



City of Toppenish Climate Element

Public Engagement Plan

Draft

March, 2025



**CITY OF
TOPPENISH**

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Background

The WA Legislature passed House Bill 1181 into law in 2023 which requires Washington Cities to update their Comprehensive Plan to build community resilience and reduce greenhouse gas emissions that contribute to global climate change. This law integrates climate planning into Washington’s Growth Management Act (GMA) by including the following:

- Adds a GMA climate change and resiliency goal to: “ensure that comprehensive plans, development regulations, policies, plans and strategies under RCW 36.70A.201 and chapter 47.80 RCW adapt to and mitigate the effects of a changing climate; support reductions in greenhouse gas emissions and per capita vehicle miles traveled; prepare for climate impact scenarios; foster resiliency to climate impacts and natural hazards; protect and enhance environmental, economic, and human health and safety, and enhance environmental justice.”

The WA State Department of Commerce developed an interim guidance document in December 2023 for cities to follow as they work towards implementation.

The City of Toppenish received a \$150,000 grant from Commerce in 2023, funded by Washington’s Climate Commitment Act.

The WA Department of Commerce climate planning grant is supported with funding from Washington’s Climate Commitment Act. The CCA supports Washington’s climate action efforts by

putting cap-and-invest dollars to work reducing climate pollution, creating jobs, and improving public health. Information about the CCA is available at www.climate.wa.gov



Purpose

Early and continuous public engagement is an important component of any long-range planning effort. The purpose of this Public Engagement Plan is to reach a diverse population in equitable and meaningful ways. Through public engagement, the city hopes to better understand how the effects of climate change are felt throughout the community. The plan provides for robust public participation which is vital to creating an inclusive and usable Climate Element.

Climate Policy Advisory Team Roles and Responsibilities

Creating and seating members onto a Climate Policy Advisory Team (CPAT) is the first step toward the creation of a new Climate Element. The group will meet periodically throughout the duration of the project, which is scheduled to run through May 2025. Policy team member responsibilities will include:

- Advising staff on project priorities;
- Assist with development of the public participation plan and vision statement;
- Reviewing and providing feedback on key project deliverables;
- Developing goal and policy recommendations; and,
- Encouraging community members to participate in the public process.

A press release was issued in August 2024, and again in November 2024, to invite interested residents to apply to join the group. A renewed effort began in January 2025. The CPAT is composed of the following individuals:

| Name | Organization |
|------------------------|---------------------------------|
| Jesus (Manuel) Aguirre | Planning Commission |
| Monica Saldivar | Toppenish School District |
| Andrew Hattori | CED Director, City of Toppenish |
| Joseph Calhoun | HLA, Project Consultant |

Public Engagement Strategy

In order to engage the public in an equitable manner, the city proposes early and continuous opportunities to provide public comment through the project timeline. The primary ways that Toppenish will reach the public is through the project webpage and public meetings.

Project Webpage

The city established a project webpage dedicated to the Climate Element. Draft documents will be available for public review at various points throughout the planning period. Interested stakeholders will be able to sign up to be included in a mailing list to receive regular updates throughout the planning period. Notices of upcoming public meetings will be posted online when scheduled, and linked on the City's Facebook page. <https://www.toppenish.gov/planning-commission/page/climate-resilience-planning>

Public Meetings

The city anticipates a wide variety of public and stakeholder engagement opportunities throughout this process. Members of the public are invited to submit written comment about the Climate Element via email or in writing. Public meetings, along with the final council adoption,

will be advertised in the Sunnyside Sun. A total of four public meetings are scheduled, in addition to the final adoption at City Council, as follows:

Meeting 1 – Project kickoff

The project kickoff meeting was held on November 20, 2024, at the Toppenish Planning Commission meeting. An outline of the project was presented including background information, formation of the CPAT, the importance of meaningful public engagement, necessary steps to complete the Climate Element, and a timeline.

Interested stakeholders were encouraged to attend the kickoff meeting to discuss next steps and provide contact information so they can be informed about key timelines and deliverables.

Meeting 2 – Showcase data exhibits

Meeting 2 will include the presentation of a significant amount of climate data. The initial phase of this project includes using a climate mapping tool developed by the University of Washington to identify and explore potential climate hazards. A secondary component of this meeting will be presenting a compilation of existing goals and policies that deal, either directly or indirectly, with climate resilience found in the city's comprehensive plan, shoreline master program, critical areas ordinance, and work completed for the Yakima County multi-jurisdictional hazard mitigation plan.

Meeting 3 – Review planning process and present new goals and policies

Meeting 3 will outline a review of the planning process to-date and include the presentation of new or modified goals and policies designed to fill climate resiliency gaps. This will be the final public meeting prior to development of the draft plan.

Meeting 4 – Present draft Climate Element and receive final public comment

The final scheduled public meeting is where the draft Climate Element will be presented to the Planning Commission. The draft will include a summary of the previous public engagement meetings along with a list of all comments received. This will be the final meeting to submit public comments prior to presentation of the Climate Element to City Council for adoption.

Final adoption

Once all public comments have been received and implemented into the draft Climate Element, it will be presented to City Council for adoption at an open public meeting.

In order to encourage participation and engage a wide range of stakeholders and interested parties, public meetings will be scheduled in the evening, where practical, and may include light

Climate Resilience Planning

News Release Date: 09-24-2024

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City of Toppenish Climate Resilience Planning

With the passage of E2SHB 1181 during the 2023 Washington state legislative session, the City of Toppenish is now required to add a Climate Change Element to its Comprehensive Plan.

The legislation creates a new mandate that spans several elements in the comprehensive plan, such as transportation, land use, parks and recreation, capital facilities and utilities, environmental, and economic development. The new Climate Element needs to include a resilience sub-element.

