
WASHINGTON ENVIRONMENTAL HEALTH DISPARITIES MAP

APRIL 27, 2019



DEOHS
SCHOOL OF PUBLIC HEALTH
UNIVERSITY of WASHINGTON

PARTNERS



LISTENING SESSIONS

- *What kinds of pollution, if any, are impacting your life or work and that of your family and community?*
- *What factors best show if your community is healthy or doing well compared to other communities?*



THE INDICATORS

Environmental exposures

Diesel emissions

Ozone

Particulate matter 2.5 (PM2.5)

Toxic releases from facilities

Traffic density

Environmental effects

Lead risk and exposure

Proximity to hazardous waste generators and facilities

Proximity to Superfund sites

Proximity to facilities with highly toxic substances

Wastewater discharge

Sensitive populations

Cardiovascular disease

Low birth weight

Socioeconomic factors

Low educational attainment

Housing burden

Transportation expense

Linguistic isolation

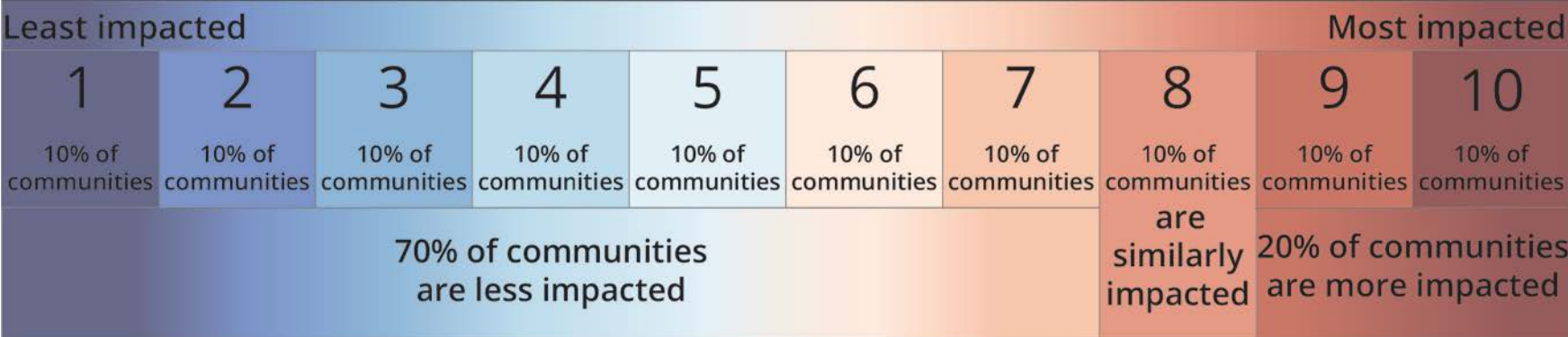
Poverty

Race (people of color)

Unemployment

Model formula = (EExposures + .5EEeffects)/2 x (SP+SF)/2

RANKING



THE REPORT

Washington Environmental Health Disparities Map
Comparing environmental health risk factors across communities

W ENVIRONMENTAL & OCCUPATIONAL HEALTH SCIENCES SCHOOL OF PUBLIC HEALTH UNIVERSITY OF WASHINGTON

FRONT AND CENTERED

Washington State Department of Health

ENVIRONMENTAL HEALTH TRACKING

pscleanair.org
Puget Sound Clean Air Agency

Contact Information

Access the mapping tool
<https://fortress.wa.gov/doh/wtn/WTNIBL>

UW project website
deohs.washington.edu/washington-state-envmap

Email
envmap@uw.edu

WASHINGTON TRACKING NETWORK

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[Data and Statistical Reports](#) > [Environmental Health](#) > [Washington Tracking Network \(WTN\)](#)

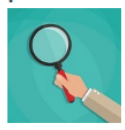
- Washington Tracking Network (WTN)
- Air Quality
- Asthma
- Biomonitoring
- Birth Outcomes
- Body Mass Index
- Cancer
- Carbon Monoxide
- Climate Change
- Community Characteristics
- Drinking Water
- Heart Attack
- Heat Stress
- Information by Location

Washington Tracking Network (WTN)

Welcome to WTN, your source for environmental and public health data.

[Search WTN Data](#)

Sort, export, chart and map data for environmental and public health measures. [Search data](#) now



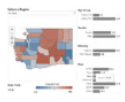
[Information by Location \(IBL\)](#)

Explore community rankings for topics such as health disparities (differences) and lead exposure risk. View [Information by Location](#) tool now.



[WTN Dashboards](#)

View WTN data in a new way. Like our current tools, these [dashboards](#) have maps, charts and graphs. You can see these features in the same view.



