



ENVIRONMENTAL JUSTICE IN WEST EUGENE



Families, Health and Air Pollution



ENVIRONMENTAL HEALTH PROJECT

Funded by a grant from the US EPA
Environmental Justice Program and the
McKenzie River Gathering Foundation



The Partnership

One-third of Centro's clients reside in West Eugene



Beyond Toxics has worked in West Eugene's impacted neighborhoods for 9 years

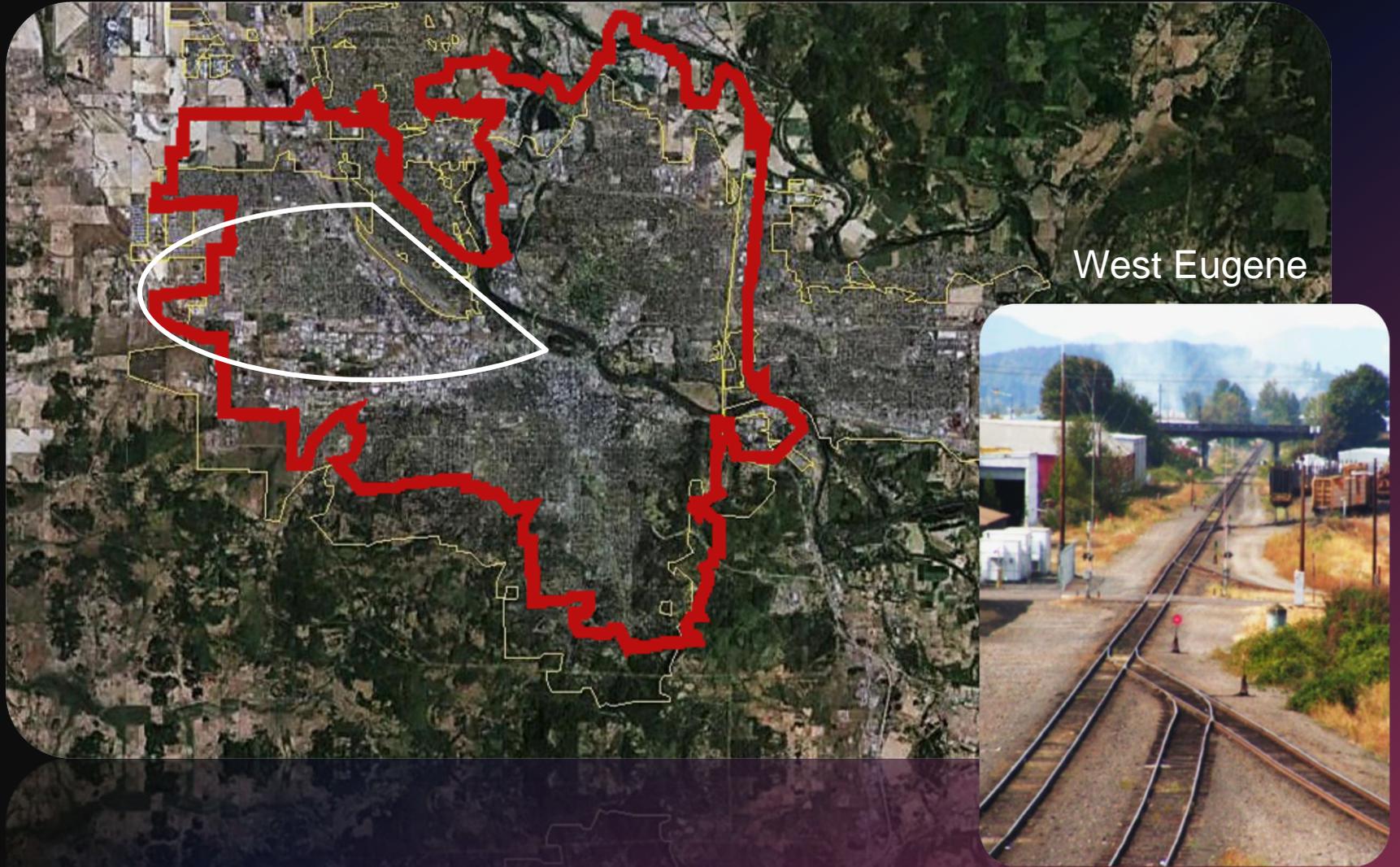


Purpose:

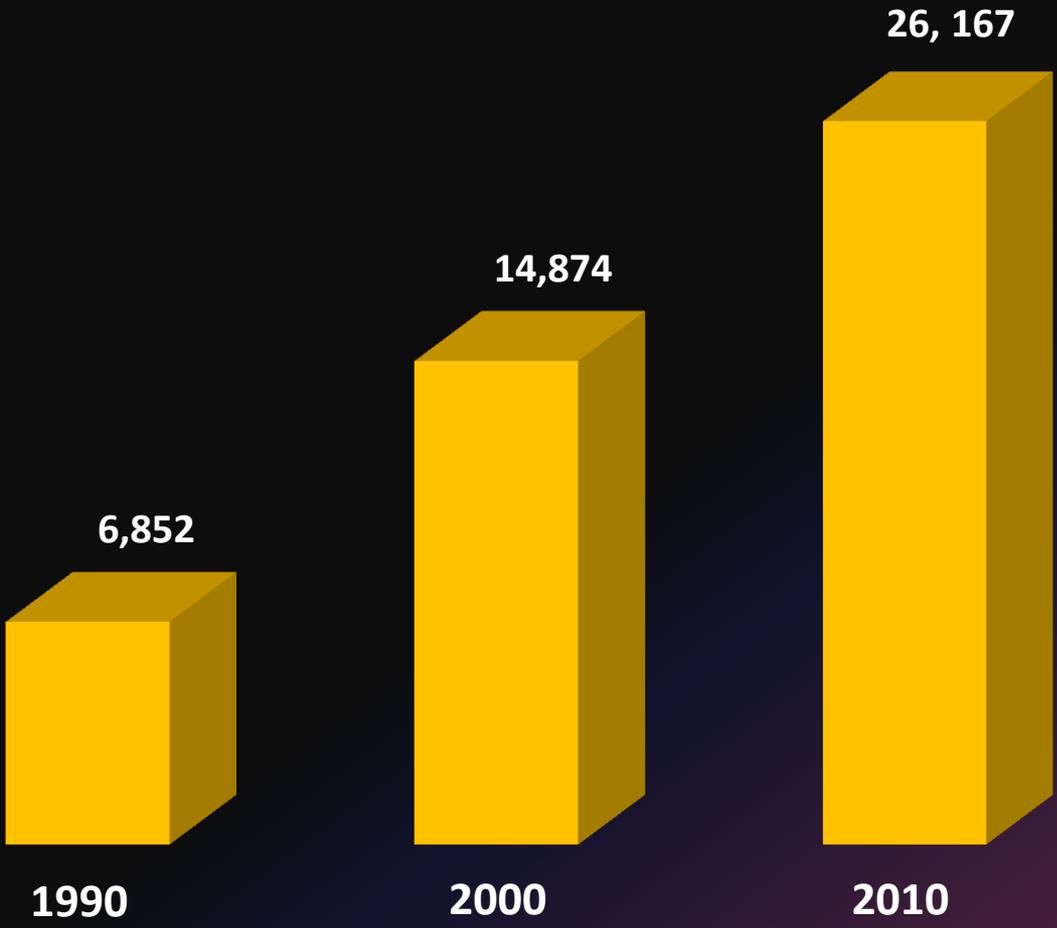
To recognize the distinctive environmental health vulnerabilities of low-income and Latino residents in West Eugene.



West Eugene Industrial Corridor



Latinos in Lane County



1990-2000
Hispanic residents
more than doubled

2000-2010
Hispanic residents
increased by 75.9%

Source: 2010 US Census Bureau



Hispanics in West Eugene

Focus groups and survey results: **Primary concern was children's respiratory disease**

Health Survey

41% of residents surveyed believe that air quality affects them

60% households detected air pollution in their neighborhood

18% of the residents interviewed smoke

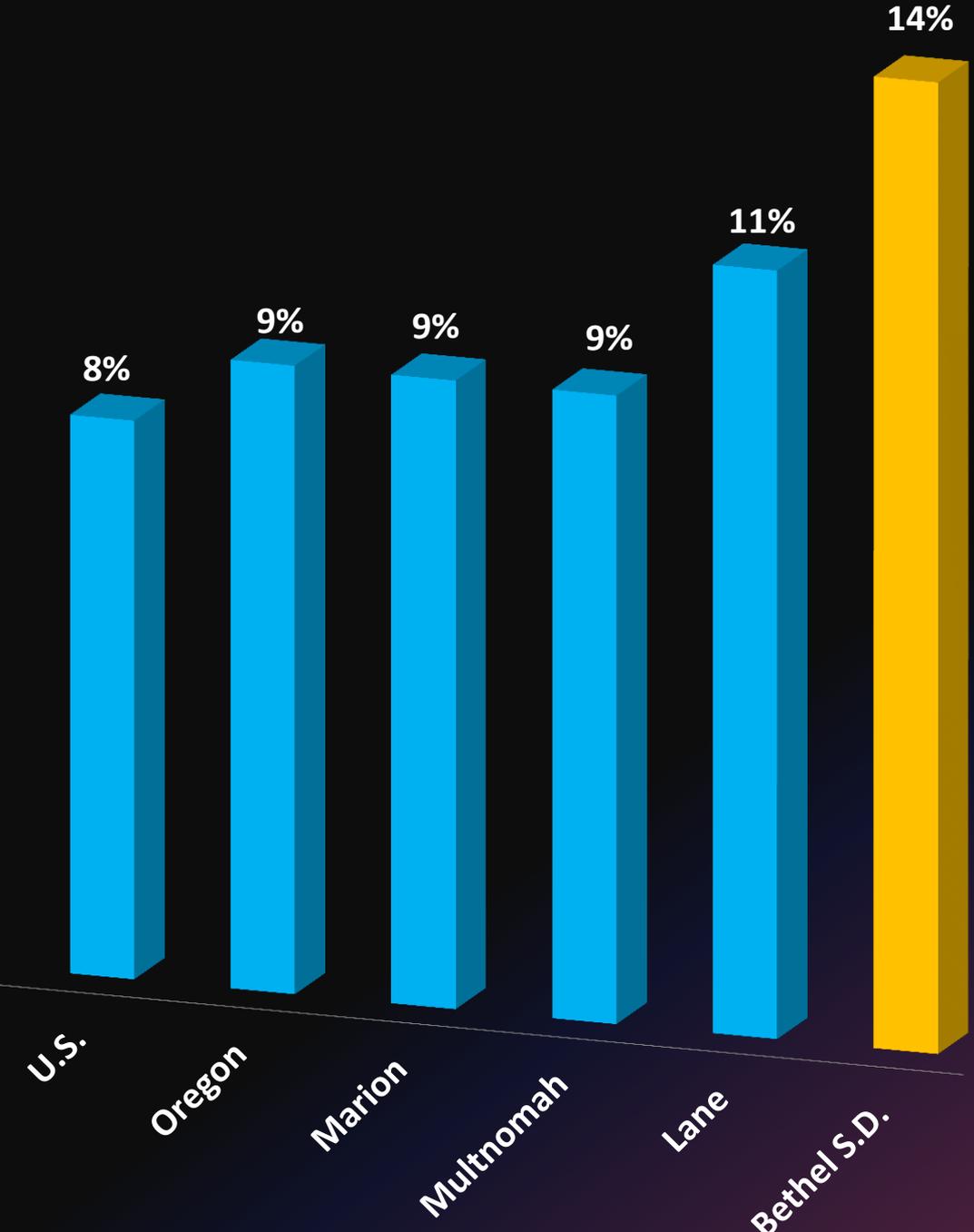


Asthma Rates in Our Community

Asthma Rates

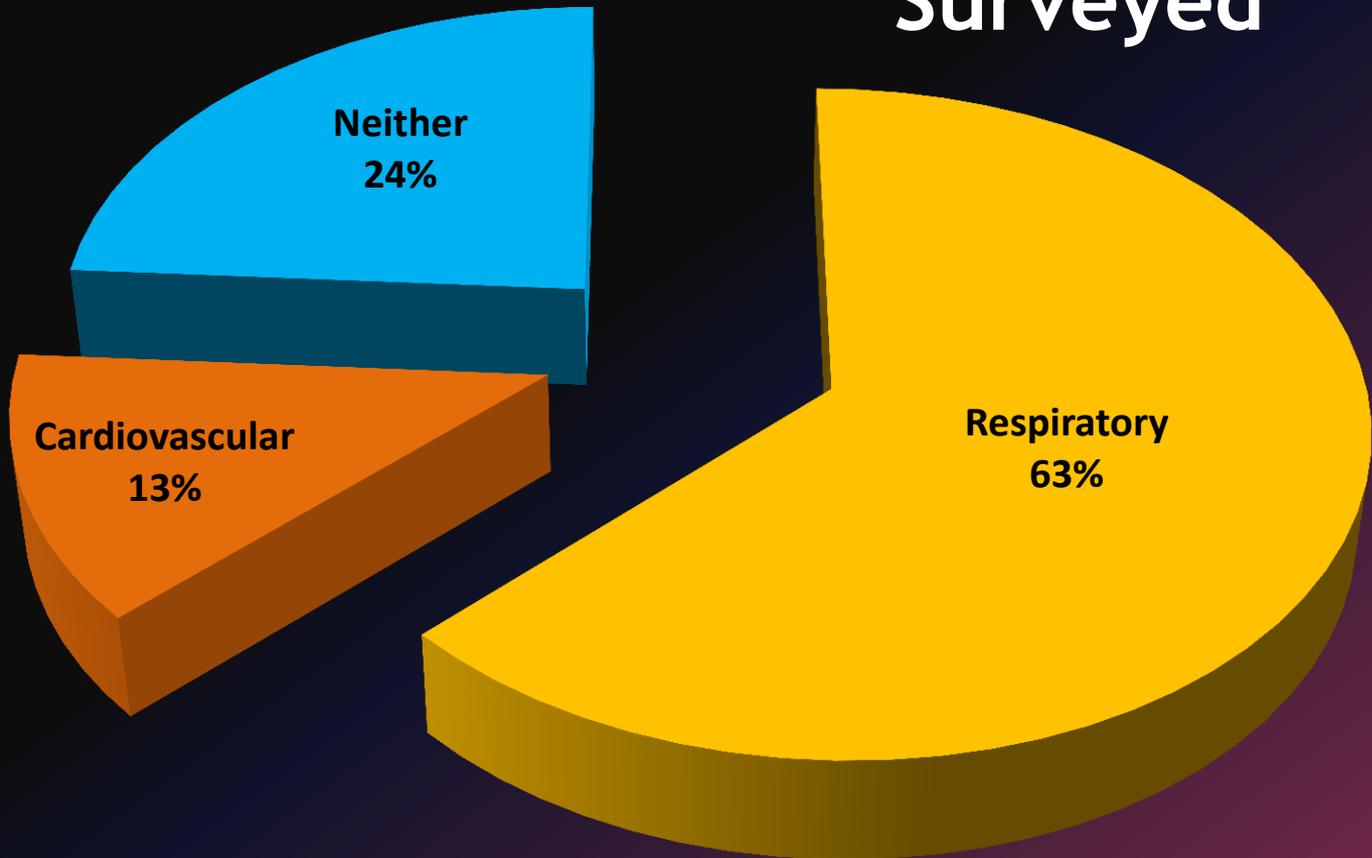
30% of survey respondents reported having asthma