The Washington State Department of Commerce developed guidance for local governments to follow as part of this legislation. The City of Toppenish received grant funding through the Climate Commitment Act to complete this work.

refreshments. Meeting dates and times will be advertised on the City's website as they are scheduled.

Tribal Engagement Strategy

New GMA requirements for Tribal Coordination were established in 2022 by House Bill 1717. RCW 36.70A.040 allows tribes to voluntarily participate in the local comprehensive planning process. The City of Toppenish currently engages with the Yakama Nation through the environmental review process. Additional engagement during this Climate Update process will occur if requested by affected tribes.



Inclusive Outreach

The City of Toppenish will provide multiple opportunities for public engagement, in order to reach all segments of the population. Based on demographic data, the City of Toppenish is 84% Hispanic, 18.3% White, and 9.36% Native (2020 Decennial Census). In order to reach all demographic segments, the city plans on providing notice documents and website information in English and Spanish. The webpage has a built-in translator that is accessible through the 'select language' icon at the bottom of the page.

Outreach Goals

Based on the Demographics, the Department of Health Information by Location Tool, and the White House Council on Environmental Quality Climate and Economic Justice Screening Tool the City of Toppenish has developed the following Outreach Goals and Outcomes (See Appendix A for complete Equity Analysis data):

Outreach Goal 1:

Engage the community at-large so that all residents affected by climate change can voice their opinion and contribute to the process.

Outcome 1.1:

Receive a wide variety of comments and opinions from the community.

Outcome 1.2:

Identify alternative methods of outreach and communication, which may change throughout the project timeline, to reach the highest number of residents and interested stakeholders.

Outreach Goal 2:

Through equitable public engagement, identify segments of the community who may be more affected by climate change.

Outcome 2.1:

Ensure that any barriers to achieving meaningful outreach to certain segments of the community such as language, internet access, time-of-day (for public meetings), or others are remedied through appropriate accommodations.

Outcome 2.2:

If necessary based on community requests, provide both an in-person and electronic option for public meetings.

Project Schedule

Based on grant requirements, the City plans on completing this effort by June 2025. Additional project components include the following:

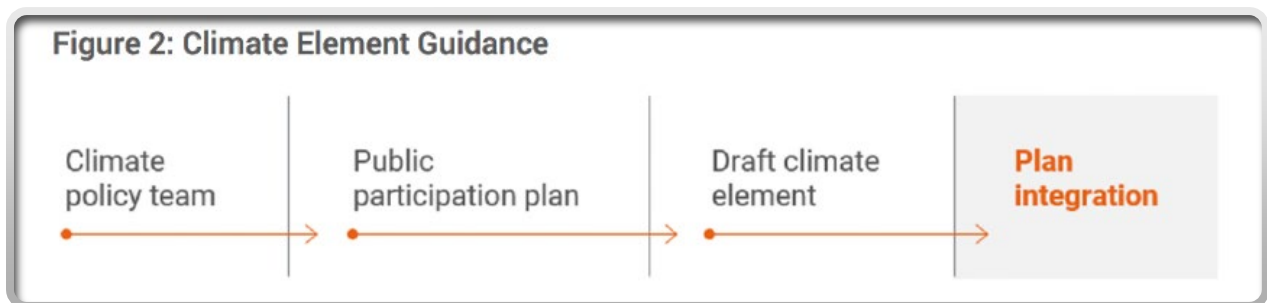


Figure: Dept. of Commerce Climate Element Planning Guidance – Dec. 2023

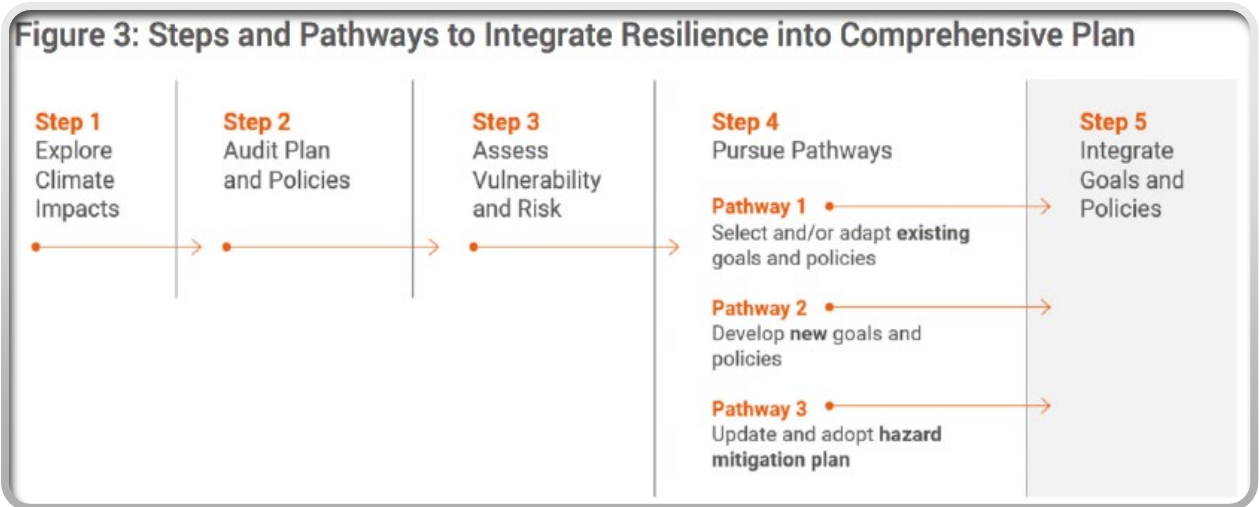


Figure: Dept. of Commerce Climate Element Planning Guidance – Dec. 2023

Contact: Andrew Hattori, Community and Economic Development Director, at Andrew.hattori@cityoftoppenish.us

Appendix A: Equity Analysis

Demographics



The City of Toppenish has a population of 8,854 people, 84% of whom are Hispanic or Latino. The city has 2,415 households and an average household size of 3.94 persons. Spanish is the primary language spoken at home at 74.5%; 25.1% of homes speak English only.

