

Overlays: How To & Data Sources

Washington Environmental Health Disparities (EHD) Map

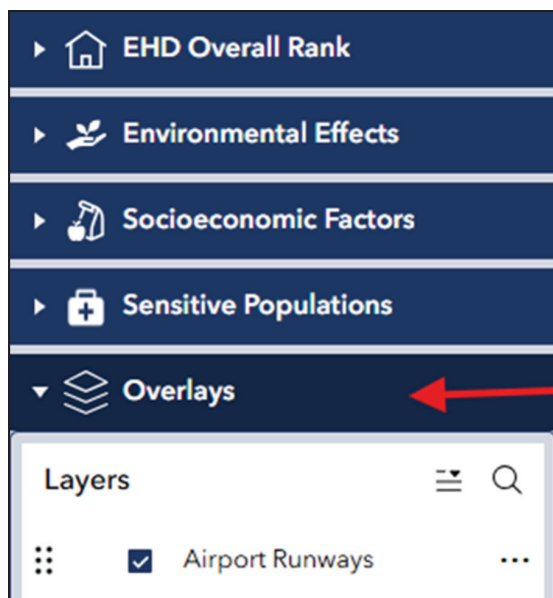


Background

The places where we live, work, and play affect our health — as does our social environment. These factors overlap and interact. Pollution, racism, colonialism, cost of living, and pre-existing health challenges can combine and make things worse.

The primary goal for the Environmental Health Disparities (EHD) map is to identify communities most affected by environmental health risks. The tool ranks these risks by census tract, highlighting communities most burdened by the cumulative impacts of pollution. It also identifies environmental health measures by census tract — providing data-driven insights for communities, policymakers, government leaders, and others.

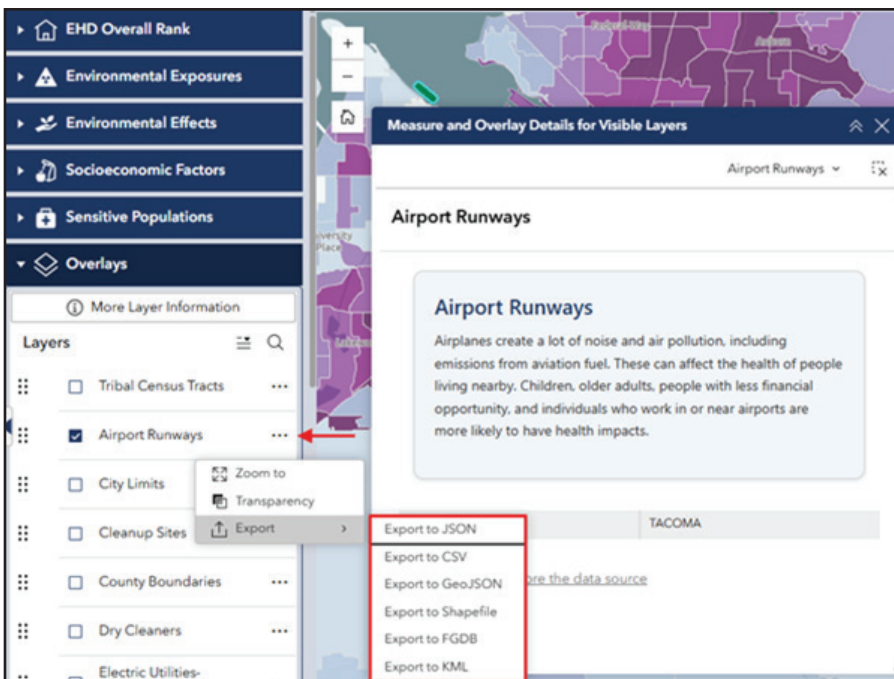
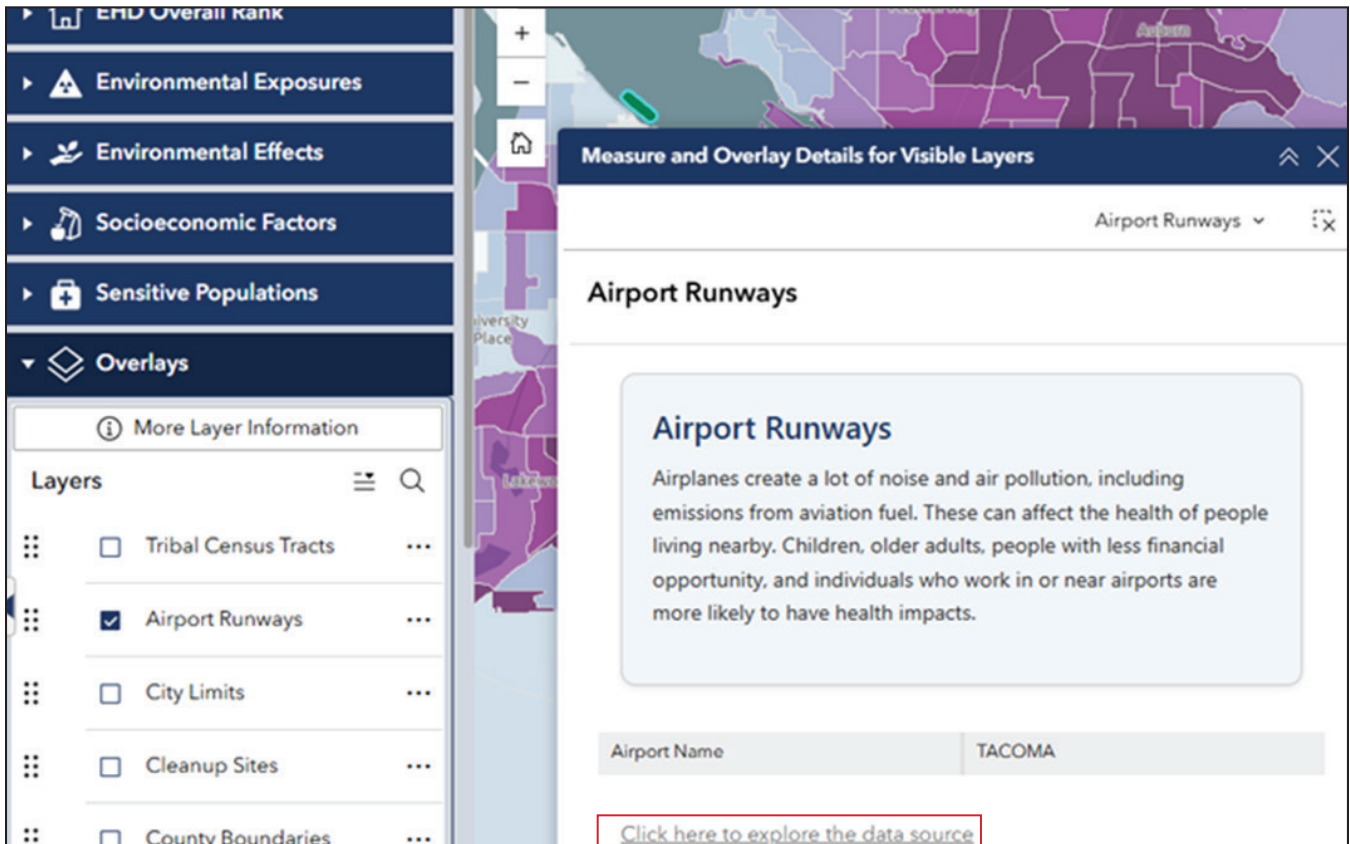
Overlays are different from measures. They are data layers that can be added to the map to provide additional context and visual support. They do not contribute to a community's environmental health risk score.