Survey: 1 out of 3 respondents said they developed a respiratory or heart problem since moving to the West Eugene Industrial Corridor

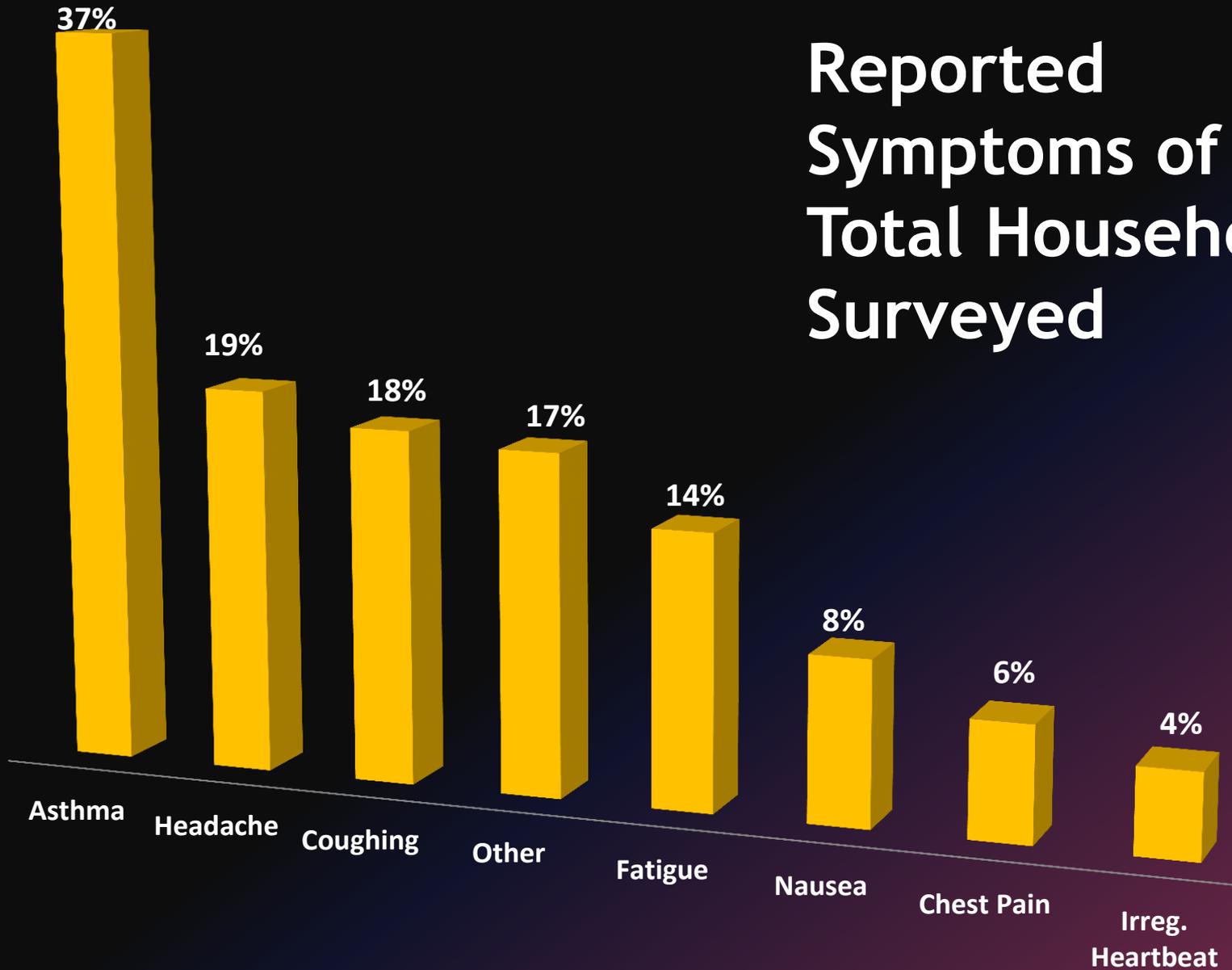


Source: Bethel School District 2011, Health Impact Assessment on Transportation Policies 2010, Oregon Department of Health

Illnesses Reported by All Household Surveyed



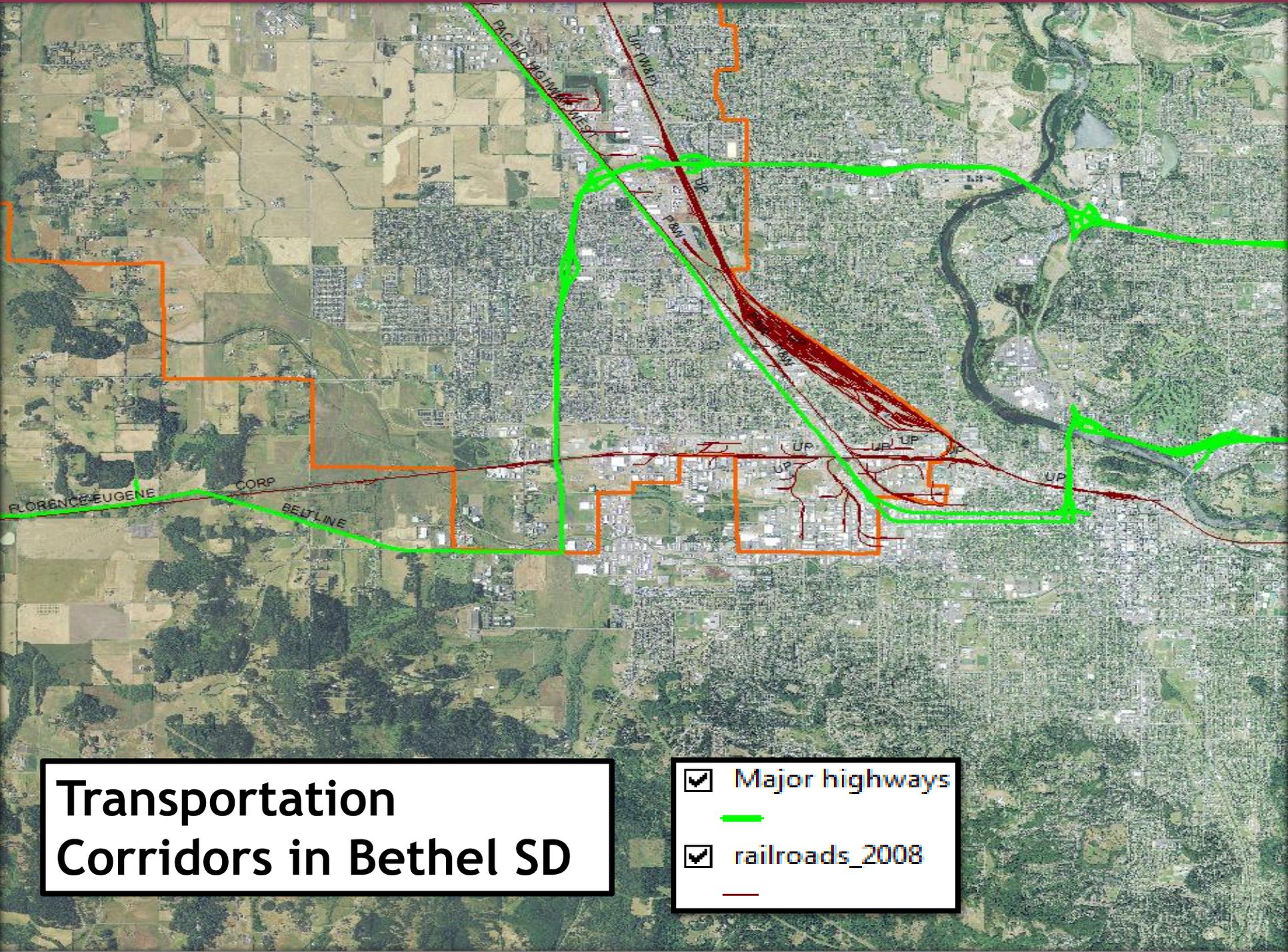
Reported Symptoms of Total Households Surveyed





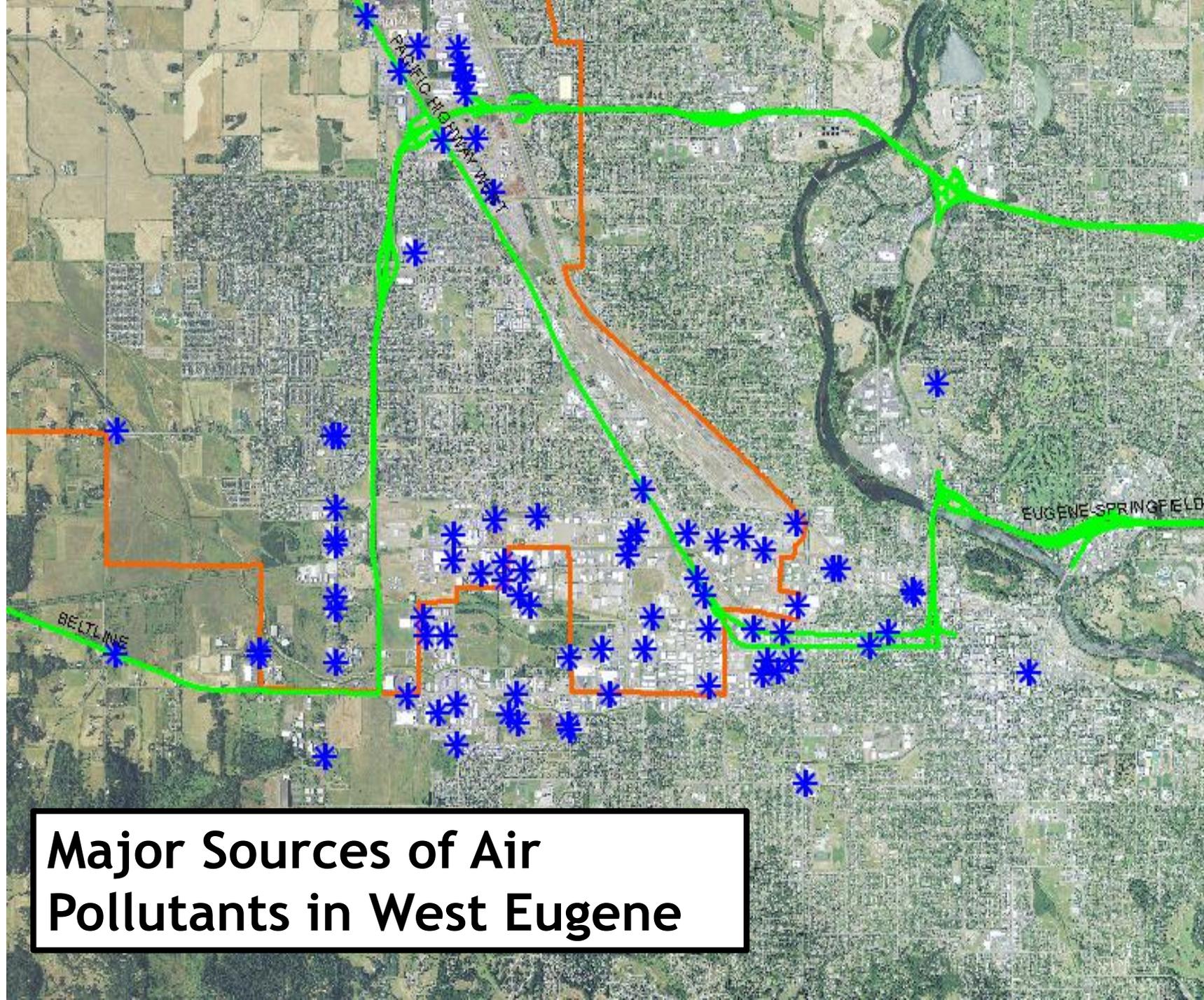
Using GIS in an Environmental Justice Community

- Cross-reference information with GIS spatial data
- Identify point sources of air pollution
- Consider relationships between air toxics and health