The median age in Toppenish is 28.1. 31.3% of the population is under 18 years old and 11.9% of the population is over the age of 65.

The median household income in Toppenish is \$64,327 which is similar to Yakima County (\$63,865) and below WA State (\$91,306). Approximately 8.4% of Toppenish residents have a bachelor's degree or higher.

The city has a 61.5% employment rate, with the top 3 sectors being Agriculture, forestry, fishing and hunting, and mining (29.8%), Educational services, and health care and social assistance (17.5%), and Manufacturing (11.5%).



About 62.0% of homes are owned in the city limits. The median gross rent for rental housing is \$945 per month.

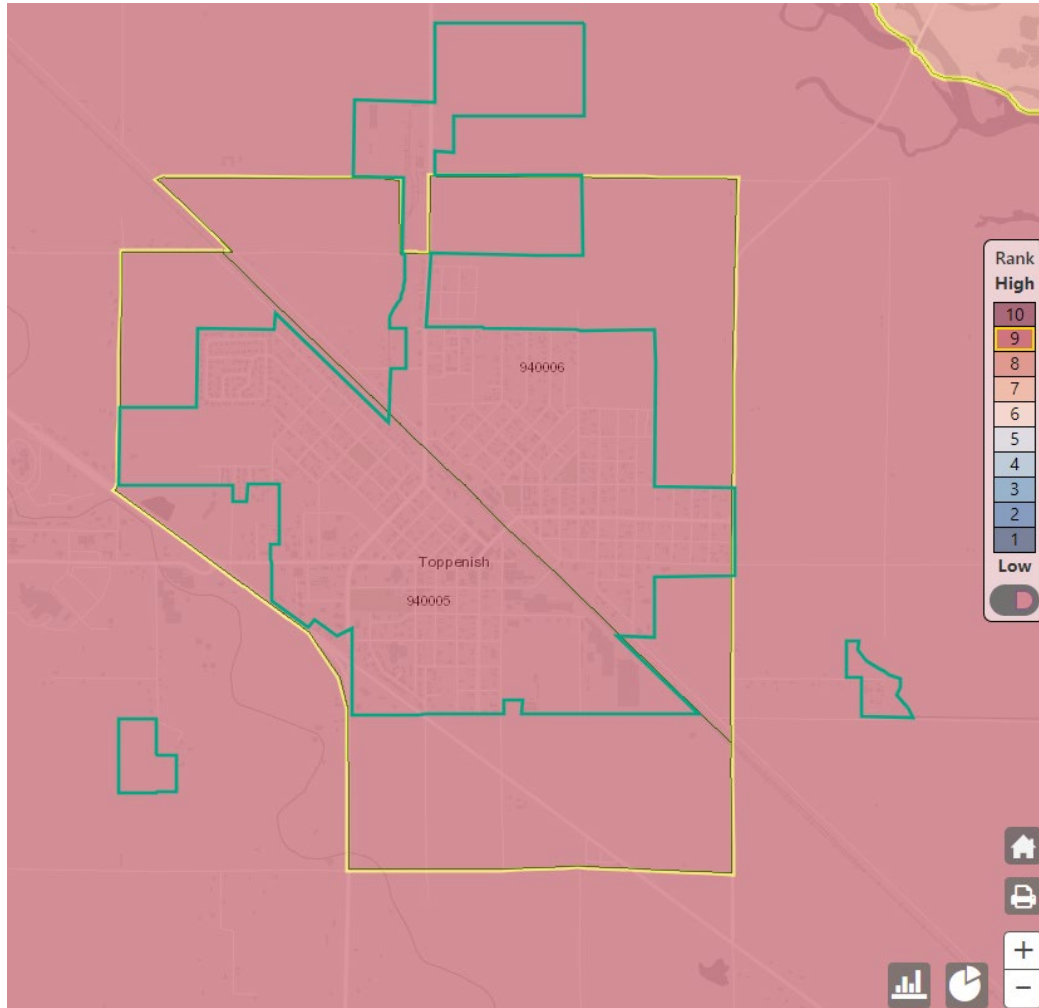
[Toppenish city, Washington - Census Bureau Profile](#)

WA State Department of Health

The Washington State Department of Health developed a mapping tool for health disparities that displays location-based information to help identify health disparities in a community. The mapping tool includes a variety of datasets showing information on health outcomes, social determinants of health, and economic determinants of health. The City of Toppenish lies within three Census Tracts: 53077940005, 53077940006 and 53077940002. For the purposes of this analysis, only tracts 53077940005 and 53077940006 will be used because the majority of the population lies within these tracts. Tract 53077940002 includes two areas separated from the City Limits: the cemetery to the SW and the Wastewater Treatment Plant to the east. In addition, there are approximately 135 acres on the north side of the city limits that include railroad property, some industrial use, and mostly vacant land. Due to the size of tract 53077940002, which spans from Granger to Wapato, and the limited city area within, it will not be used in the analysis.

Environmental Health Disparities

Overall, the City of Toppenish ranks 9 out of 10 for Environmental Health Disparities, across both Census Tracts.