There are more than 20 overlays on the EHD map. Some use data provided by partner organizations, which means those updates depend on the partners' release schedules. DOH manages other overlays. DOH updates those at least once every 3 years when a new version of the map is published.

To access overlays, select the blue Overlays bar in the EHD map tool. Then check the box next to the overlay you want to view. In the example below, we selected Airport Runways.

If you click directly on the overlay graphic (such as the green line shown below), a pop-up will appear with more information.



You can download data in various formats by clicking the three dots next to the overlay name (shown in the picture to the left). You can also learn more about each overlay by selecting "Click here to explore the data source" at the bottom of the popup.

For assistance or questions about overlays, please contact the EHD map team at ehdmap@doh.wa.gov.

Environmental Health Disparities (EHD) Map *Overlays: How To and Data Sources*

Overlay Data Descriptions

Airport Runways

Description

This overlay shows runways for all official and operational airfields. This uses data from the airport dataset on the National Transportation Atlas Database. This geospatial data comes from the FAA's National Airspace System Resource Aeronautical Data.

Data Source

[Airport Runways, U.S. Department of Transportation Statistics](#)

Last Updated

Dependent on host service

City Limits

Description

This overlay shows the boundaries of incorporated municipalities in Washington state. The Washington State Office of Financial Management records this data.

Data Source

[City Limits, WSDOT Geospatial Open Data Portal](#)

Last Updated

Dependent on host service

Cleanup Sites

Description

This overlay shows locations of properties being decontaminated by the Department of Ecology. Cleanup projects range from small and routine (like cleaning up a leak from an underground storage tank) to large and complex that require engineered solutions.