Transportation Corridors in Bethel SD

- Major highways
- railroads_2008

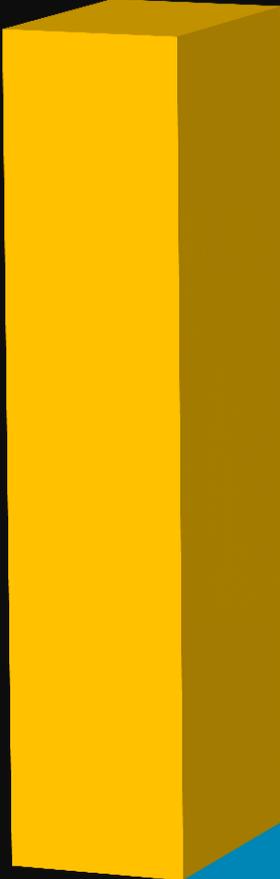


**Major Sources of Air
Pollutants in West Eugene**

Toxic Emissions in Eugene

West

1,008,500



East

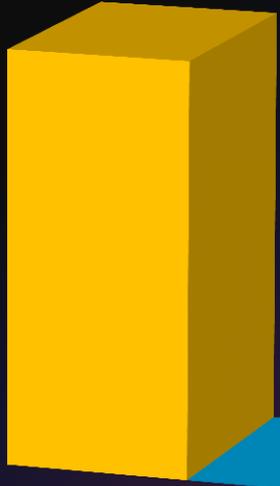
770



2005

West

494,000



East

0

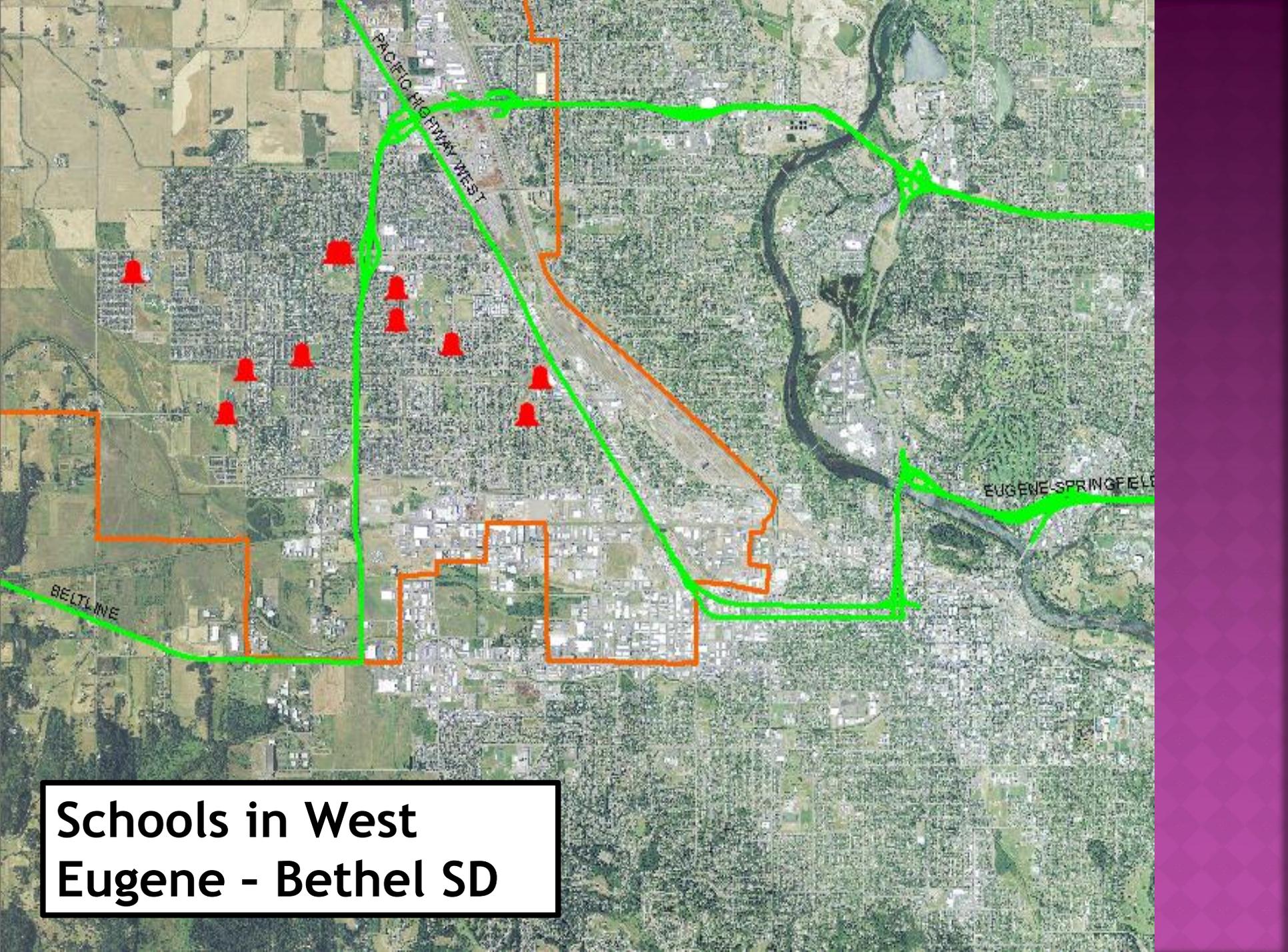


2008

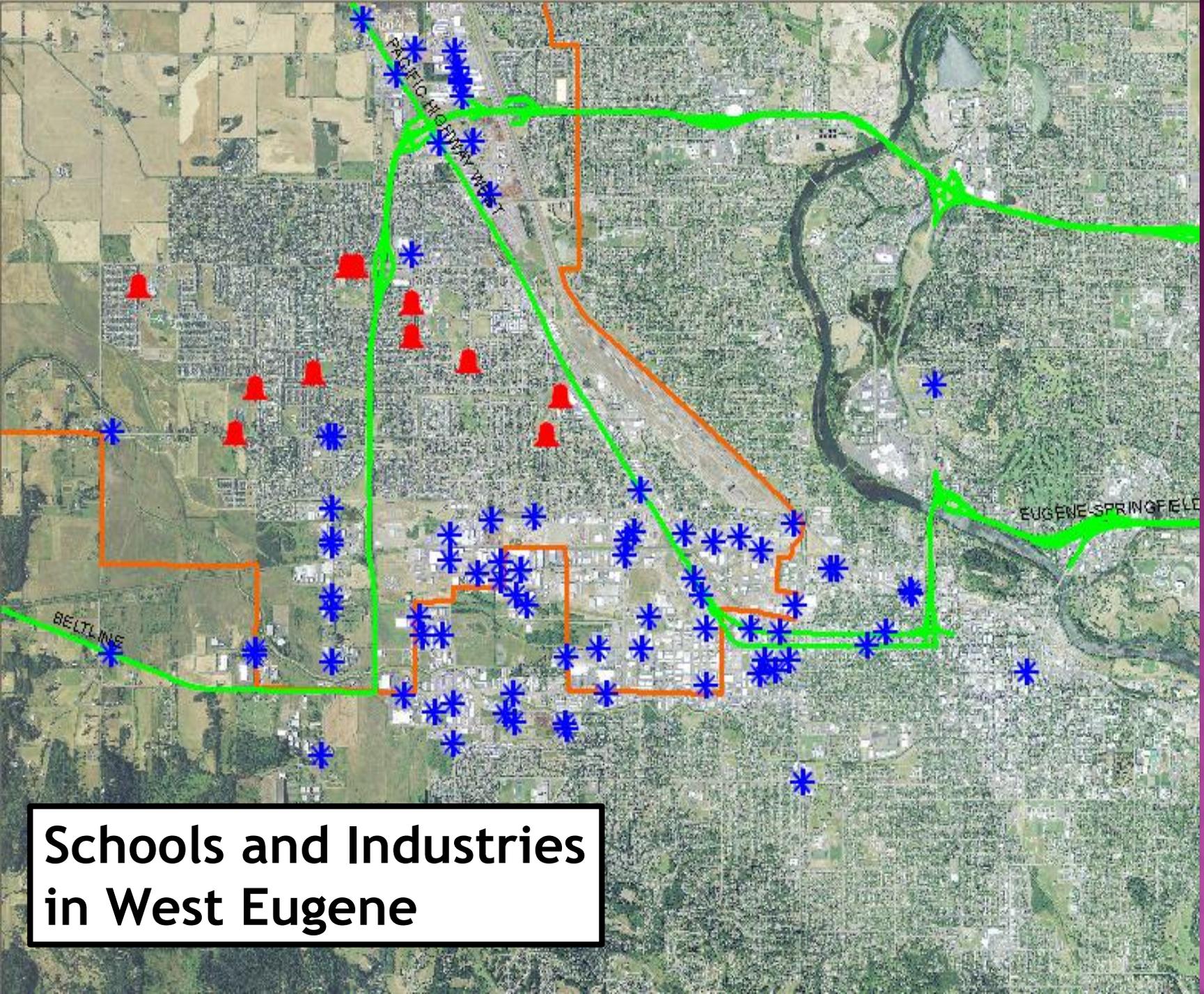
West v. East

- West Eugene – 1,008,500 pounds
- East Eugene – 770 pounds

Source: City of Eugene Toxics Right to Know 2011



Schools in West Eugene - Bethel SD



**Schools and Industries
in West Eugene**

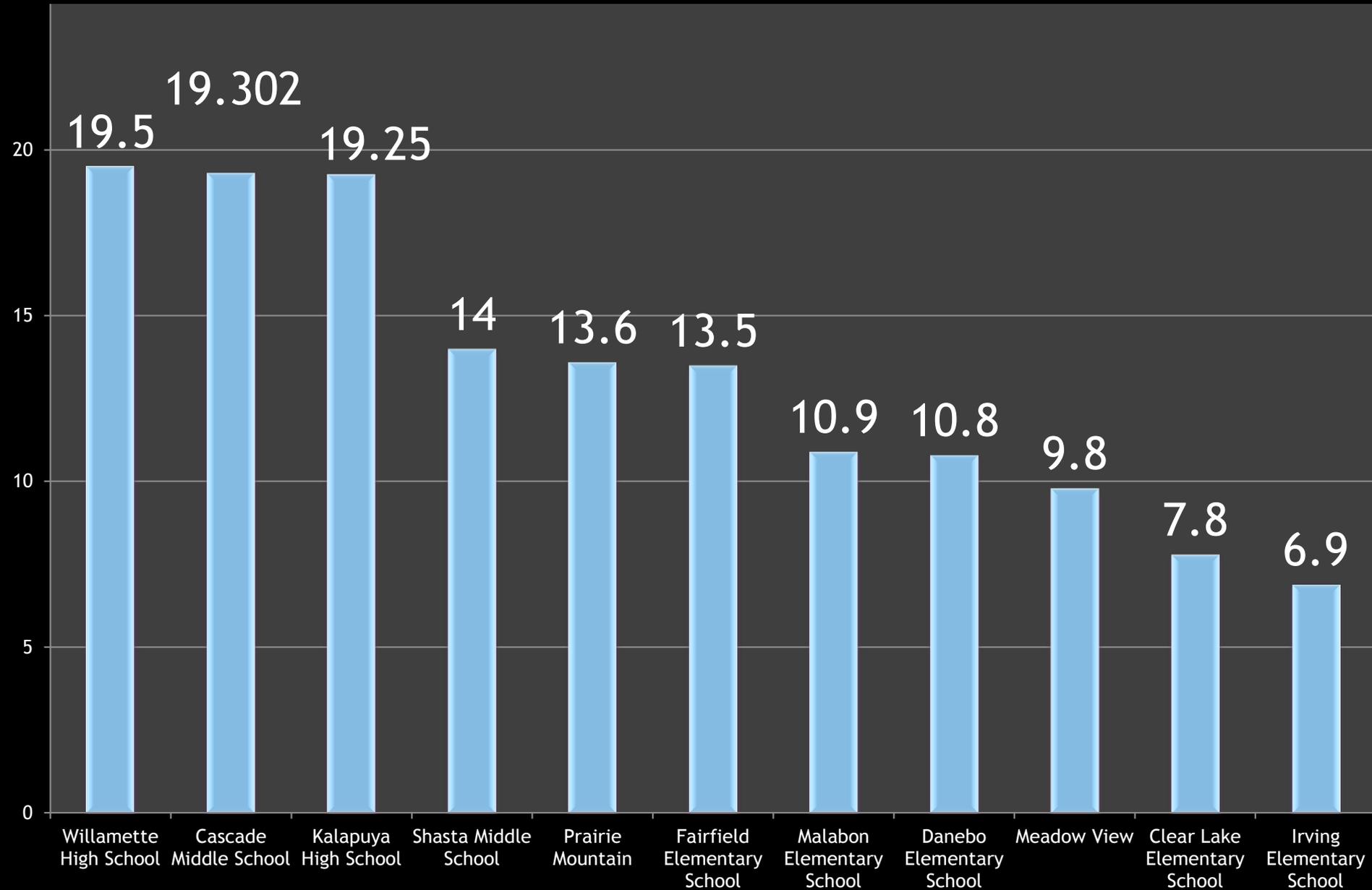


Latino Students in West Eugene

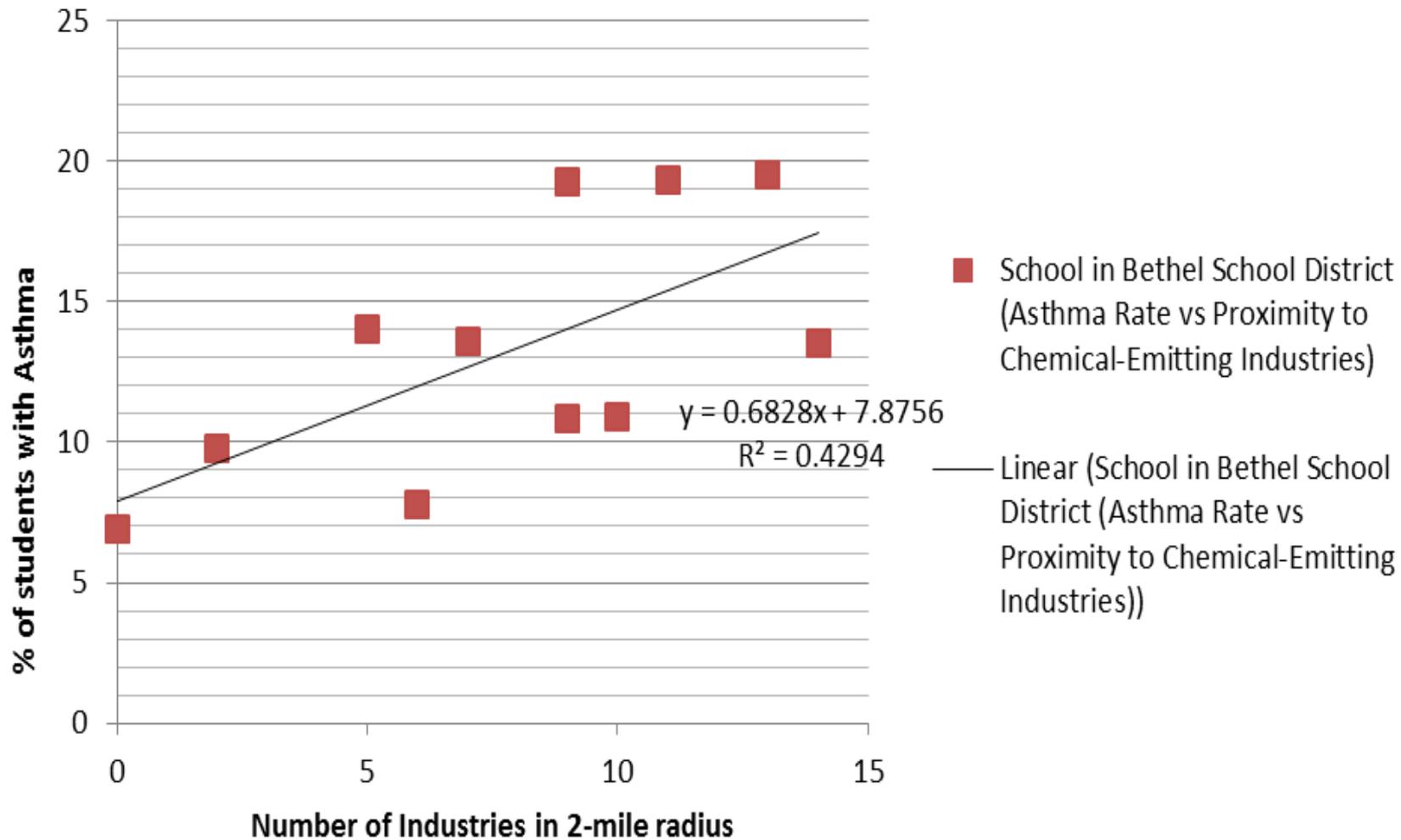
<u>School</u>	<u>Hispanic Students</u>
Fairfield Elem.	36%
Danebo Elem.	25%
Praire Mountain	23%
Cascade Middle	21%
Willamette HS	17%
Kalapuya HS	15%
Shasta Middle	14%
Clear Lake Elem.	13%
Irving Elem.	07%
South Eugene HS	4.2%