Environmental Exposures

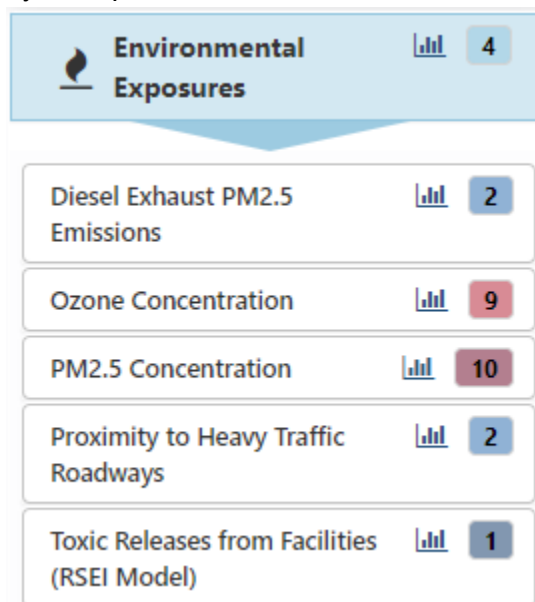
For overall Environmental Exposures, the City of Toppenish ranks between 3 and 4 out of 10, depending on census tract. Across both tracts, the levels of Ozone Concentration and PM2.5 Concentration rank 9/10 and 10/10, respectively.

Ozone Concentration: Ozone is a highly reactive gas consisting of oxygen atoms. Ozone is both anthropogenic and naturally occurring in the upper atmosphere, in both the stratosphere and the troposphere (ground level). While ozone is naturally occurring in the stratosphere, significant amounts of ozone in the troposphere are formed primarily from photochemical reactions between air pollutants such as volatile organic compounds (VOC) and nitrogen oxides (NOx). Sources of these air pollutants include motor vehicles, biogenic sources, solvent use, residential wood combustion, gasoline pumps, and industrial point sources. Depending on sunlight and emission patterns, ozone levels shift.

Significant health threats exist with exposure to high levels of ozone. For those living in areas of serious ozone exposure, health risks include higher rates of asthma and increased daily deaths. In addition, exposure to ozone has been associated with increased cardiovascular and respiratory mortality.

PM2.5 Concentration: Particulate matter is a chemical mixture of particles with diameters that are 2.5 micrometers and smaller. These particles come from many different sources such as residential wood combustion, wildfires and other outdoor burning, dust, industrial point sources, commercial cooking, and motor vehicles. Particulate matter can be emitted directly from a source or form through secondary chemical reactions of chemicals like sulfur oxides and nitrogen oxides. The composition of PM2.5 depends on seasonal periods, geography, and weather patterns, on both local and regional scales.

Particulate matter is extremely hazardous because the small particles can penetrate the bloodstream and be absorbed deep into organs, resulting in poor health outcomes. The elderly, those with preexisting respiratory health conditions, and children are most susceptible to the significant health impacts posed by PM2.5.



Environmental Effects

The City of Toppenish ranks between 8 out of 10 for Environmental Effects. Across both census tracts, Toppenish ranks between 9/10 for Lead Risk from Housing, 10/10 for Proximity to Risk Management Plan Facilities, and 10/10 for Wastewater Discharge.

Lead Risk From Housing: Lead poisoning is a serious but preventable public health issue. Lead is a naturally-occurring toxic heavy metal. Much of the lead found in human environments is due to the use of lead in products such as gasoline and house paint. There are no known safe levels of lead exposure, and even small amounts can lead to significant health implications. Exposure can lead to chronic health conditions, neurological defects, and nervous system damage. Those that live in low socioeconomic housing or in poverty are more likely to live in older homes and be exposed to lead poisoning.

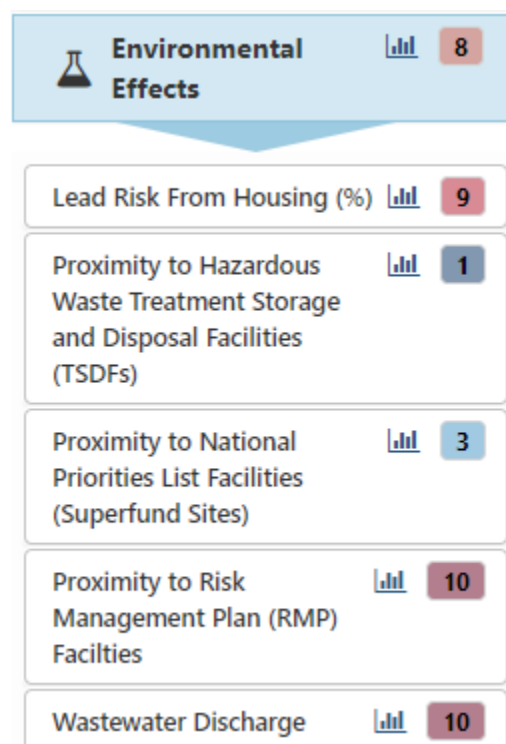
Proximity to Risk Management Plan Facilities: Toxic releases from facilities entails the safe management of toxic substances and occupational risk. Limiting occupational exposure and occupational hazards is key to reducing accidents and unwanted toxic exposures.

Communities living in areas where facilities release toxic chemicals are at greater risk of poor outcomes caused by accidents or unsafe management practices. Studies have shown that communities of color and those of low socioeconomic backgrounds are more likely to live in surrounding areas, placing them at higher risk of potential health impacts such as cardiovascular disease and cancer.

According to the Clean Air Act, RMP plans are federally required for toxic facilities that release extremely hazardous chemical substances to develop a risk management plan that is updated every 5 years. These plans are valuable for first responders and ensure that safe practices are in place to respond to chemical emergencies in the community and improve accident prevention.

Wastewater Discharge: Wastewater refers to the used waste and solids that are released as household sewage. This wastewater flows into a wastewater treatment plant and is stored in underground tanks. The discharge from wastewater plants can pollute the nearby groundwater and surface water if not carefully managed. In such cases, the contaminated storage water can lead to poor health outcomes for many communities that use that water as their drinking water supply. In addition, leaked wastewater could poison and degrade soil and emit dangerous odors significantly impacting farmers.

Communities of color, ethnic minorities, and those in low socioeconomic conditions bear the burden of disease and are most vulnerable to poor health outcomes such as hypertension, cancer, and waterborne infections.