Data Source

[Cleanup Sites, Department of Ecology Geospatial Open Data Portal](#)

Last Updated

Dependent on host service

County Boundaries

Description

This overlay shows county boundaries in Washington as defined by the 2020 US Census. Please note that this layer does not represent tribal boundaries.

Data Source

[County Boundaries, Office of Financial Management](#)

Last Updated

Dependent on host service

Dry Cleaners

Description

This overlay shows the locations of current and former dry cleaners in Washington state. These locations are important to track because cleaners used in dry cleaning may release toxic chemicals and volatile organic compounds (VOCs) into the environment. VOCs are gases that come from certain solids or liquids. Examples of VOCs include paints, cleaning products, and building materials.

Data Source

[Dry Cleaners, Washington State Geospatial Open Data Portal](#)

Last Updated

September 2025

Electric Utilities-Investor

Description

This overlay shows the boundaries of all investor-owned electric utility companies in Washington state.

Background

This overlay helps utilities identify the highly impacted communities they serve. This information supports their responsibilities under the 2019 Clean Energy Transformation Act (CETA). For more information about DOH's role in CETA, [visit the CETA webpage](#).

Data Source

[Electric Utilities-Investor, Bonneville Power Administration Open Geospatial Portal](#)

Last Updated

Dependent on host service

Electric Utilities-Public

Description

This overlay shows the boundaries of all public electric utility companies in Washington state.

Background

This overlay helps utilities identify the highly impacted communities they serve. This information supports their compliance with the 2019 Clean Energy Transformation Act (CETA). For more information about DOH's role in CETA, [visit the CETA webpage](#).

Data Source

[Electric Utilities-Public, Bonneville Power Administration Open Geospatial Portal](#)

Last Updated

Dependent on host service

Former Orchard Lands

Description

This overlay shows historical orchard boundaries in 5 counties based on old aerial photographs. These counties include Benton, Chelan, Douglas, Klickitat, Okanogan, and Yakima.

Data Source

[Former Orchard Lands, Department of Ecology Geospatial Open Data Portal](#)

Last Updated

No plans to update. This is historical data without changing geography.

Hazardous Waste Sites

Description

This overlay shows the locations of hazardous waste generators and facilities as defined by the Department of Ecology. Communities also identify additional sites. Hazardous waste comes in many forms from industrial manufacturers, such as liquids, solids, gases, or sludges. This can significantly impact the health of nearby communities.

Data Source

[Hazardous Waste Sites, Department of Ecology Geospatial Open Data Portal](#)

Last Updated

September 2025

Historical Redlining

Description

This overlay shows the Home Owners' Loan Corporation (HOLC) neighborhood ranking system, commonly known as redlining. Grades ranged from A to D and were color-coded:

- **A (Best - Green):** Typically upper- or upper-middle-class white neighborhoods. Neighborhoods were considered low risk for banks and other mortgage lenders and described as "ethnically homogeneous."
- **B (Still Desirable - Blue):** Mostly white, non-immigrant neighborhoods considered good investments for mortgage lenders.
- **C (Declining - Yellow):** Often working-class areas with older housing and limited utilities. Residents were commonly first or second-generation European immigrants
- **D (Hazardous - Red):** Often assigned based on race. These areas typically consisted of minority populations and were more likely to be near industrial zones with older housing.

Overlays are available for Spokane, Seattle, and Tacoma. These were the only Washington cities where HOLC produced rankings.

Data Source

[Historical Redlining, Washington State Geospatial Open Data Portal](#)

Last Updated

September 2025 (No plans to update. This is historical data without changing geography.)

Languages Spoken at Home

Description

This overlay shows languages spoken at home by students in Pre-K through Grade 12 in Washington public schools. This is based on the 2024-2025 school year district boundaries in the [OSPI School District Directory](#). It includes all 295 public school districts, as well as charter districts and Tribal compacts.

Data Source

[Languages Spoken at Home, Washington State Geospatial Open Data Portal](#)

Last Updated

September 2025

Legislative Districts

Description

This overlay shows Washington state legislative districts as defined by RCW 44.05.

Data Source

[Legislative Districts, Washington State Geospatial Open Data Portal](#)

Last Updated

Dependent on host service

Environmental Health Disparities (EHD) Map *Overlays: How To and Data Sources*

Licensed Childcare Centers

Description

This overlay shows all center-based childcare facilities licensed by the Department of Children, Youth, and Families (DCYF).

Data Source

[Licensed Childcare Centers, Washington State Geospatial Open Data Portal](#)

Last Updated

September 2025

Long Term Care - Nursing Homes

Description

This overlay shows the locations of long term care nursing homes licensed by the Department of Social and Health Services. This includes intermediate care facilities for individuals with intellectual disabilities.