[WTN On The Go](#)

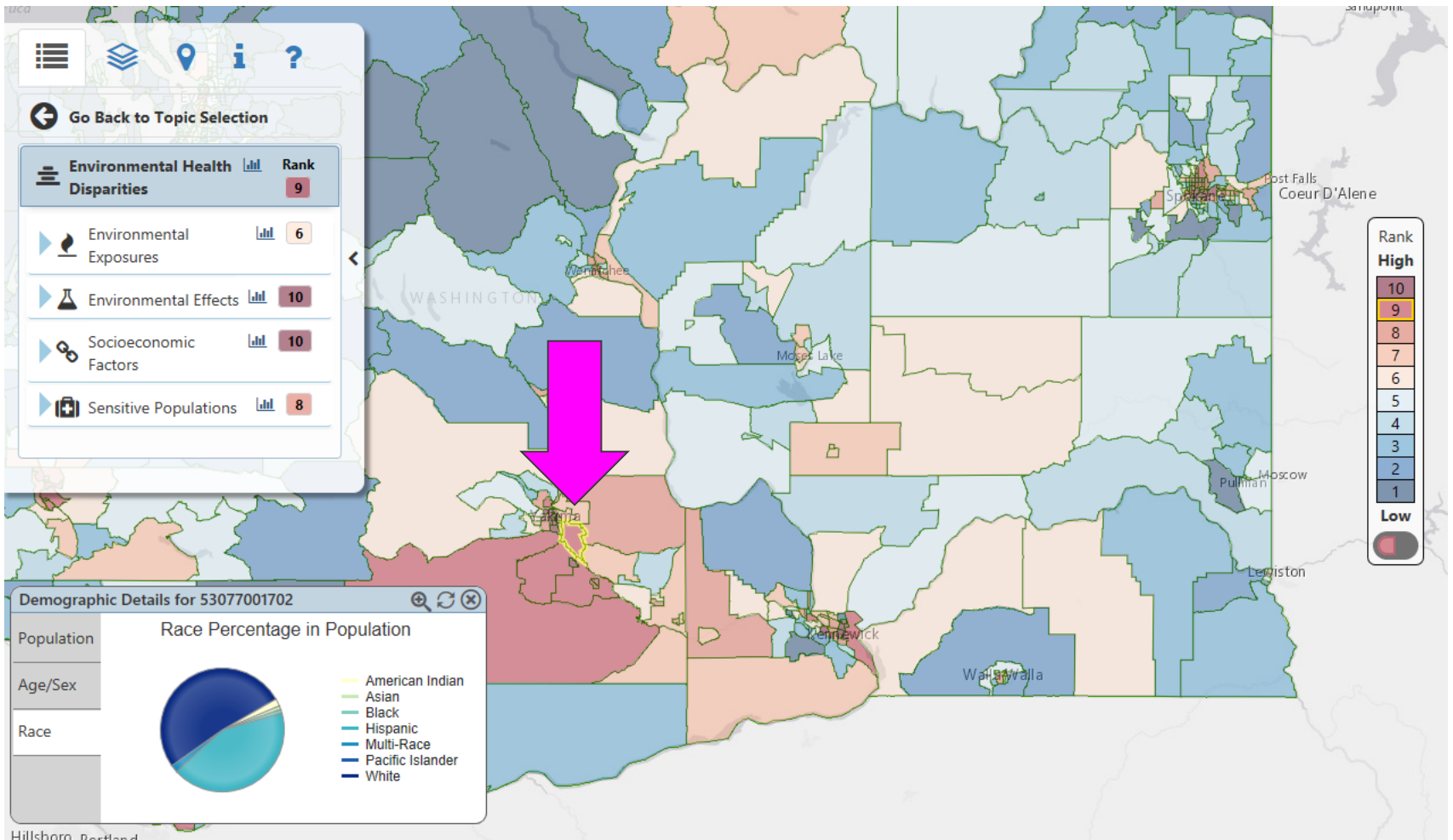
Use your phone or tablet to view our new [tool](#) for environmental health topics, such as radon. Touch the maps to see data for your community.