Socioeconomic Factors

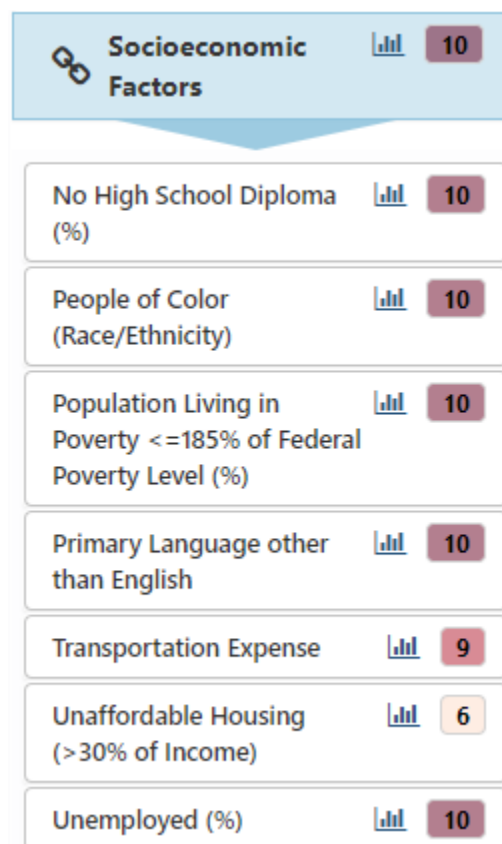
The City of Toppenish ranks 10/10 for Socioeconomic Factors across both census tracts. This metric looks at several compounding factors including: No High School Diploma (10/10), People of Color (10/10), Population Living in Poverty (10/10), Primary Language other than English (10/10), Transportation Expense (9/10), Unaffordable Housing (6/10) and Unemployed (10/10).

No High School Diploma: Educational attainment is a very important social determinant of health as it provides insight into individual and community health and well-being for various health outcomes. Those who have a high school diploma or higher have less risk of mortality caused by particulate matter pollution. Communities with lower educational attainment are more susceptible to developing asthma and other air pollution-related cardiopulmonary health outcomes.

Population Living in Poverty: Poverty is a primary social determinant of health and is strongly associated with exposure to environmental pollutants. Low-income communities are significantly impacted by their socioeconomic status. Economic status shapes one's nutrition, occupation, housing, access to healthcare resources, and more. Due to increased psychosocial stress and decreased resilience, individuals experiencing poverty bear poor mental and physical health. Furthermore, many do not have the resources or access to healthcare services or delay healthcare due to financial insecurity. Thus, underlying pre-existing health conditions in low income communities may be exacerbated by exposure to environmental pollutants. Individuals in low socioeconomic status face higher concentrations of air pollutants, making them more susceptible to chronic respiratory health outcomes such as asthma. In addition, those experiencing poverty may not have access to safe or healthy living conditions, leading to additional vulnerability to infectious diseases and exposure to environmental hazards.

Primary Language other than English: Linguistic isolation is measured by the US Census Bureau in households to assess if all members 14 years of age or above have at least some difficulty speaking English. Among individuals and communities that have high levels of linguistic isolation, there is a concern about the limited access to health education and health services. Lack of proficiency may place individuals at the loss of clear communication at times of environmental risk or emergencies such as with hazards and air pollution. In addition, households that are linguistically limited might experience greater racial discrimination, social isolation, and increased exposure to environmental pollution.

Transportation Expense: Transportation affordability captures many of the socioeconomic conditions that affect social health and well-being. As a social determinant of health, this indicator may influence the effect of exposure to environmental pollution. Those that experience a transportation burden may be at a greater risk of living in areas of environmental degradation



and increased levels of air pollution. Individuals living in areas of heavy traffic and limited transportation options may be exposed to a greater extent of air pollution and experience vulnerability to respiratory health outcomes and increased mortality. Additionally, those that experience transportation burdens may delay medical care and services and suffer more long-term impacts due to financial insecurity or distance to resources. Low-income and financially vulnerable individuals may also experience greater periods of instability, resulting in increased vulnerability to chronic and acute health conditions. Such health effects include stress and depression.

Unaffordable Housing: The housing burden captures many of the socioeconomic conditions that affect social health and well-being. As a social determinant of health, this indicator may influence the effect of exposure to environmental pollution. Those that live with a housing burden may be at a greater risk of living in areas of environmental degradation and increased levels of air pollution. Individuals experiencing a housing burden are at greater risk of exposure to air pollution and higher mortality. Those that experience a housing burden may delay medical care services and suffer more long-term impacts due to financial insecurity. Low-income and financially vulnerable households may also experience greater periods of residential instability, and increased vulnerability to chronic and acute health conditions. Such health effects include stress and depression.

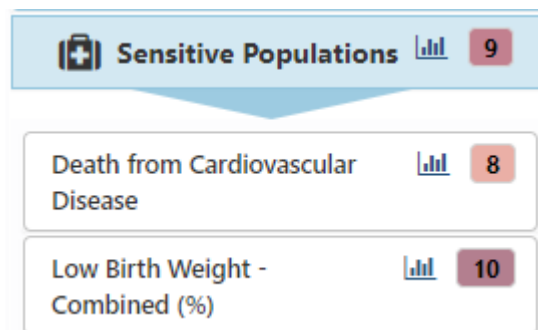
Unemployed: Unemployment is a major factor when considering individual health and well-being. Unemployment can significantly impact mental and physical health as financial and emotional stress increases. This stress may lead to an increased susceptibility to environmental pollutants. With unemployment, individuals may experience the burden of financial strain, resulting in reduced access to healthcare resources, insurance, and nutritious food, leading to an increased risk of poor health outcomes related to environmental pollutants. When experiencing unemployment, individuals experience high levels of biological stress and long-term unemployment may lead to increased morbidity and mortality. Unemployment may lead individuals to seek housing in lower-income areas, which are often associated with higher levels of air pollution and environmental decline. In addition, in communities with high rates of unemployment, the increased cardiovascular disease persists.