Source: Bethel School District

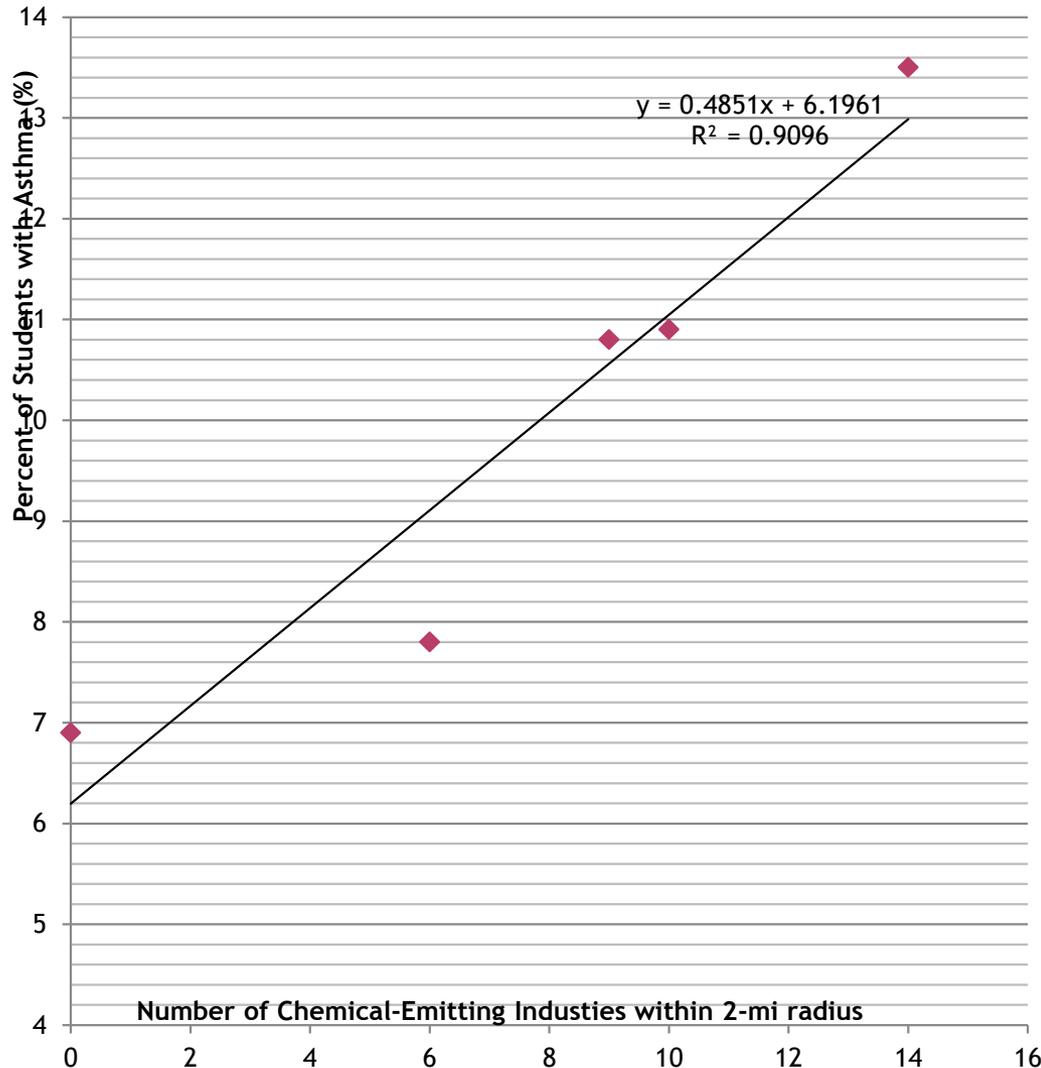
Percentage of Students with Asthma in the Bethel School District



Percentage of Asthma in all Bethel Schools Compared to the Number of Industries w/in 2 Miles



Asthma Rate vs Proximity to Toxins in the Bethel School District - Elementary (K-5)

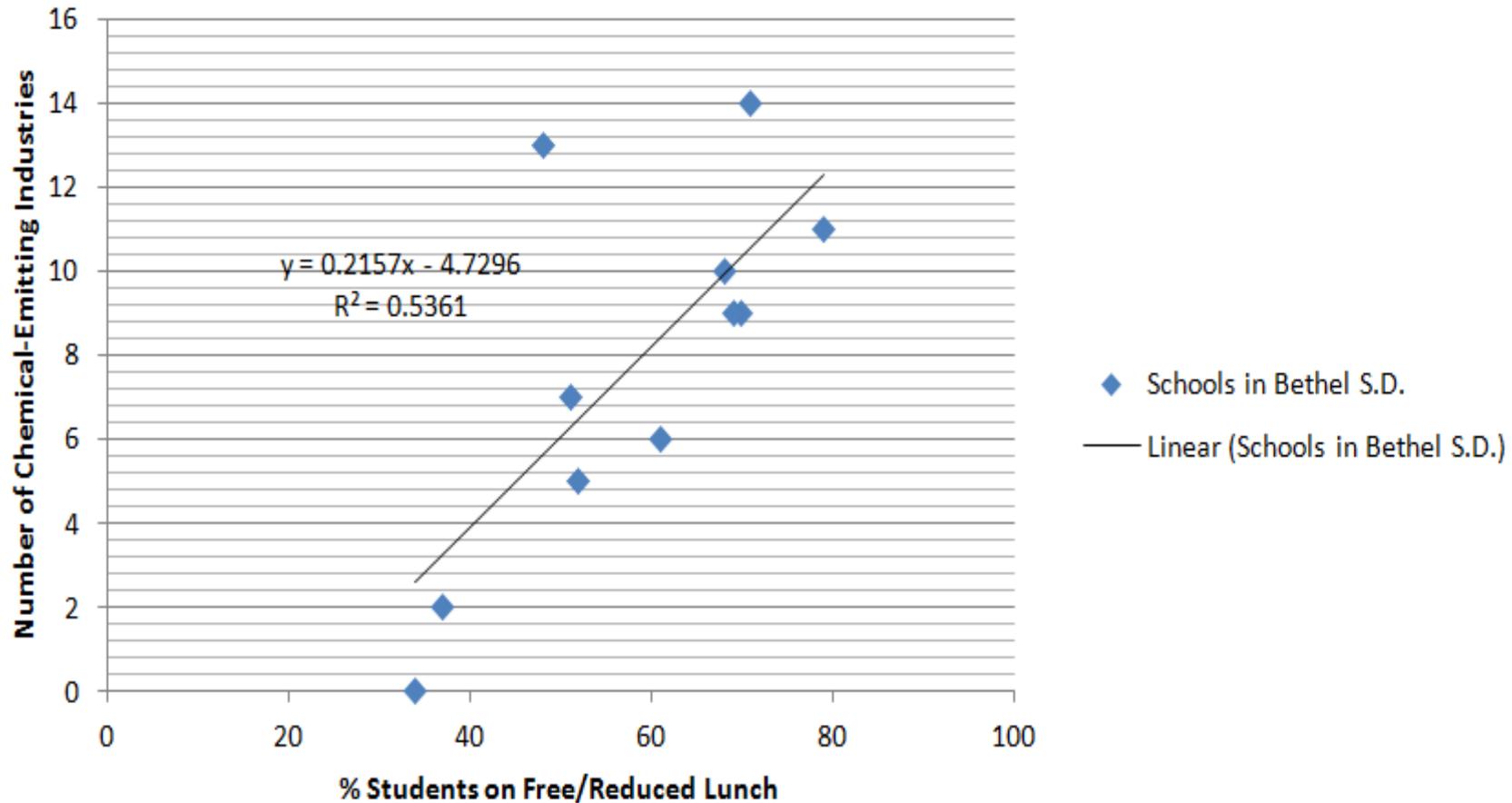


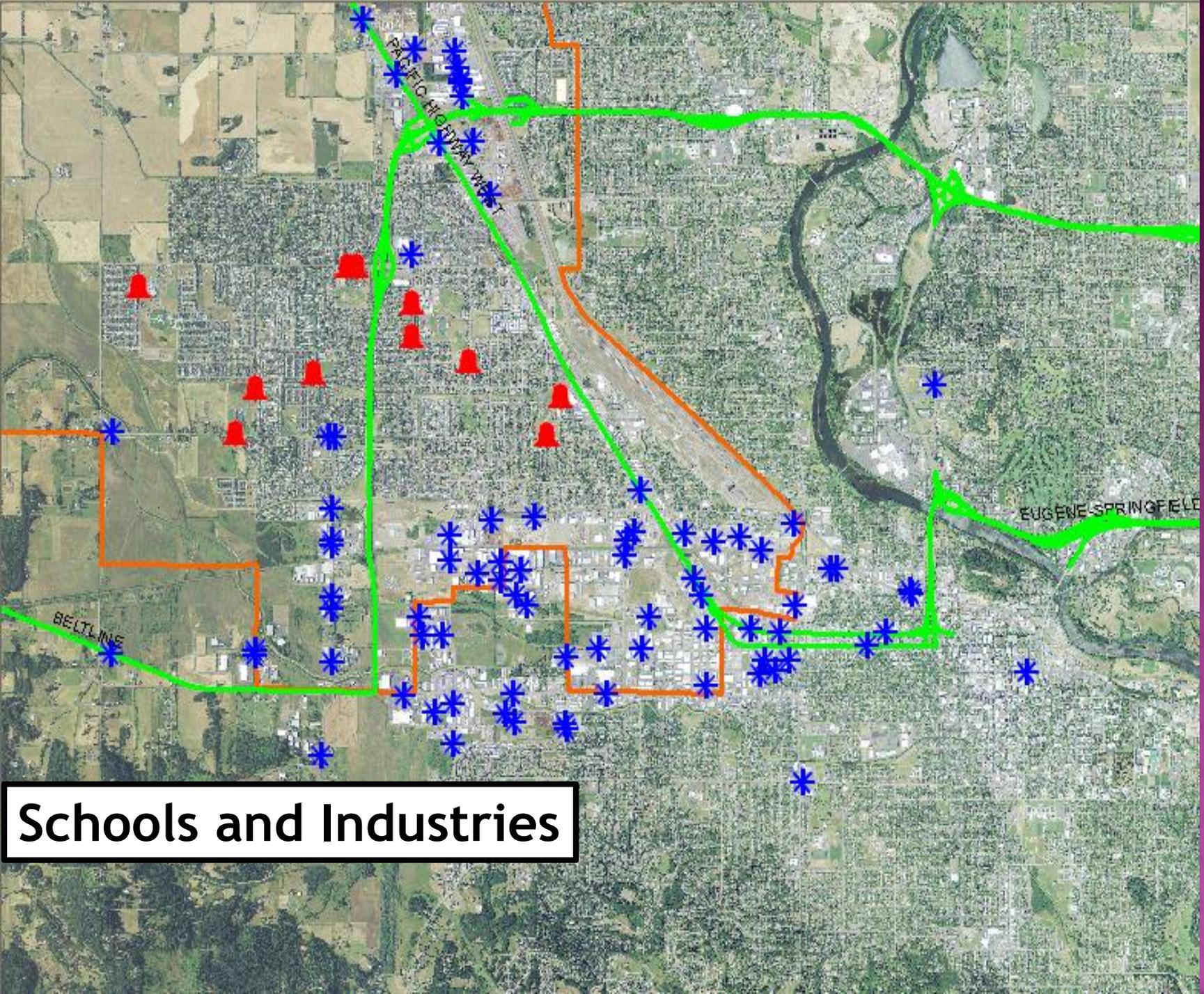
- ◆ Elementary Schools in Bethel S.D. (Asthma Rate vs Proximity to Toxins)

- Linear (Elementary Schools in Bethel S.D. (Asthma Rate vs Proximity to Toxins))

