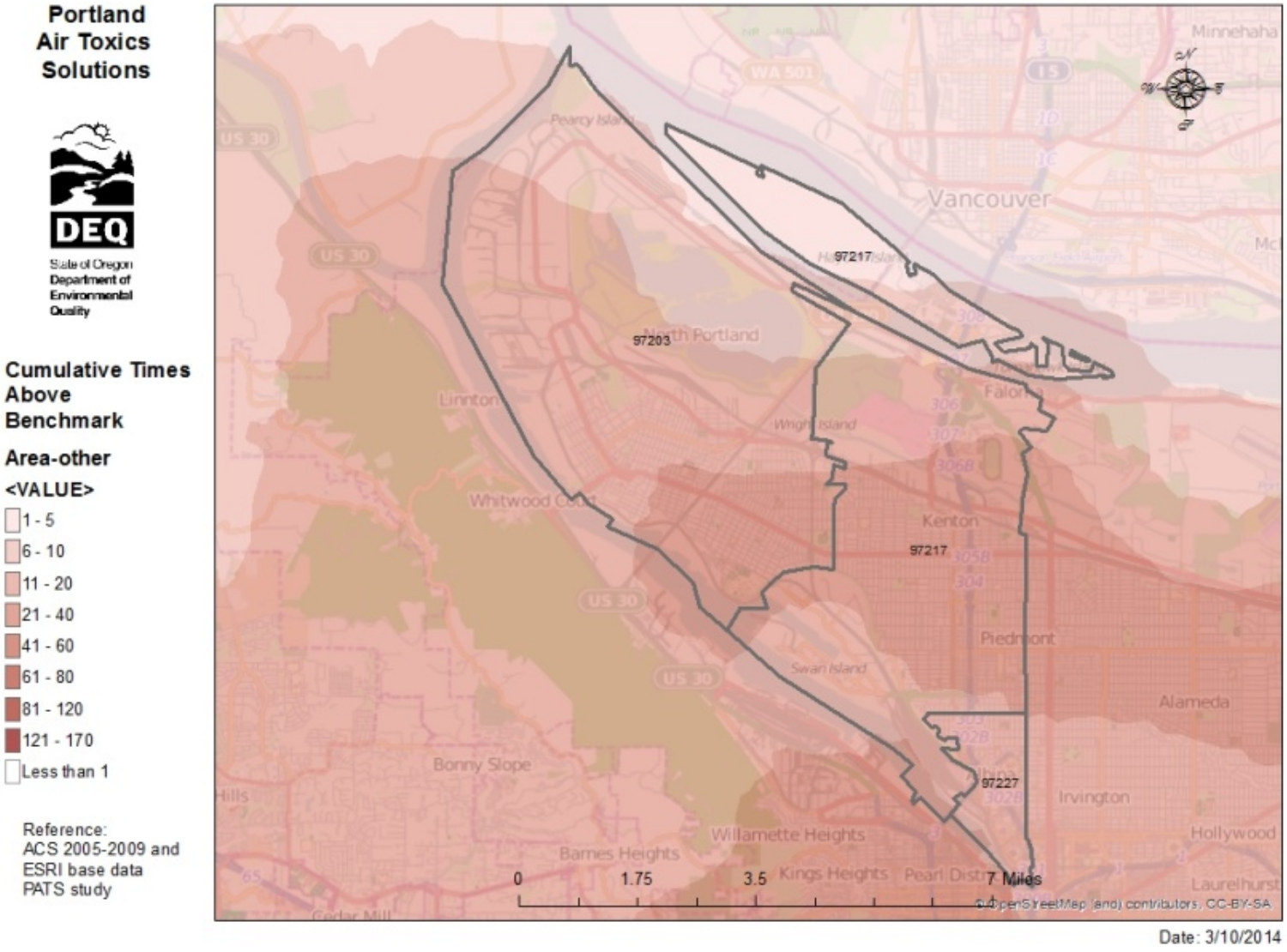
# Residential Wood Burning



# Area Sources



# All Sources

**Portland Air Toxics Solutions**

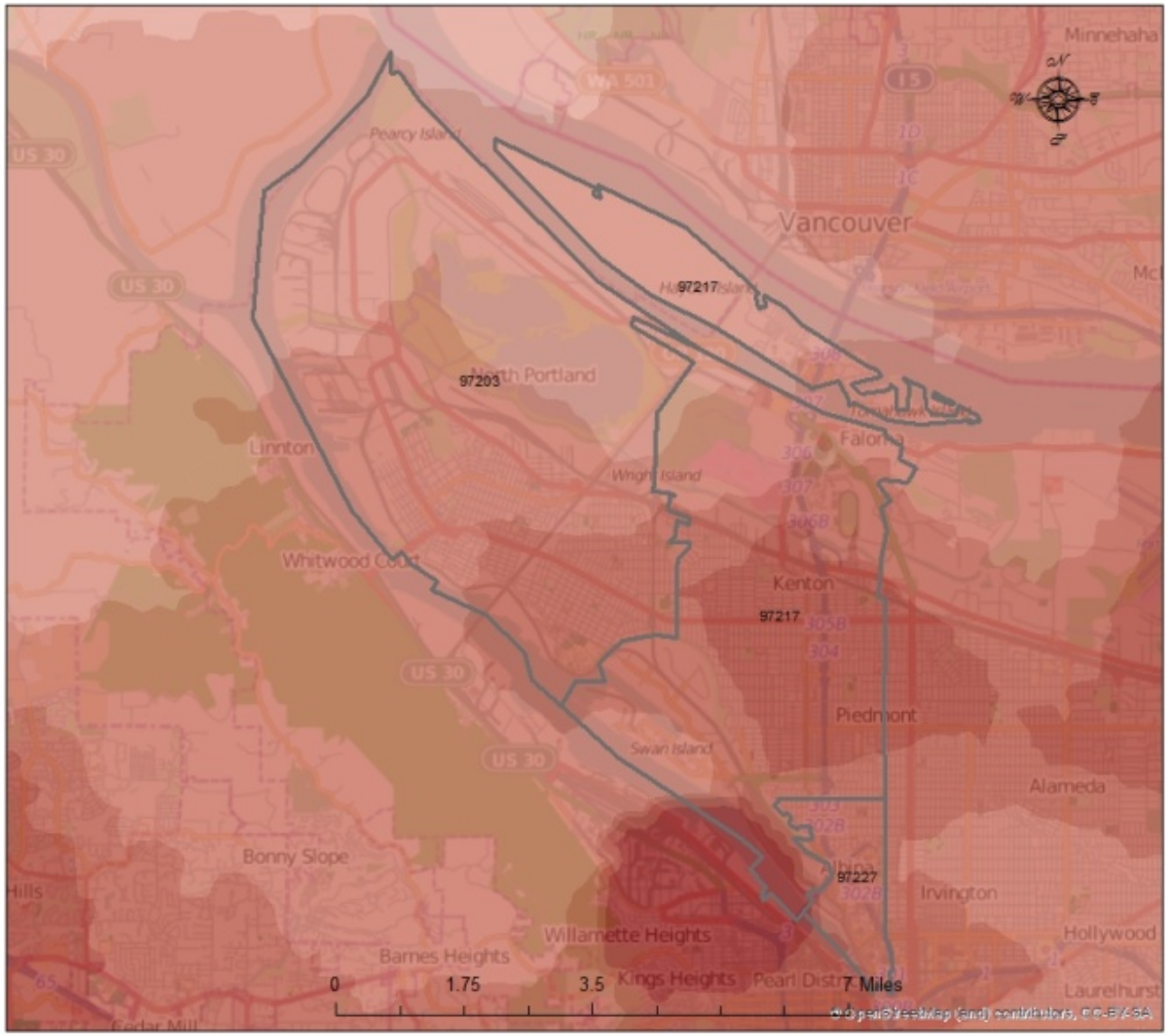
DEQ
State of Oregon Department of Environmental Quality

**Cumulative Times Above Benchmark**

**All sources**

- 1 - 5
- 6 - 10
- 11 - 20
- 21 - 40
- 41 - 60
- 61 - 80
- 81 - 120
- 121 - 170
- Less than 1

Reference:
ACS 2005-2009 and
ESRI base data
PATS study

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# Portland Air Toxics Solutions

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PATS report:
http://www.deq.state.or.us/aq/planning/patsReport.htm

PATS interactive maps:
http://www.deq.state.or.us/aq/toxics/patsmaps.htm