Sensitive Populations

Toppenish ranks between a 8 and a 9 out of 10 for Sensitive Populations, based on census tract. This health disparity metric looks at Death from Cardiovascular Disease (9-10/10) and Low Birth Weight (5-10/10).

Death from Cardiovascular Disease: This measure was developed using cardiovascular disease mortality data from the Washington State DOH Center for Health Statistics. The Center for Health Statistics collects information on the deaths of Washington state residents from their death certificates, including the deaths of Washington state residents that died in other states or in Canada.

Mortality from cardiovascular diseases represents the proportion of deaths to a population due to cardiovascular disease. The rate represents the age adjusted rate per 100,000 population.



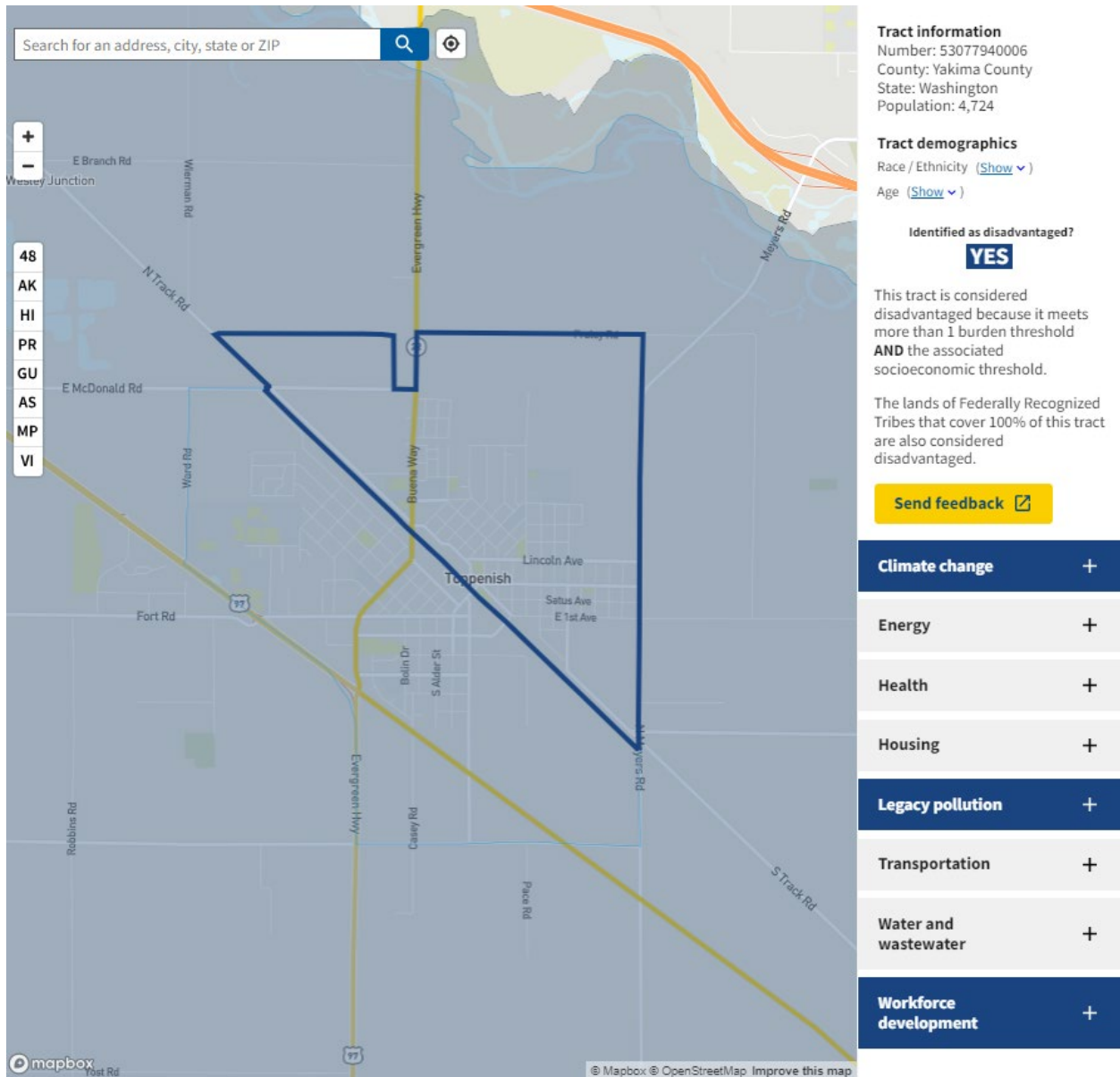
The prevalence of cardiovascular disease in a community truly captures the population susceptible to environmental risk factors; however, no such publicly available data exists. Mortality data may underestimate the true population with pre-existing heart disease in the community.

Low Birth Weight: Outcomes such as Low birth weight (LBW) is a globally recognized marker for population health due to existing disparities because certain demographics put infants at risk of LBW. For example, Black or Hispanic women have a higher risk of giving birth to a LBW baby, or older women have higher risk of delivering a LBW baby. Additional risk factors associated with LBW include nutritional status, lack of prenatal care, stress, and maternal smoking. There is evidence that environmental stressors not only impact LBW infants throughout their lifetime but also put infants at risk for LBW before birth.

Climate and Economic Justice Screening Tool

The White House Council on Environmental Quality developed a Climate and Economic Justice Screening Tool that examines overburdened and underserved areas at the census tract level. As with the above analysis, only Census Tracts 53077940005 and 53077940006 will be included.