Percentage of Students w/Free or Reduced Free Lunch

Compared to Number of Chemical Emitting Industries w/in 2 Mile Radius



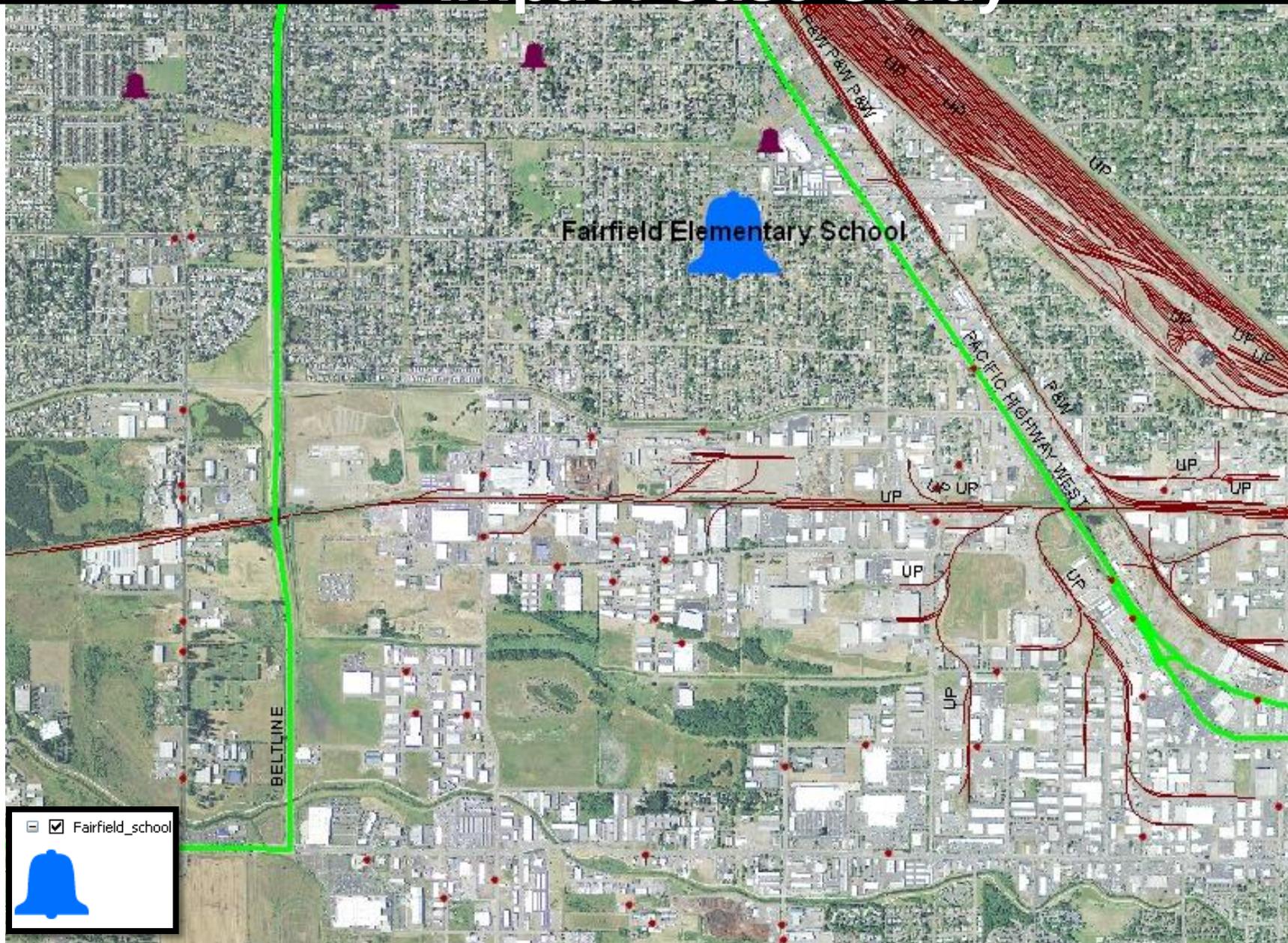


Schools and Industries

Comparing 2 Schools in Proximity to Number of Chemical Emitting Industries w/in 2 Mile Radius

<i>School Name</i>	<i>Industries in a 1 mile radius</i>	<i>Industries in a 2 mile radius</i>	<i>Total Number of Industries</i>
Fairfield Elementary School 14% asthma rate 36% Hispanic	Bulk Handling Co. Incorporated, Cascade Plating & Machine, Emerald Forest Products Incorporated, JH Baxters Incorporated, Newood Products of Oregon, Oregon Rubber Co., Western Pneumatics Incorporated, Weyerhaeuser (Veneer Technologies), Whittier Wood Products Company,	Bulk Handling Co. Incorporated, Cascade Plating & Machine, Emerald Forest Products Incorporated, JH Baxters Incorporated, Komag Incorporated, Newood Products of Oregon, Oregon Rubber Co., Pierce Fittings Inc., Scientific Development, States Industries Incorporated, Western Pneumatics Incorporated, Weyerhaeuser (Veneer Technologies), Whittier Wood Products, Willamette Industries Incorporated (Flakeboard)	14
Irving Elementary School 7% asthma rate 7% Hispanic	None	None	0

Fairfield School Cumulative Impact Case Study



Methodology

1. Gather most current industrial air toxics emissions data from the following sources:

[Eugene Right To Know](#)

[EPA Toxics Release Inventory](#)

[Lane Regional Air Protection Agency](#)

2. Rank top three chemicals per industry and health impacts for Fairfield Elementary School case study
3. Map the industries and health impacts around Fairfield Elementary School
4. Assess cumulative exposures



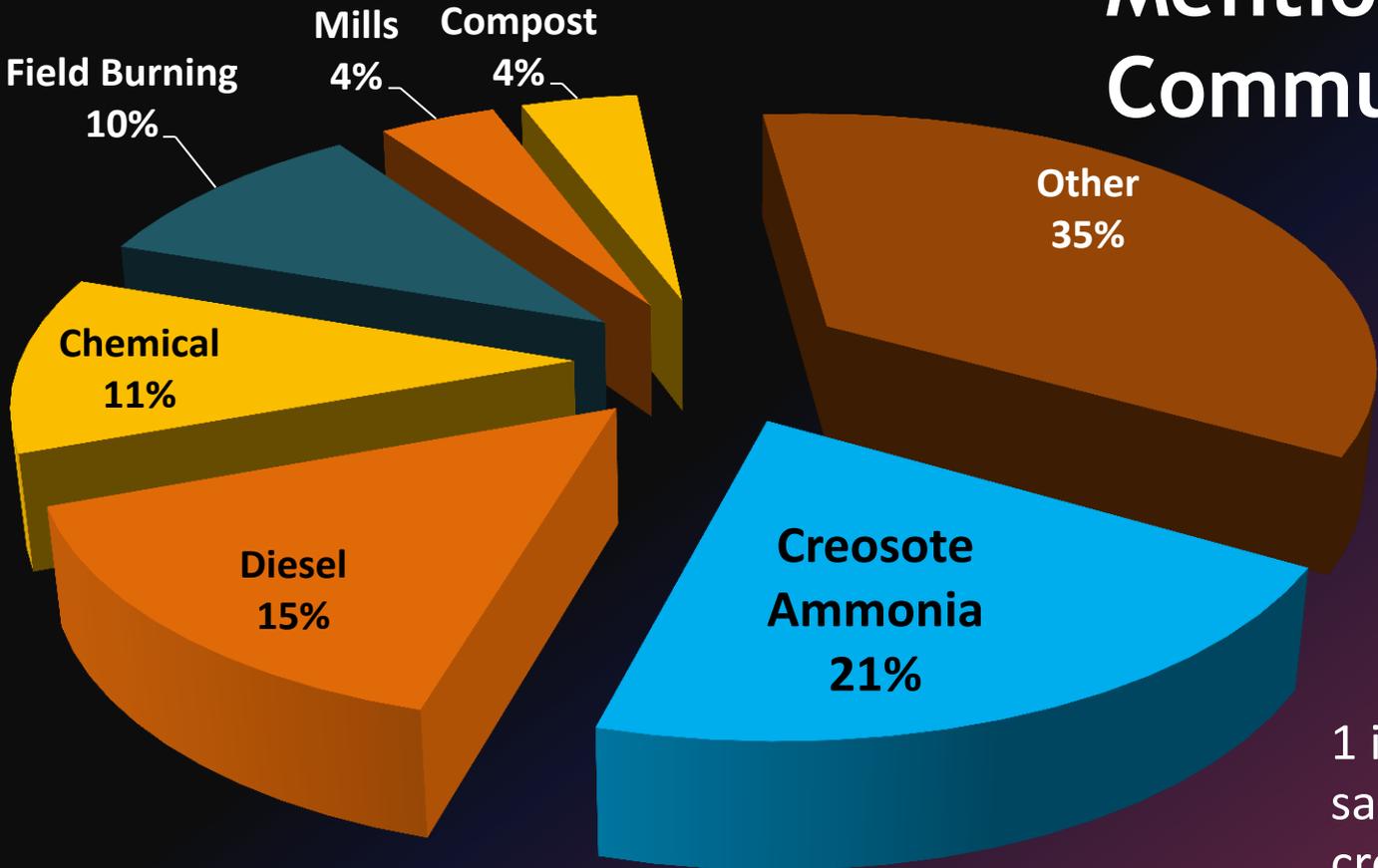
Examples of Health Impacts from Air Toxics

Increased sickness and premature death from:

- Respiratory (i.e. Asthma)
- Brain and Nervous System Damages
- Developmental Delays
- Cancer

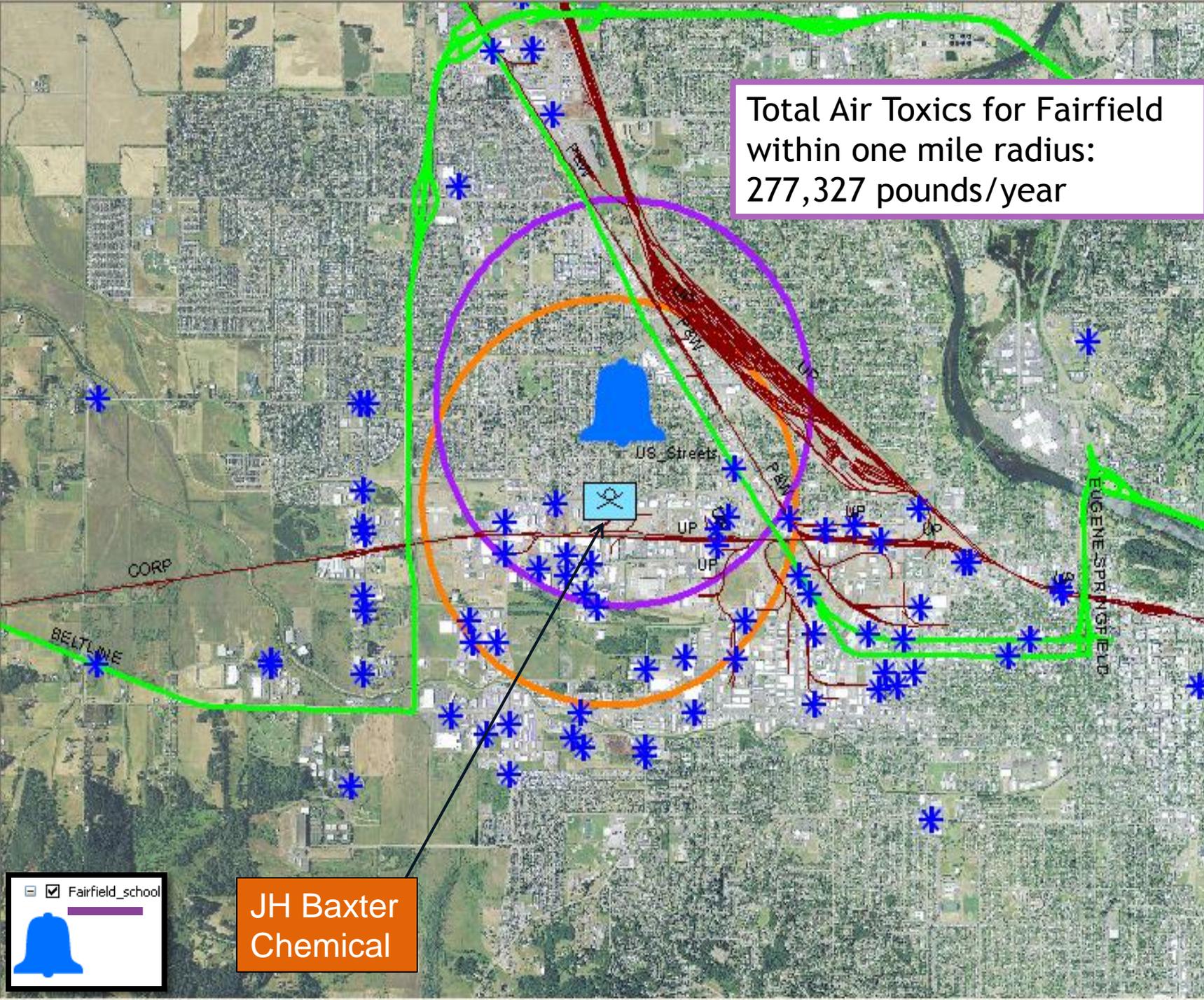
Sources: EPA, CDC, ATSDR

Air Pollution Origins Mentioned in the Community



1 in 5 people surveyed
said they smelled
creosote from the JH
Baxter facility

Total Air Toxics for Fairfield
within one mile radius:
277,327 pounds/year

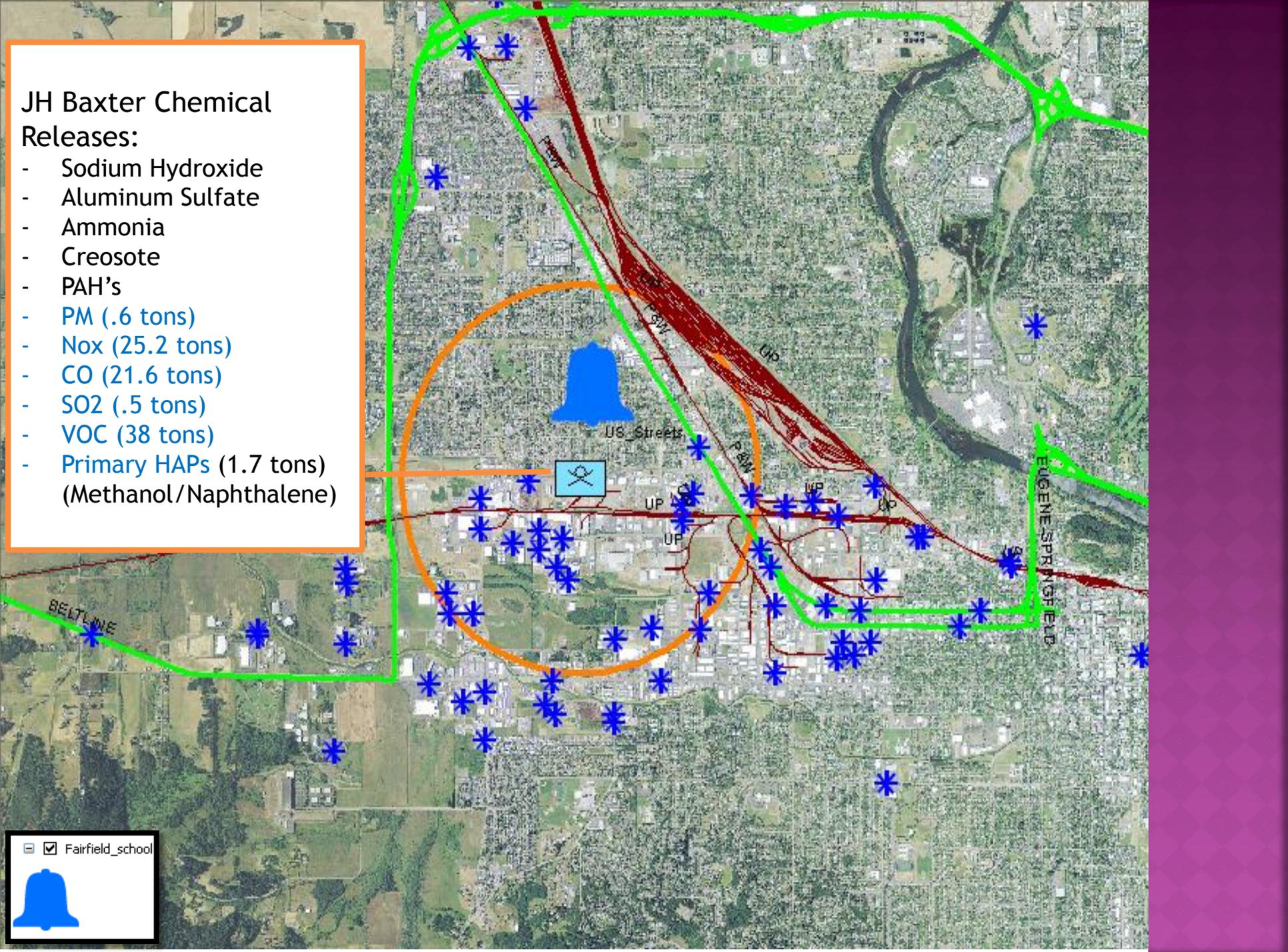


JH Baxter
Chemical

Fairfield_school

JH Baxter Chemical Releases:

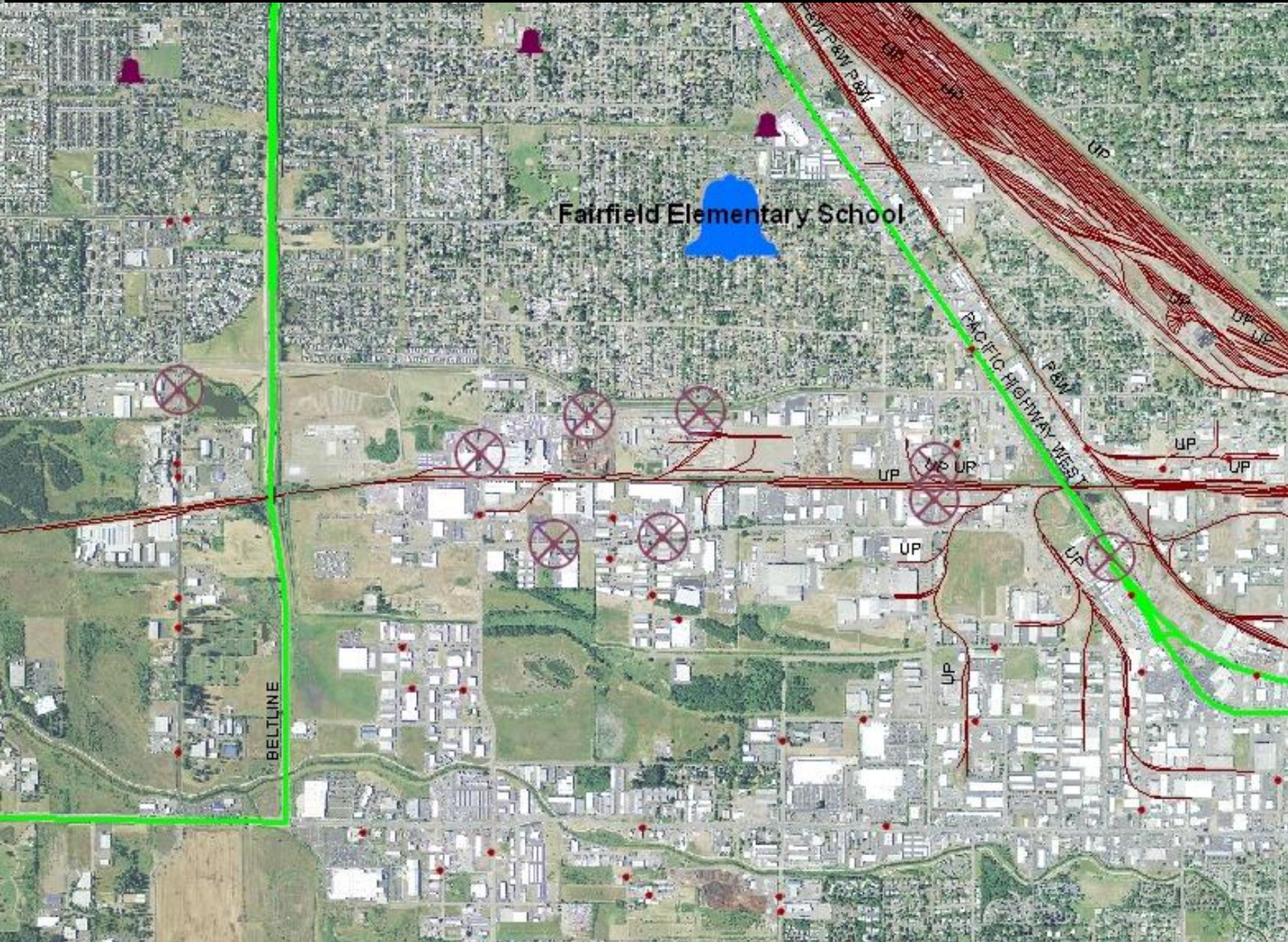
- Sodium Hydroxide
- Aluminum Sulfate
- Ammonia
- Creosote
- PAH's
- PM (.6 tons)
- Nox (25.2 tons)
- CO (21.6 tons)
- SO2 (.5 tons)
- VOC (38 tons)
- Primary HAPs (1.7 tons)
(Methanol/Naphthalene)