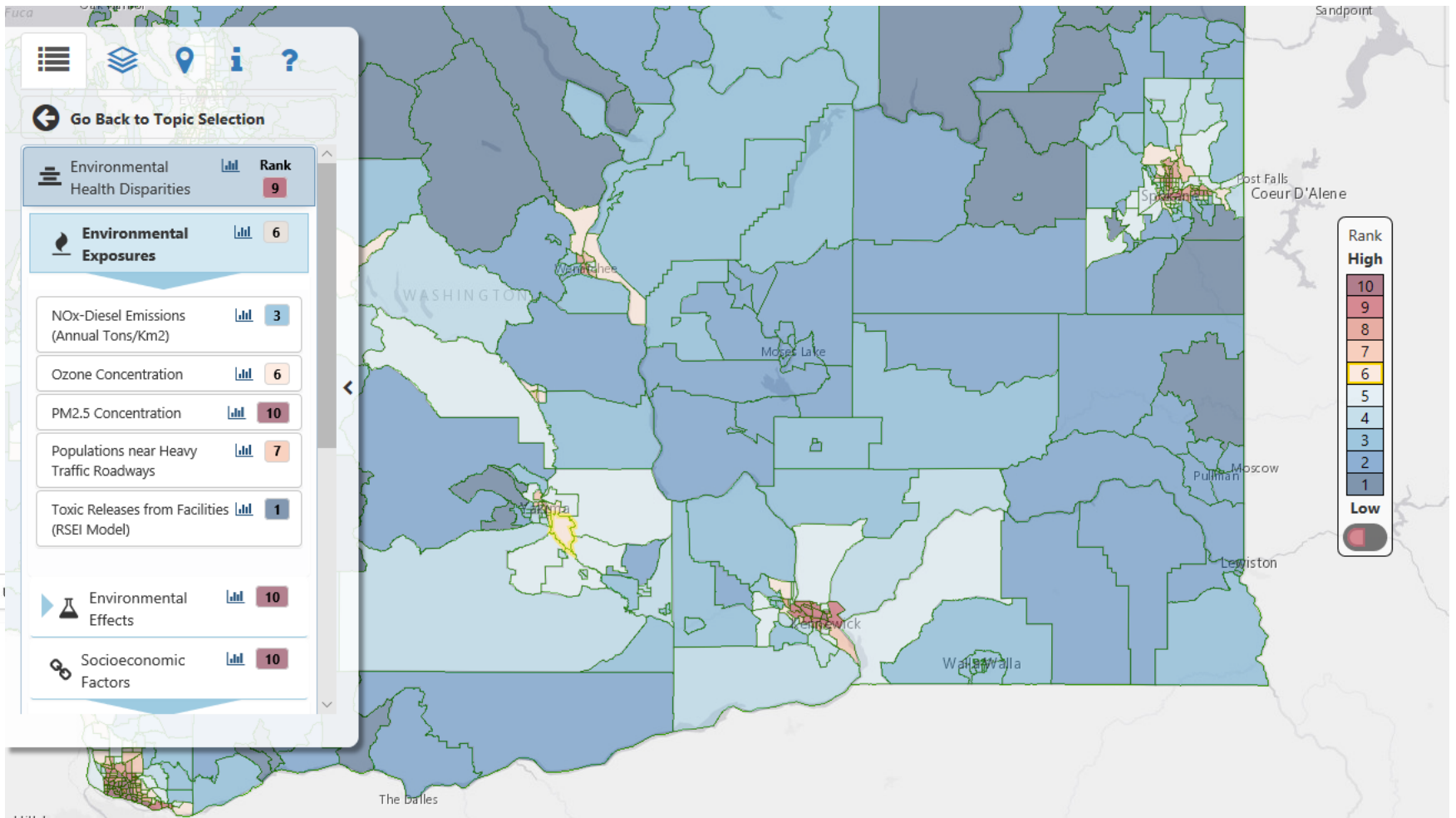


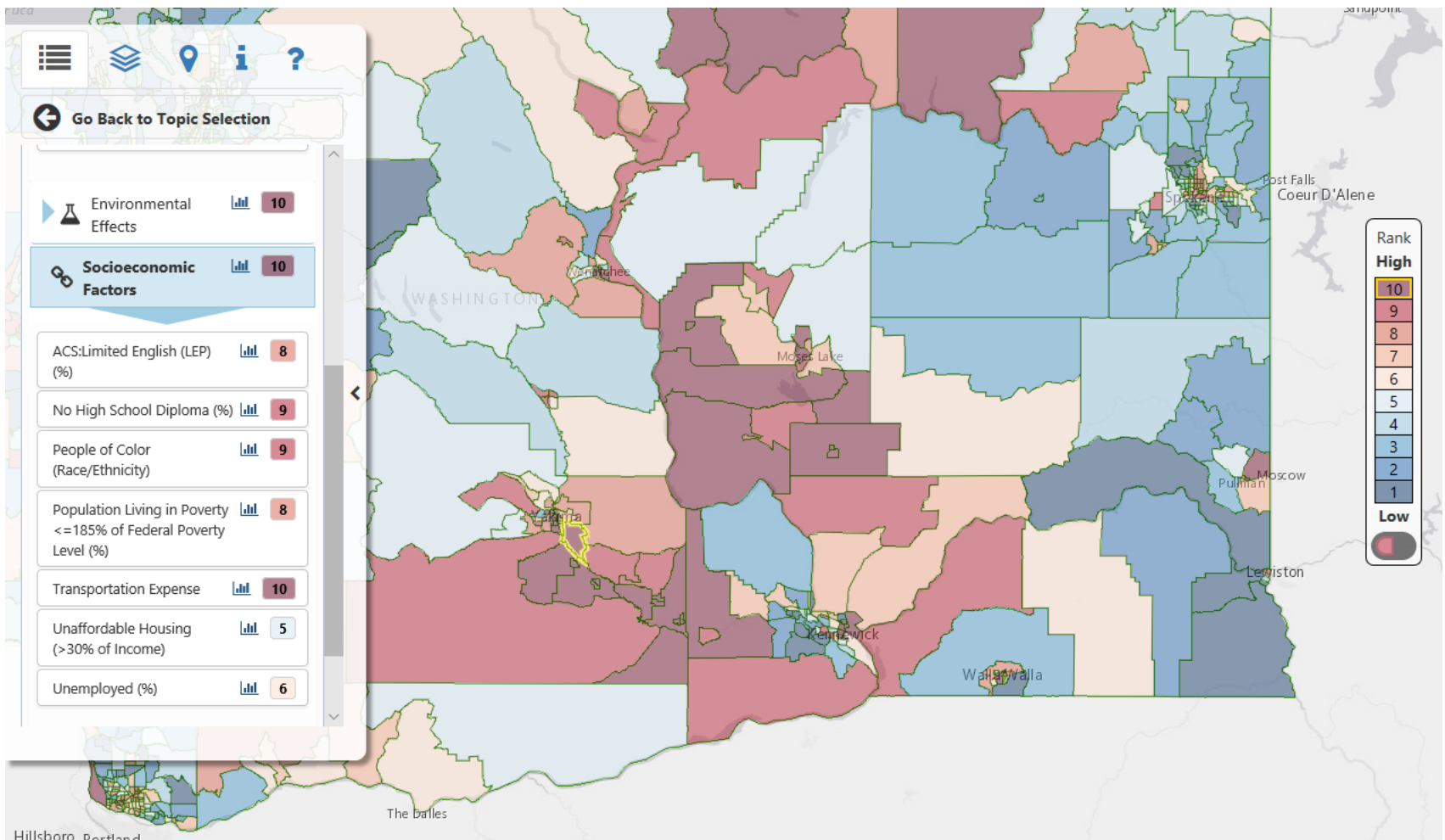


EXAMPLE: YAKIMA COUNTY



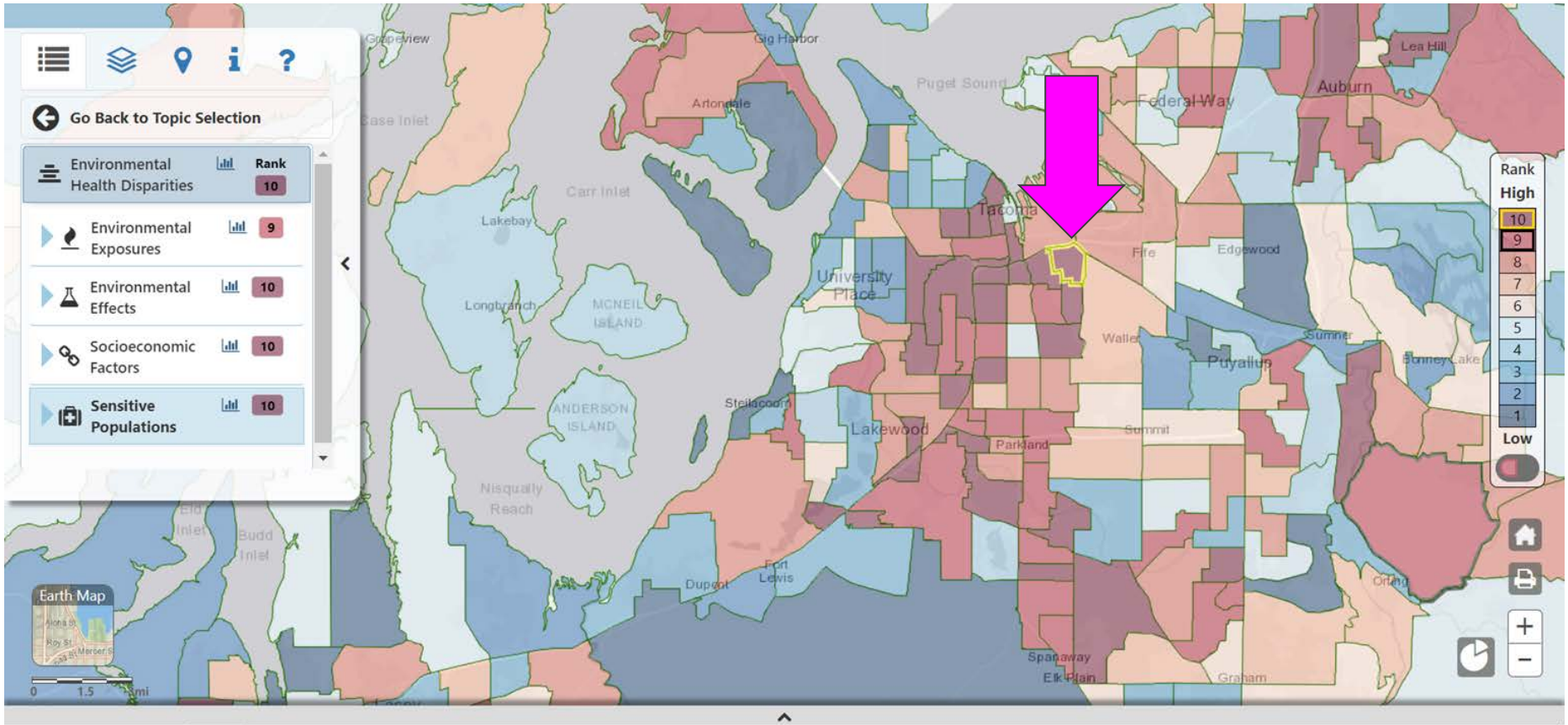