[Explore the map - Climate & Economic Justice Screening Tool \(geoplatform.gov\)](https://geoplatform.gov)



| Climate change | — | Energy | — | Health | — |
|---|--|---|--|---|--|
| Expected agriculture loss rate Economic loss to agricultural value resulting from natural hazards each year | 72nd not above 90 th percentile | Energy cost Average annual energy costs divided by household income | 72nd not above 90 th percentile | Asthma Share of people who have been told they have asthma | 79th not above 90 th percentile |
| Expected building loss rate Economic loss to building value resulting from natural hazards each year | 40th not above 90 th percentile | PM2.5 in the air Level of inhalable particles, 2.5 micrometers or smaller | 77th not above 90 th percentile | Diabetes Share of people ages 18 years and older who have diabetes other than diabetes during pregnancy | 75th not above 90 th percentile |
| Expected population loss rate Fatalities and injuries resulting from natural hazards each year | 95th above 90 th percentile | AND Low income People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed | 91st above 65 th percentile | Heart disease Share of people ages 18 years and older who have been told they have heart disease | 35th not above 90 th percentile |
| Projected flood risk Projected risk to properties from projected floods, from tides, rain, riverine and storm surges within 30 years | 98th above 90 th percentile | | | Low life expectancy Average number of years a person can expect to live | 63rd not above 90 th percentile |
| Projected wildfire risk Projected risk to properties from wildfire from fire fuels, weather, humans, and fire movement in 30 years | 89th not above 90 th percentile | | | AND Low income People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed | 91st above 65 th percentile |
| AND Low income People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed | 91st above 65 th percentile | | | | |

| Housing — | | Legacy pollution — | | Transportation — | |
|---|---|---|---|---|---|
| Housing cost Share of households making less than 80% of the area median family income and spending more than 30% of income on housing | 69 th not above 90 th percentile | Abandoned mine land Presence of one or more abandoned mine land within the tract | No | Diesel particulate matter exposure Amount of diesel exhaust in the air | 33 rd not above 90 th percentile |
| Lack of green space Amount of land, not including crop land, that is covered with artificial materials like concrete or pavement | 89 th not above 90 th percentile | Formerly Used Defense Sites Presence of one or more Formerly Used Defense Site within the tract | -- missing data | Transportation barriers Average of relative cost and time spent on transportation | 70 th not above 90 th percentile |
| Lack of indoor plumbing Share of homes without indoor kitchens or plumbing | 62 nd not above 90 th percentile | Proximity to hazardous waste facilities Count of hazardous waste facilities within 5 kilometers | 8 th not above 90 th percentile | Traffic proximity and volume Count of vehicles at major roads within 500 meters | 45 th not above 90 th percentile |
| Lead paint Share of homes that are likely to have lead paint | 78 th not above 90 th percentile | Proximity to Risk Management Plan facilities Count of Risk Management Plan (RMP) facilities within 5 kilometers | 97 th above 90 th percentile | AND | |
| AND | | Proximity to Superfund sites Count of proposed or listed Superfund (or National Priorities List (NPL)) sites within 5 kilometers | 35 th not above 90 th percentile | Low income People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed | 91 st above 65 th percentile |
| Low income People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed | 91 st above 65 th percentile | AND | | | |
| | | Low income People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed | 91 st above 65 th percentile | | |

Water and wastewater

Underground storage tanks and releases

Formula of the density of leaking underground storage tanks and number of all active underground storage tanks within 1500 feet of the census tract boundaries

2nd
not above 90th
percentile

Wastewater discharge

Modeled toxic concentrations at parts of streams within 500 meters

80th
not above 90th
percentile

AND

Low income

People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed

91st
above 65th
percentile

Workforce development

Linguistic isolation

Share of households where no one over age 14 speaks English very well

94th
above 90th
percentile

Low median income

Comparison of median income in the tract to median incomes in the area

47th
not above 90th
percentile

Poverty

Share of people in households where income is at or below 100% of the Federal poverty level