Data Source

[Long Term Care – Nursing Homes, Washington State Geospatial Open Data Portal](#)

Last Updated

Dependent on host service

Long Term Care - Residential Care

Description

This overlay shows long term care facilities licensed by the Department of Social and Health Services. This includes adult family homes, assisted living facilities, and enhanced services facilities.

Data Source

[Long Term Care – Residential Care, Washington State Geospatial Open Data Portal](#)

Last Updated

Dependent on host service

Ozone Peak Annual Concentration

Description

This overlay represents 5 km grid cell estimates of the 4th highest annual ozone design value. This is measured in parts per billion (ppb).

Data Source

[Ozone Peak Annual Concentration, Washington State Geospatial Open Data Portal](#)

Last Updated

September 2025

PM2.5 Annual Concentration

Description

This overlay shows 5 km grid cell estimates of the annual PM2.5 design value ($\mu\text{g}/\text{m}^3$), with wildfire-influenced days excluded.

Data Source

[PM2.5 Annual Concentration, Washington State Geospatial Open Data Portal](#)

Last Updated

September 2025

PM2.5 Daily Concentration

Description

This overlay shows 5 km grid cell estimates of the 24-hour PM2.5 design value in ($\mu\text{g}/\text{m}^3$), with wildfire-influenced days excluded.

Data Source

[PM2.5 Daily Concentration, Washington State Geospatial Open Data Portal](#)

Last Updated

September 2025

Railroads

Description

This overlay shows major rail lines across Washington state.

Data Source

[Railroad Tracks, Washington State Geospatial Open Data Portal](#)

Last Updated

Dependent on host service

Superfund Sites

Description

This overlay identifies superfund (National Priorities List) sites. Superfund sites are where hazardous waste has historically been dumped or spilled. These often include mining grounds, manufacturing sites, processing facilities, and landfills. Cleanup efforts are underway through EPA's Superfund program.

Data Source

[Superfund Sites, Department of Ecology Geospatial Open Data Portal](#)

Last Updated

Dependent on host service

Tacoma Smelter Plume

Description

This overlay shows the area contaminated by the Tacoma smelter plume. For nearly a century, the Asarco Company operated a copper smelter in Tacoma. Airborne pollutants settled across more than 1,000 square miles of the Puget Sound basin. Arsenic, lead, and other heavy metals remain in the soil. Additional spatial data for Tacoma is available on the Tacoma Maps Portal.

Data Source

[Tacoma Smelter Plume, Washington Department of Ecology](#)

Last Updated

Dependent on host service

Temporary Worker Housing

Description

This overlay shows locations of temporary worker housing regulated by the Department of Health.

Data Source

[Temporary Worker Housing, Washington State Geospatial Open Data Portal](#)

Last Updated

Dependent on host service

Transportation Noise

Description

This overlay displays transportation noise levels from 2020. This incorporates road, freight and passenger rail, and aviation sources.

Data Source

[Transportation Noise, Bureau of Transportation Statistics](#)

Last Updated

Dependent on host service

Tribal Census Tracts

Description

This overlay displays census tracts from 2020. They contain Tribal lands as defined by the Tribal land boundaries layer.

Data Source

[Tribal Land Boundaries, Department of Ecology Geospatial Open Data Portal](#)

[Census Geographic Files, Office of Financial Management](#)

Last Updated

As needed

Environmental Health Disparities (EHD) Map *Overlays: How To and Data Sources*

Tribal Health Services

Description

This overlay shows the locations of Tribal health facilities. This includes hospitals, dental clinics, behavioral health centers, and health clinics.

Data Source

[Tribal Health Centers, Indian Health Services](#)

Last Updated

Dependent on host service

Tribal Land Boundaries

Description

This overlay shows 3 categories of Tribal lands:

- **Reservations:** Officially recognized lands (U.S Bureau of Indian Affairs)
- **Disputed lands:** Areas recognized by some entities as part of a reservation, but the title is disputed by other parties (U.S Government)
- **Off-reservation Tribal lands:** Lands acquired or held in trust for Tribal use outside reservation boundaries (county parcel layers)

Data source

[Tribal Land Boundaries, Department of Ecology Geospatial Open Data Portal](#)

Last Updated

Dependent on host service

Watershed Boundaries

Description

Watershed boundaries are land areas where all precipitation (or water) drains to a common point, such as a river, stream, or lake. This overlay shows watershed boundaries for Washington state.

Data Source

[Watershed Boundaries, Department of Ecology Geospatial Open Data Portal](#)

Last Updated

Dependent on host service

For More Information

To learn more about the EHD Map update process and detailed methods, please refer to the [EHD Map Report](#).

Contact Us

For questions or more information, email EHDMap@doh.wa.gov.



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