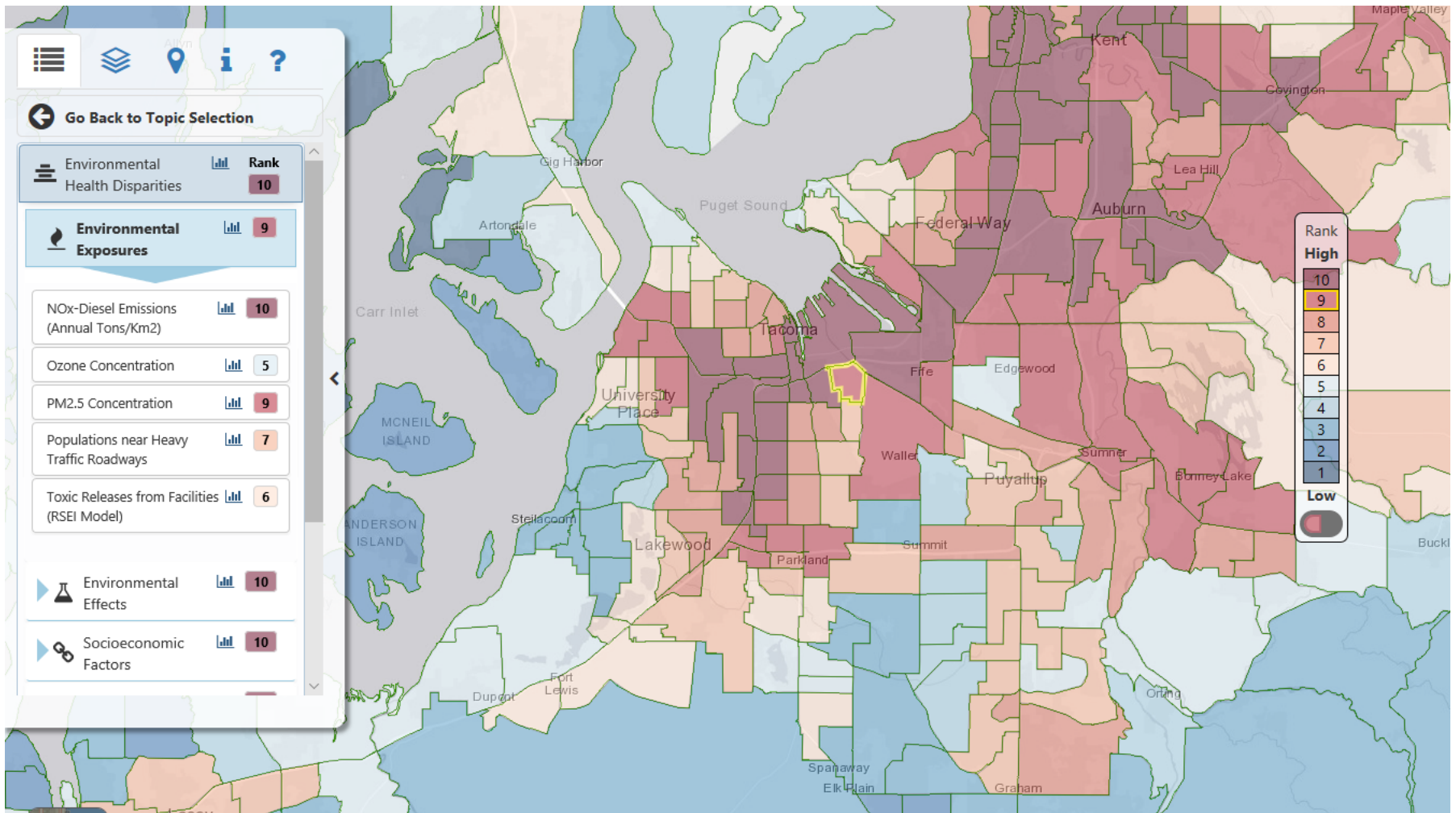


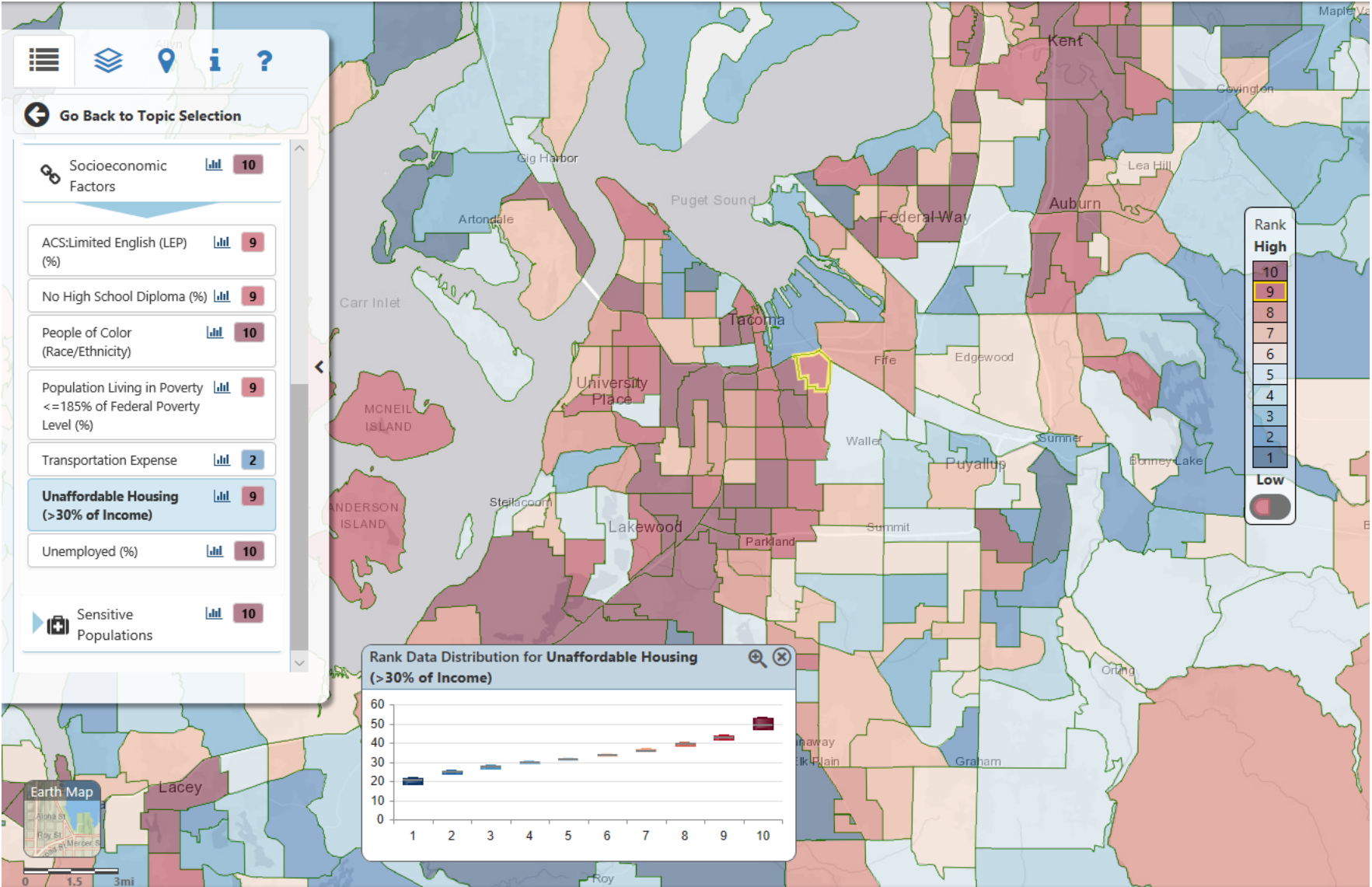




EXAMPLE: PIERCE COUNTY



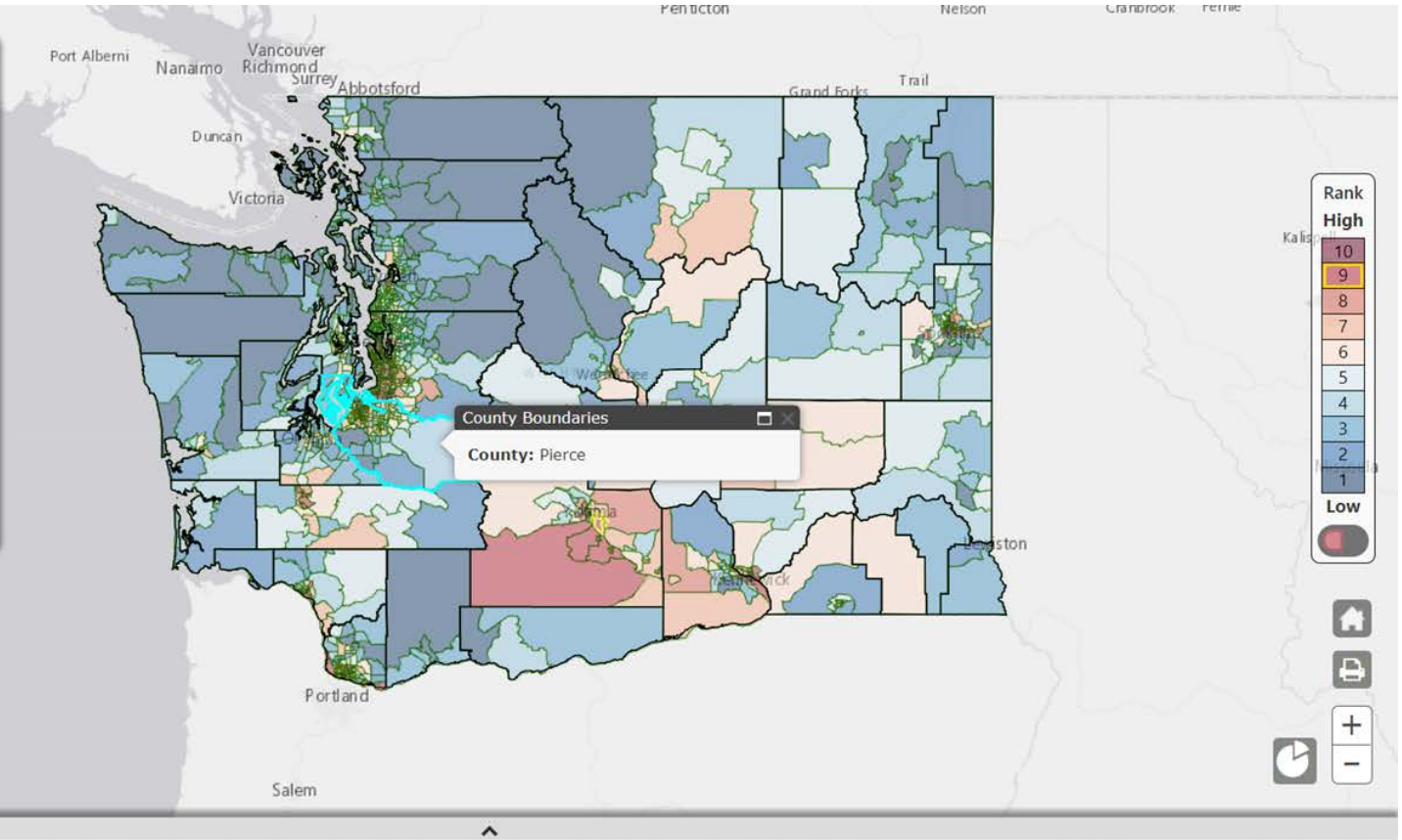