83rd
not above 90th
percentile

Unemployment

Number of unemployed people as a part of the labor force

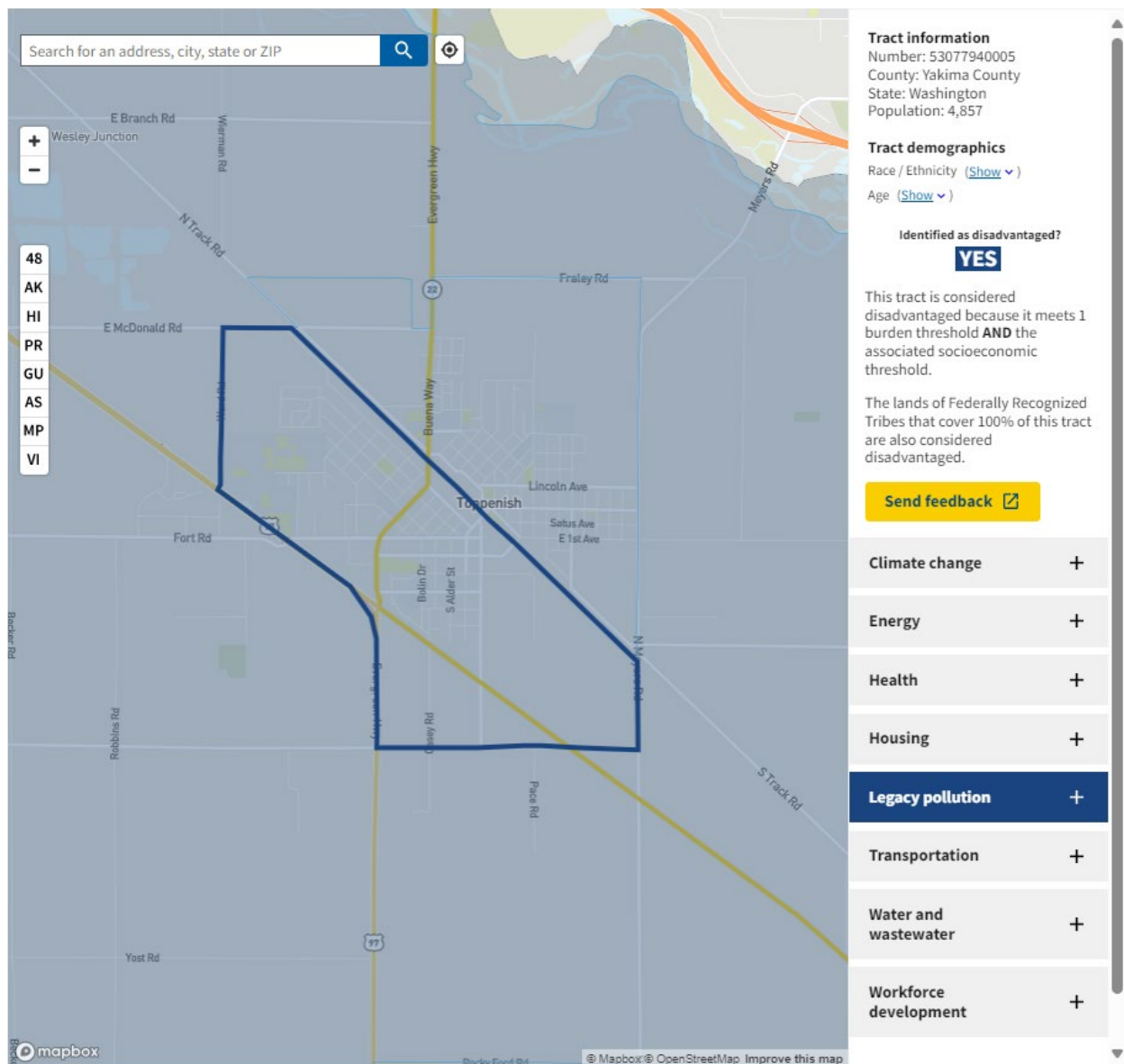
83rd
not above 90th
percentile

AND

High school education

Percent of people ages 25 years or older whose high school education is less than a high school diploma

50%
above 10% percent



| Climate change | — | Energy | — | Health | — |
|---|---|---|---|---|---|
| Expected agriculture loss rate Economic loss to agricultural value resulting from natural hazards each year | 61st not above 90 th percentile | Energy cost Average annual energy costs divided by household income | 59th not above 90 th percentile | Asthma Share of people who have been told they have asthma | 75th not above 90 th percentile |
| Expected building loss rate Economic loss to building value resulting from natural hazards each year | 3rd not above 90 th percentile | PM2.5 in the air Level of inhalable particles, 2.5 micrometers or smaller | 77th not above 90 th percentile | Diabetes Share of people ages 18 years and older who have diabetes other than diabetes during pregnancy | 71st not above 90 th percentile |
| Expected population loss rate Fatalities and injuries resulting from natural hazards each year | 70th not above 90 th percentile | AND | 87th above 65 th percentile | Heart disease Share of people ages 18 years and older who have been told they have heart disease | 47th not above 90 th percentile |
| Projected flood risk Projected risk to properties from projected floods, from tides, rain, riverine and storm surges within 30 years | 18th not above 90 th percentile | Low income People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed | | Low life expectancy Average number of years a person can expect to live | 72nd not above 90 th percentile |
| Projected wildfire risk Projected risk to properties from wildfire from fire fuels, weather, humans, and fire movement in 30 years | 79th not above 90 th percentile | | | AND | |
| AND | | | | Low income People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed | 87th above 65 th percentile |
| Low income People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed | 87th above 65 th percentile | | | | |

| Housing | Legacy pollution | Transportation |
|---|---|---|
| Housing cost Share of households making less than 80% of the area median family income and spending more than 30% of income on housing | Abandoned mine land Presence of one or more abandoned mine land within the tract | Diesel particulate matter exposure Amount of diesel exhaust in the air |
| Lack of green space Amount of land, not including crop land, that is covered with artificial materials like concrete or pavement | Formerly Used Defense Sites Presence of one or more Formerly Used Defense Site within the tract | Transportation barriers Average of relative cost and time spent on transportation |
| Lack of indoor plumbing Share of homes without indoor kitchens or plumbing | Proximity to hazardous waste facilities Count of hazardous waste facilities within 5 kilometers | Traffic proximity and volume Count of vehicles at major roads within 500 meters |
| Lead paint Share of homes that are likely to have lead paint | Proximity to Risk Management Plan facilities Count of Risk Management Plan (RMP) facilities within 5 kilometers | AND Low income People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed |
| AND Low income People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed | Proximity to Superfund sites Count of proposed or listed Superfund (or National Priorities List (NPL)) sites within 5 kilometers | 87th above 65 th percentile |
| | AND Low income People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed | 96th above 90 th percentile |
| | | 35th not above 90 th percentile |
| | | 87th above 65 th percentile |

| Water and wastewater | | Workforce development | |
|---|--|---|--|
| Underground storage tanks and releases Formula of the density of leaking underground storage tanks and number of all active underground storage tanks within 1500 feet of the census tract boundaries | 2nd not above 90th percentile | Linguistic isolation Share of households where no one over age 14 speaks English very well | 88th not above 90th percentile |
| | | Low median income Comparison of median income in the tract to median incomes in the area | 57th not above 90th percentile |
| | 75th not above 90th percentile | Poverty Share of people in households where income is at or below 100% of the Federal poverty level | 62nd not above 90th percentile |
| AND | | | |
| Low income People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed | 87th above 65th percentile | Unemployment Number of unemployed people as a part of the labor force | 89th not above 90th percentile |
| AND | | | |
| | | High school education Percent of people ages 25 years or older whose high school education is less than a high school diploma | 42% above 10% percent |