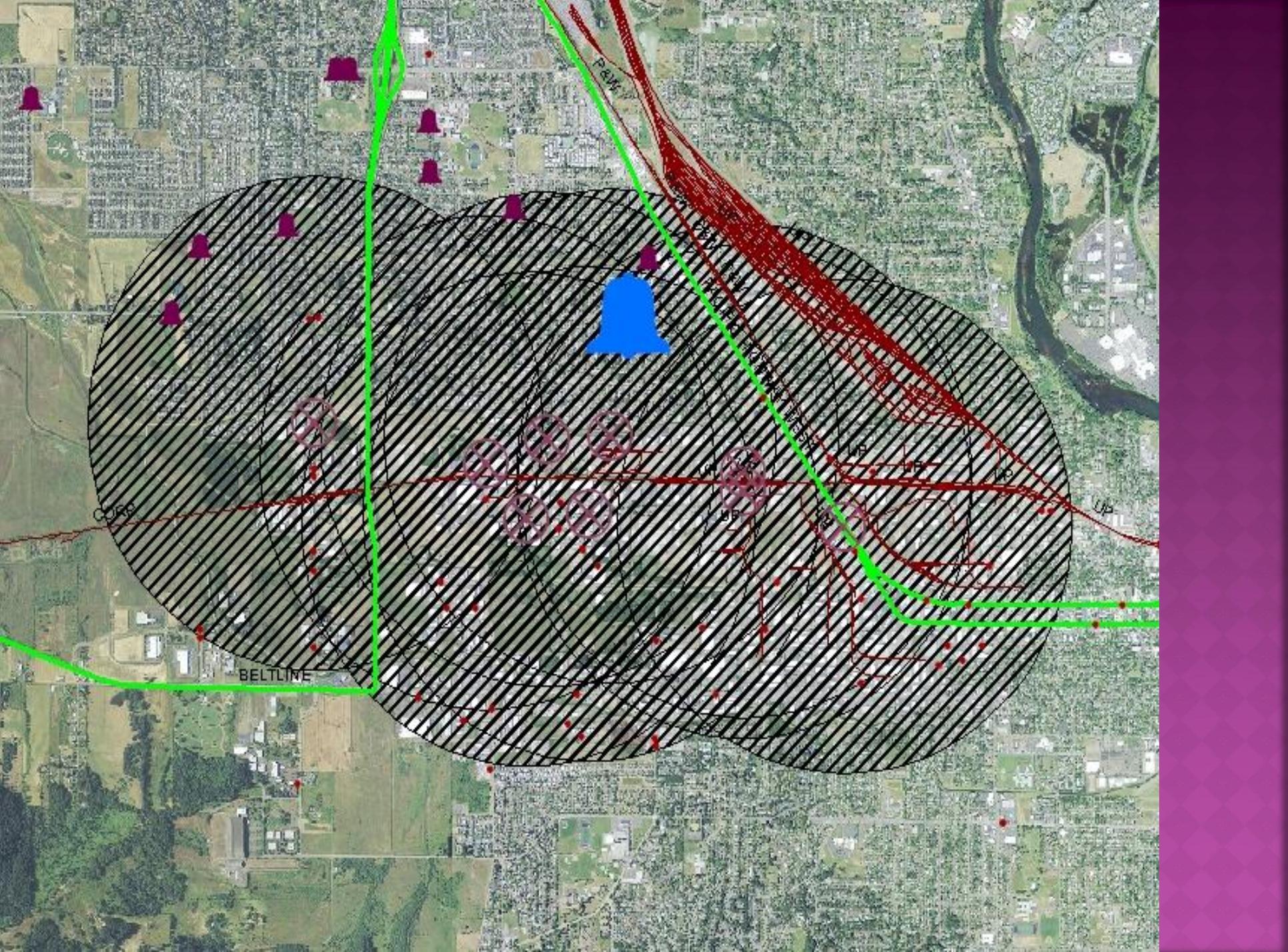


Fairfield_school

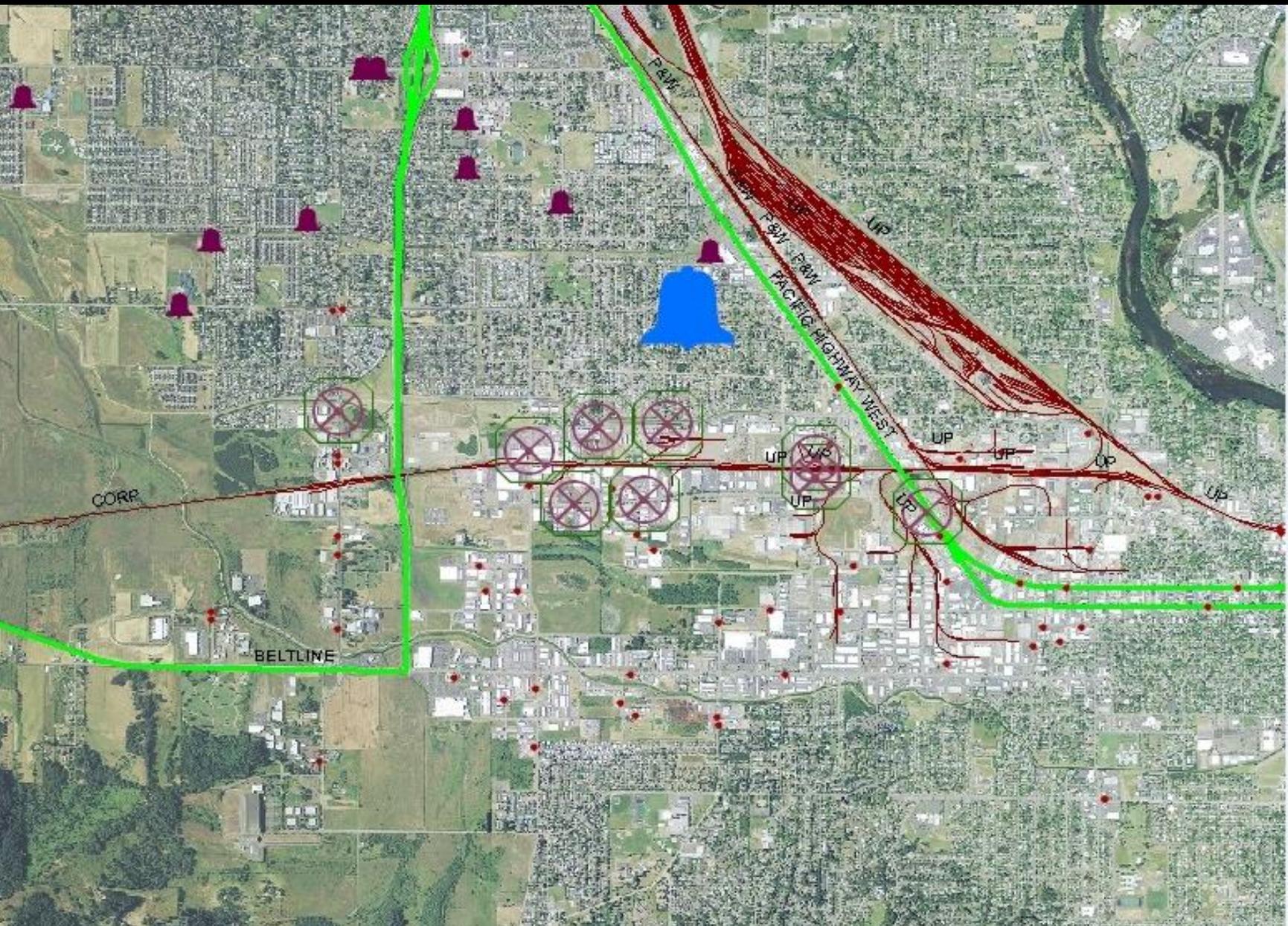


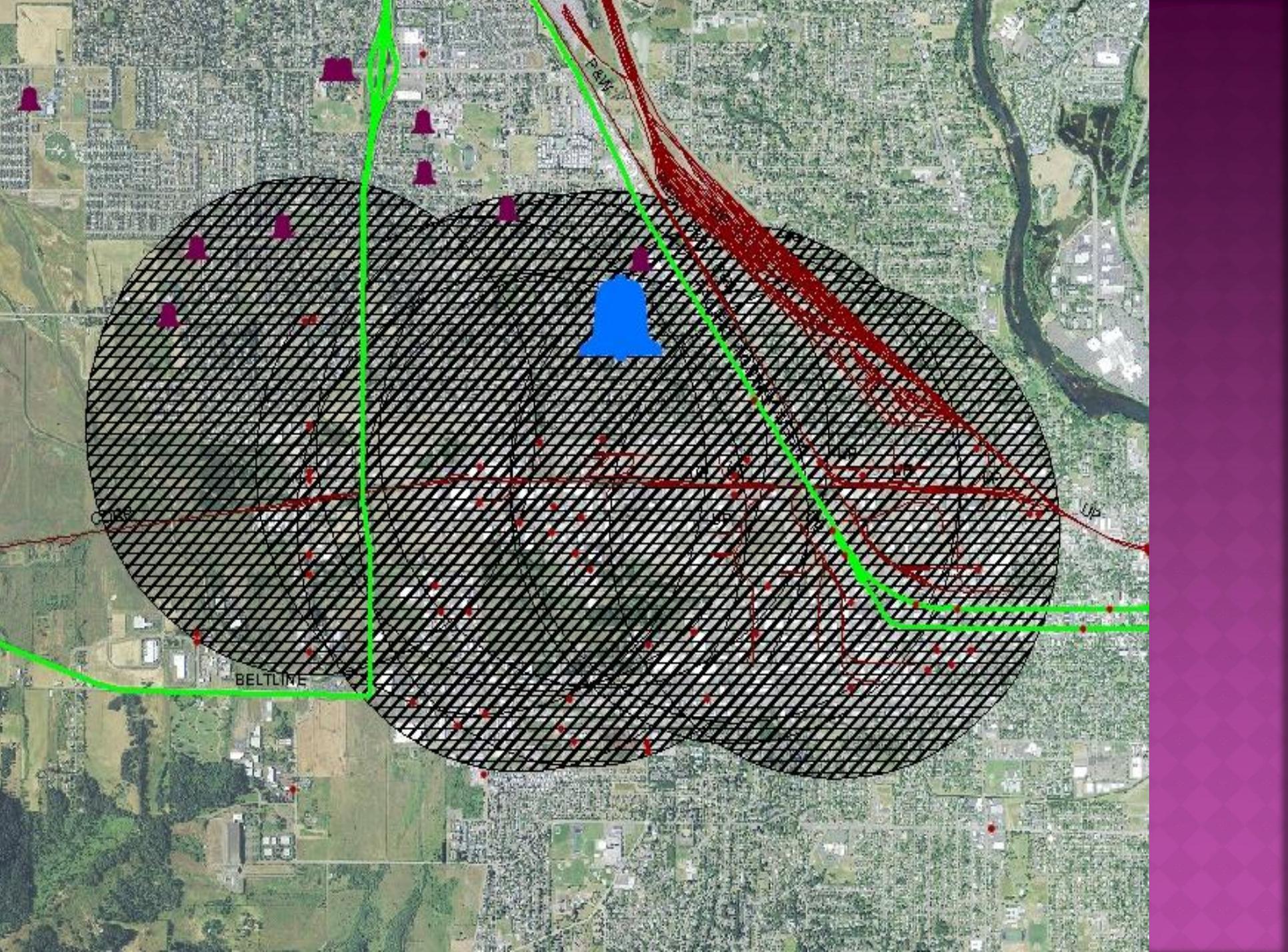
Fairfield School Case Study – Respiratory Toxic Exposures



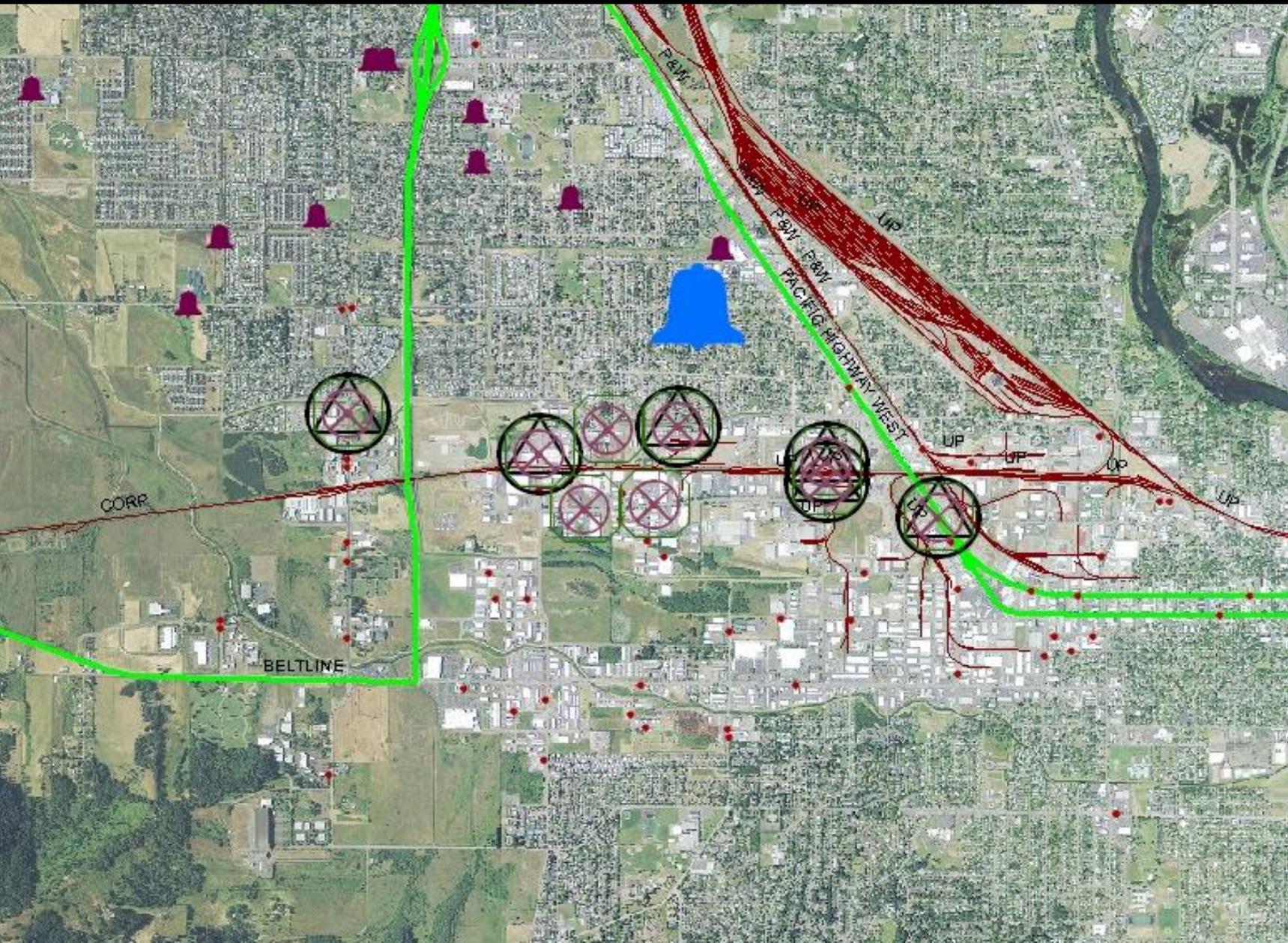


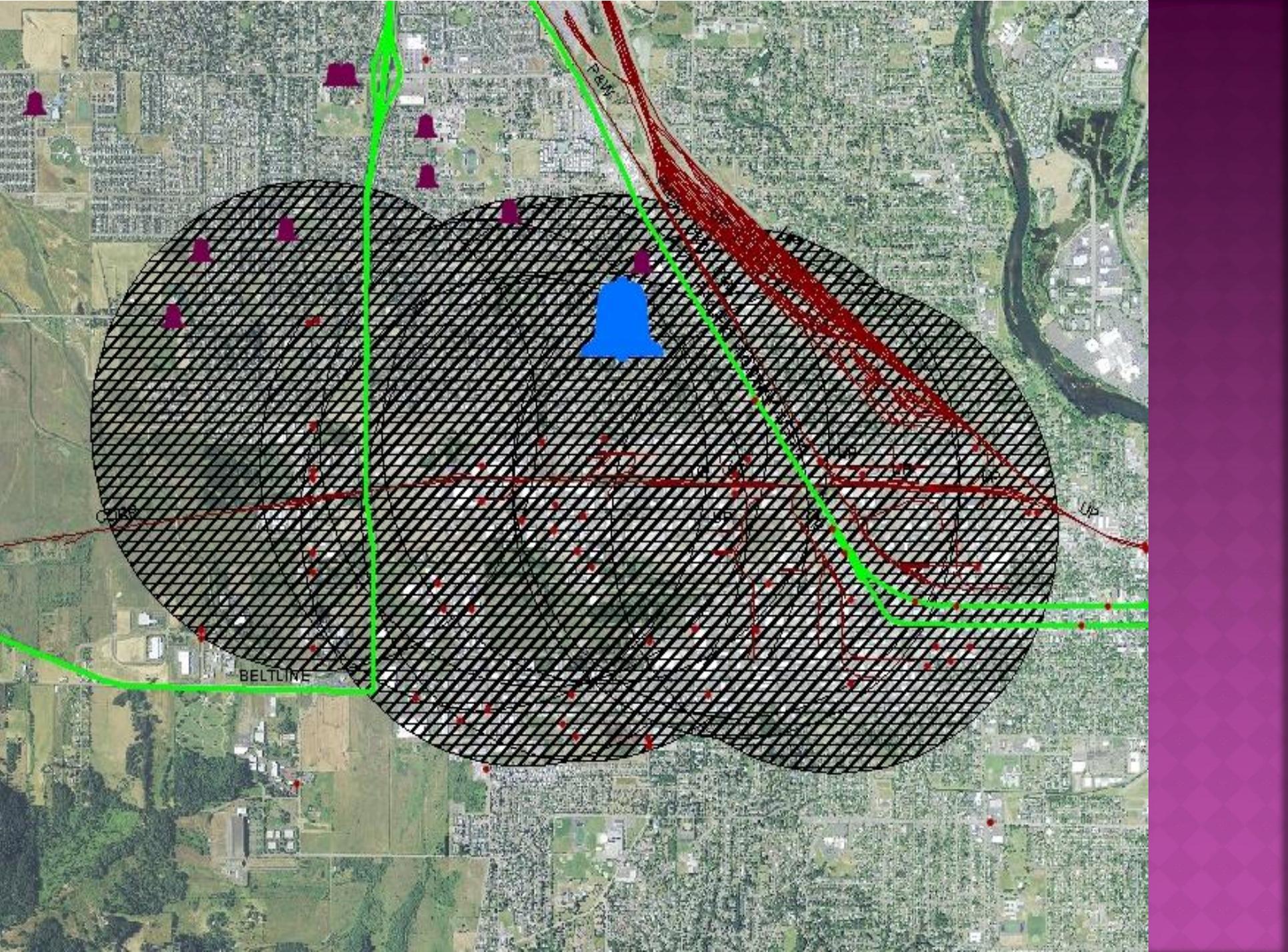
Fairfield School Case Study – Brain Nervous System Toxic Exposures