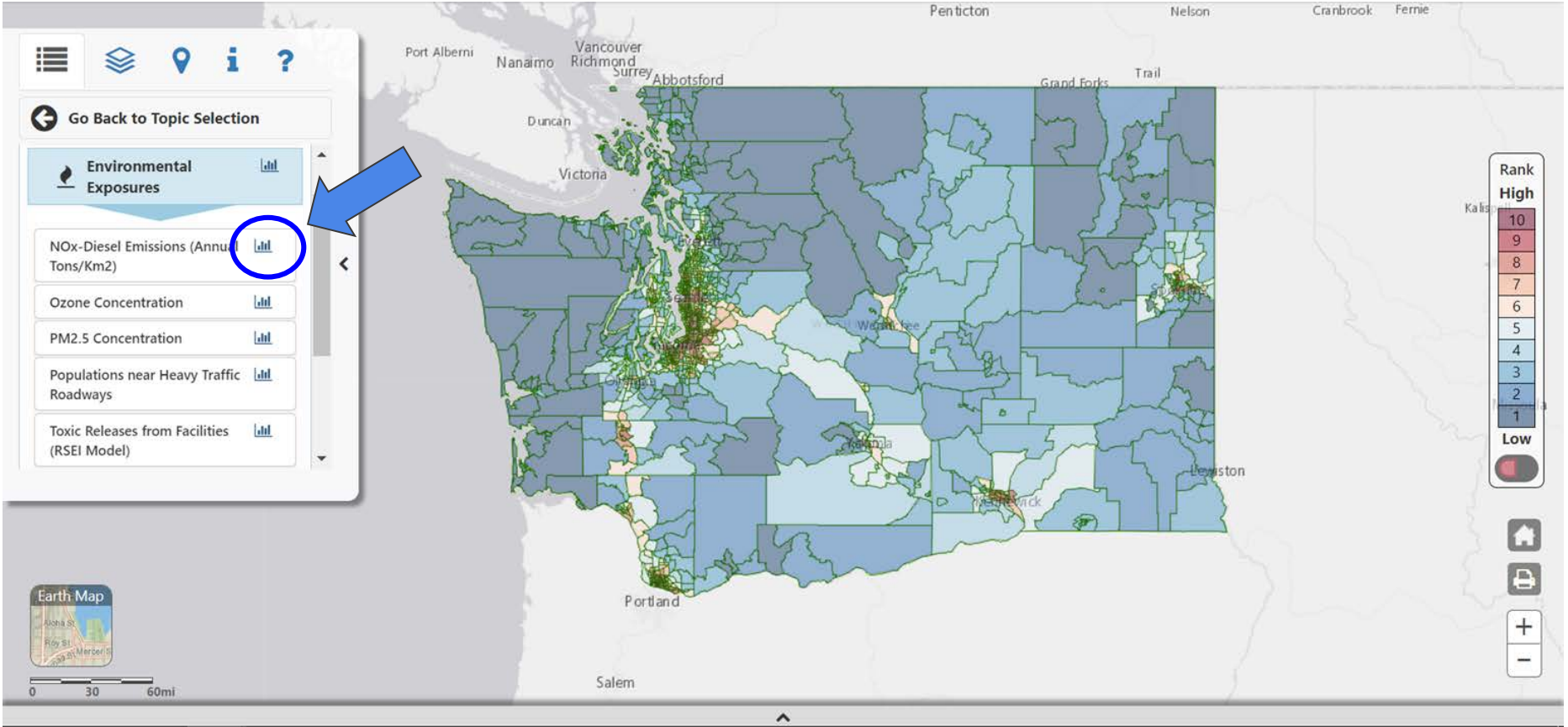




Map Features

- City Limits
- County Boundaries
- Legislative Districts
- School District Boundaries
- Tribal Land Boundary
- Rural/Urban Tiers2&4 CT
- 100-year Flood Zone





Selection Criteria

View two measures together ?

Measure 1

Keyword Search
Search measures

Section
Environment

Topics
Air Quality

Sub Topic
Diesel Emissions

Measure
NOx-Diesel Emissions (Annual Tons/K...