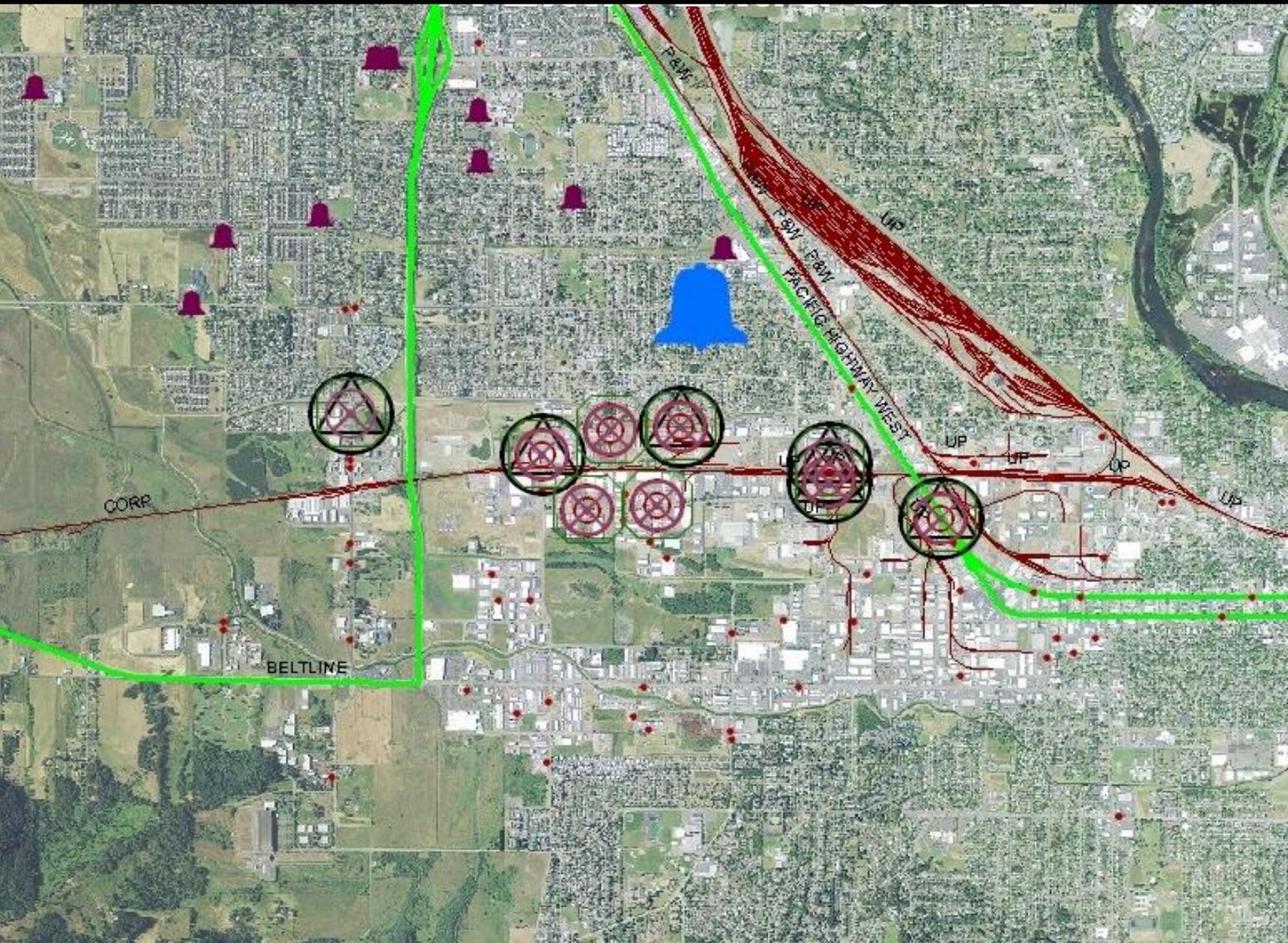


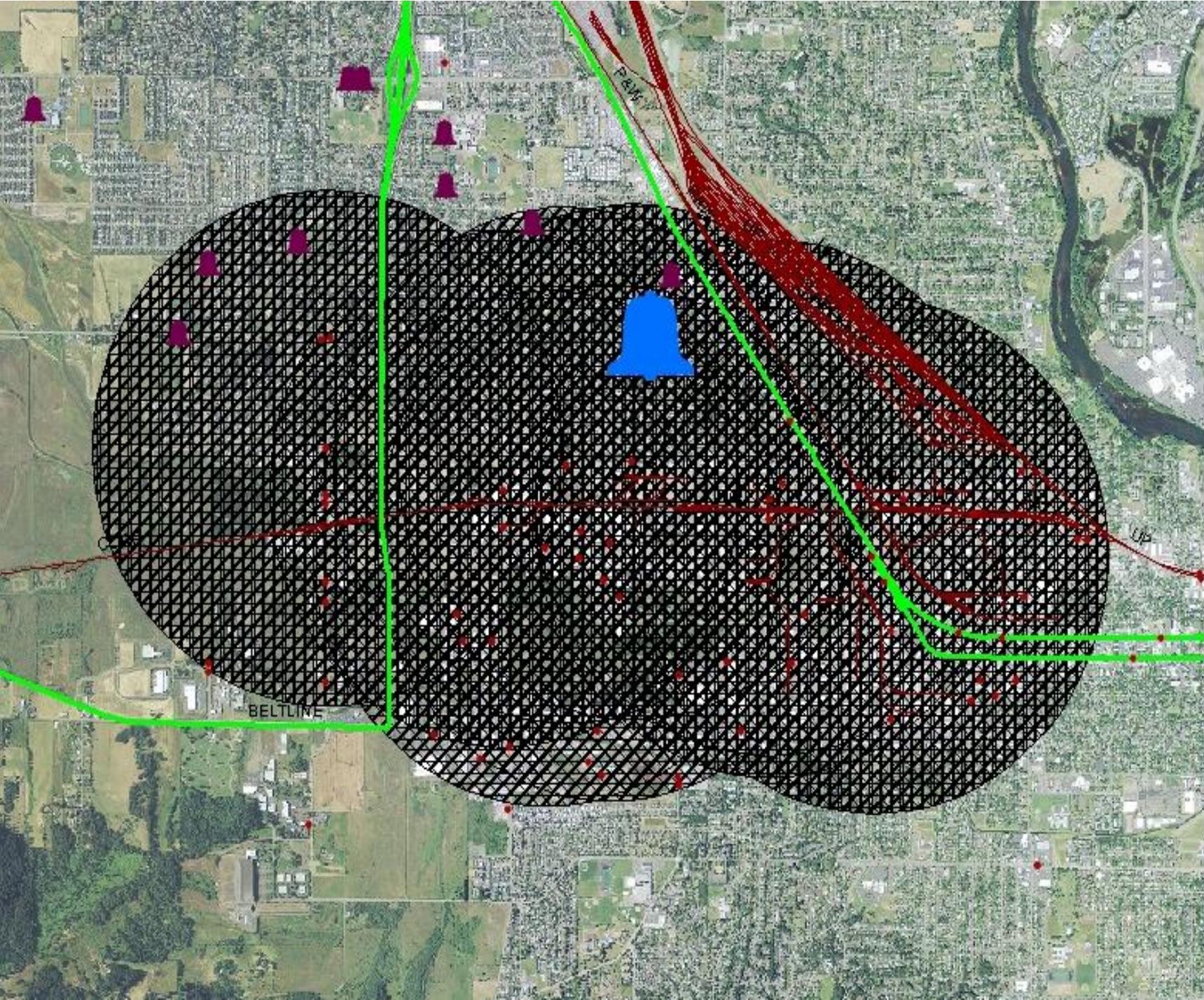
Fairfield School Case Study – Developmental Toxic Exposures



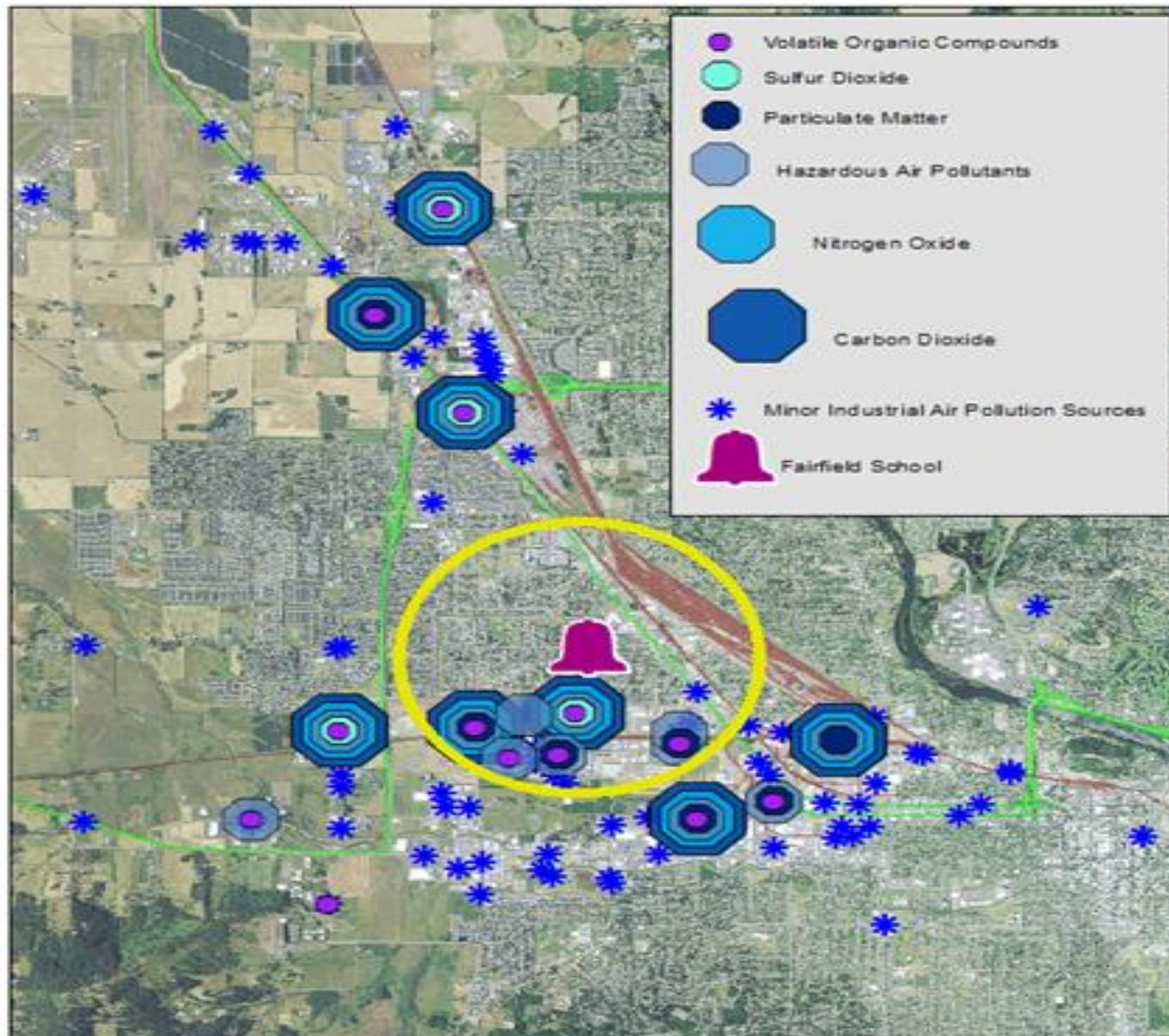


Fairfield School Case Study – Cancer Toxic Exposures





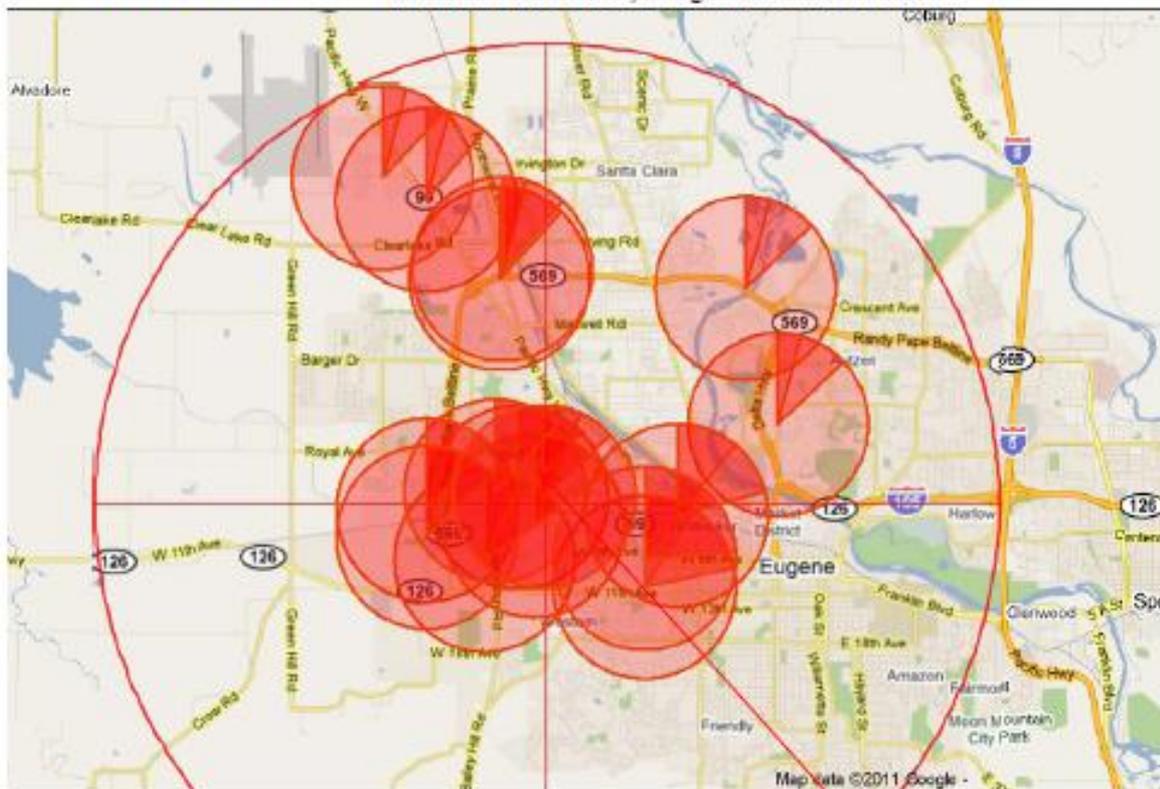
West Eugene Criteria Air Pollutants



Latinos and Air Toxics Impacts in West Eugene

TRI.NET

TRI Facilities within 5 miles of "85 N. Baxter Road Eugene, OR 97402"
 Latitude: 44.0618989, Longitude: -123.1516150



1. [Cascade Plating & Machine](#)
2. [Flakeboard America Ltd - Eugene Mdf](#)
3. [Forbo Adhesives Llc](#)
4. [Forrest Paint Co](#)
5. [Georgia-pacific Chemicals Llc](#)
6. [Gheen Irrigation Works Inc](#)
7. [J H Baxter & Co](#)
8. [McFarland Cascade Pole & Lumber Co](#)
9. [Mdu Resources Eugene Concrete](#)
10. [Murphy Plywood Co Eugene Operations](#)
11. [Oregon Rubber Co](#)
12. [Peterson Pacific Corp](#)
13. [Pierce Fittings](#)
14. [Scientific Developments Inc](#)
15. [Veneer Technologies Eugene Plant](#)
16. [Willamette Valley Co](#)

EI 1 Mile:	Buffer	Minority	Poverty	Hispanic	Income	Race:	White	Black	Asian	Other	
EI 3 Mile:	Buffer	Minority	Poverty	Hispanic	Race	Income:	less \$15K	\$15K-\$25K	\$25K-\$50K	\$50K-\$75K	\$75K or more

TRI.Net 2/8/2011 9:27:46 PM

JH Baxter Wood Preservative/ Creosote (2009)
 34,000 lbs total air
 33,240 lbs. fugitive



% Latino residents

Community Engagement



West Eugene Advisory Group
asked for fence-line air
monitoring.



Programs



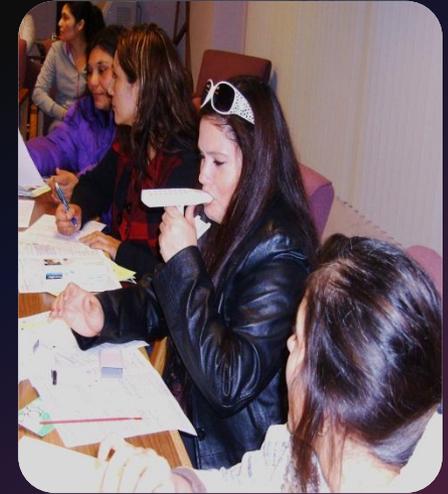
**Madres
para la
Salud**



**Toxics Tour
in April**

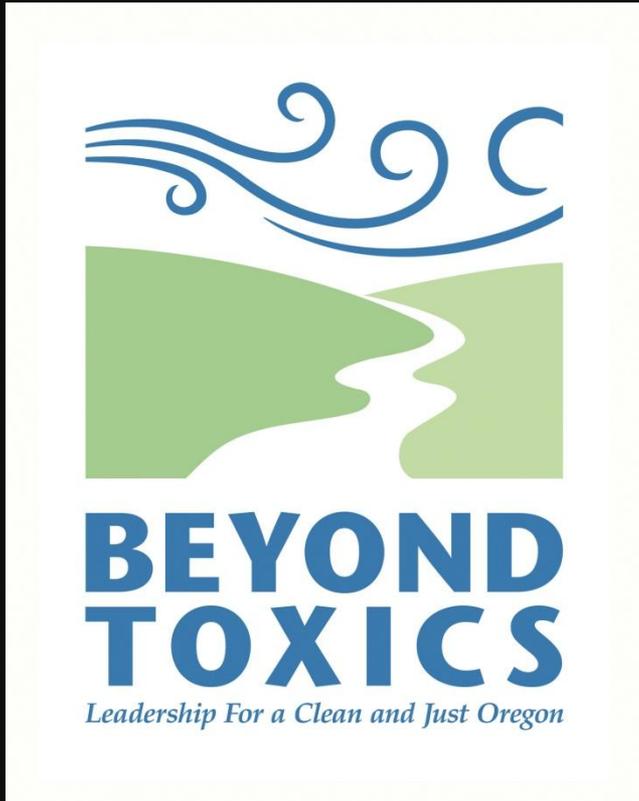


**Green
Cleaning
Workshop**



**Asthma
care
workshops**

Contact Information



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- www.BeyondToxics.org