Filters
Geography
Census Tract

Submit

Selection Criteria & Filters

Notes Table Chart Map

Diesel Emission Levels of NOx (A

Information and Resources About Air Quality

Derivation

The basis of the diesel NOx data is Wash AIRPACT-5 modeling domain, which use sources (e.g. non-point and mobile) wer emissions to individual grid-cells, based weighted spatial interpolation.

The census tracts and boundaries used i (water-only tracts) and that the boundar (shipping channels, ferry routes, and po containing all tracts by clicking the chart boundaries used in this analysis come fr bin/geo/shapefiles/index.php?year=201

The 2014 Comprehensive EI data will be <https://ecology.wa.gov/Air-Climate/>

The US EPA Spatial Surrogate Workbo <ftp://ftp.epa.gov/EmisInventory/surroga>

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Submit

Selection Criteria & Filters

Notes Table Chart Map

Diesel Emission Levels of NOx (Annual

Geography: Census Tract, Year: 2014

County Name	Census Tract
n/a	State Total
Adams	53001950100
Adams	53001950200
Adams	53001950300
Adams	53001950400
Adams	53001950500
Asotin	53003960100
Asotin	53003960200
Asotin	53003960300
Asotin	53003960400
Asotin	53003960500
Asotin	53003960600
Benton	53005010100
Benton	53005010201



WHAT'S NEXT?



OTHER INDICATORS BEING CONSIDERED

- Asthma
- Built environment indicators and tree canopy
- Climate change, health risk and vulnerability
- Drinking water contaminants
- Food access
- Marine water quality
- Noise pollution
- Occupational risk
- Pesticide exposure
- Proximity to state-specific cleanup sites
- Surface water quality
 Biological vs chemical
- Wealth inequality



RESPONSE

20 NEWS STORIES TO DATE

-RADIO, BLOGS, NEWSPAPERS ACROSS WA

- K Shastri “Is your neighborhood making you sick? Use this tool to find out”
1/11/2019
- T. Beason in the Seattle Times “These interactive maps offer concrete evidence of the gap between wealthier and whiter census tracts and ones with more people of color, immigrants and poor or working-class households, which are often located nearer to industrial zones, polluted waterways, high-traffic roads and neglected utility infrastructure”
1/14/2019
- M. G. Yerman in Moms Clean Air Force “The mapping tool is free to the public. It is online and interactive so communities can determine where they stand in terms of being located near a toxic site, exposure to poisonous chemicals, density of automobile pollution, and more. All that’s needed is a zip code.” **2/19/2019**

NEWS STORIES TO DATE

-RADIO, BLOGS, NEWSPAPERS ACROSS WA

- J. Robbins in FiberOne the Columbia Basin news “New environmental health disparities map helps find pollution threats in your area...**the tool locates hotspots where environmental pollution is concentrated.**”
1/16/2019
- K.S. Robinson in The Spokesman Review “The Washington Environmental Health Disparities Map shows us that Spokane has one of the worst environmental health disparity and vulnerability to environmental hazards in our state.” **4/18/2019**
- N. Montoni in the Medium Equality blog ” Washington Tracking Network and the University of Washington Department of Environmental and Occupational Health Sciences have launched their Information by Location tool “This platform aggregates economic, demographic, environmental, and health data by census tract, and will be a useful tool in²³ determining who is most impacted by environmental factors, and where they live.”

ACTIONS: A TOOL FOR COMMUNITIES AND AGENCIES

- Dep Ecology “Volkswagen Diesel Settlement” partnered with Dep Health to develop a mapping display to use to disperse funds to communities with high diesel emissions and vulnerable populations.
- Dep Ecology “Public Participation Grants Program” using the Env Health Disparities map to evaluate grant applications.
- Dep Natural Resources “Community Forestry Assis & EJ Grants” encourages applicants to reference EHD map.
- Legislation (in process) “HEAL Act”

HEAL
WASHINGTON!

A healthy environment for ALL.

**PASS A HEALTHY
ENVIRONMENT FOR ALL!**

THE HEAL ACT WOULD:



Define and commit state agencies to adopting a mission of environmental justice



Require agencies to use environmental health disparity data to inform decisions about enforcement, investments and policy



Reduce environmental health disparities.

The Act forms a task force to direct equitable action, including requiring agencies to measure their work against a baseline of environmental health and develop targets for decreasing disparity.



Improve public participation. The task force also recommends agency tools for properly informing and engaging community members in environmental health solutions, including translated services and materials.



Save millions of dollars in health costs by targeting communities facing the greatest environmental health risks.



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ACCESS THE MAPPING TOOL: [HTTPS://FORTRESS.WA.GOV/DOH/WTN/WTNIBL/](https://fortress.wa.gov/doh/wtn/wtnibl/)

UW PROJECT WEBSITE: [DEOHS.WASHINGTON.EDU/WASHINGTON-STATE-ENVMAP](http://deohs.washington.edu/washington-state-envmap)

FRONT AND CENTERED PROJECT WEBSITE: [FRONTANDCENTERED.ORG/EJ-MAP/](http://frontandcentered.org/ej-map/)



Washington State Department of Health is committed to providing customers with forms and publications in appropriate alternate formats. Requests can be made by calling 800-525-0127 or by email at civil.rights@doh.wa.gov. TTY users dial 711.