

Spokane Climate Risk and Vulnerability Assessment

Appendix B

Spokane Climate Vulnerability Index

Indicators Description

Date: June 9, 2025

Spokane is addressing Climate planning in its Comprehensive Plan to meet recent Growth Management Act (GMA) requirements in HB 1181. As part of that effort the City is preparing a Climate Risk and Vulnerability Assessment (CRVA). Climate vulnerability is defined as the combination of **exposure** to a changing climate, the inherent **sensitivity** of people or environments to a changing climate, and the **adaptive capacity** of the community and place to cope with the impacts of a changing climate.

To support the CRVA a Climate Vulnerability Index (CVI) has been developed to share geographical information. The Spokane CVI considers over 30 indicators of climate vulnerability and summarizes multiple sets of data into one measurement; the index allows for an “apples-to-apples” comparison across the community. The index identifies [which census block groups](#) are more or less vulnerable to extreme heat or extreme precipitation, **relative** to other areas in Spokane. The focus on comparing block groups within Spokane to each other differs from indices that compare census tracts or block groups in Spokane to others in the state (e.g., Washington State Department of Health Disparities Map) or the nation (e.g., EJScreen). The methodology to develop the CVI considers literature and studies about the effect of a changing climate on land, buildings, ecosystems, human health, economies, and more.¹

The data include different climate hazard exposures, socioeconomic and health information, and built and natural environment data across the community. It also includes assets – people, places, and infrastructure that could be exposed to different climate related hazards.

¹ See for example: Yu, J. e. (2021). Geospatial indicators of exposure, sensitivity, and adaptive capacity to assess neighbourhood variation in vulnerability to climate change-related health hazards. *Environmental Health*, 20:31.



Administrative Boundaries

Exhibit 1. Administrative Boundaries – Layer List

Spatial Layer	Description	Source
Percent of Block Group Area within city limits	Blocks with 0%, 0-50%, and 51-100% inclusion in city limits. Allows for the calculation of index scores for city limits only (blocks with at least 50% inclusion in city limits) or full study area (city and urban growth area (UGA) combined).	US Census Bureau – block boundaries BERK – calculated share in city limits
Neighborhoods	Neighborhoods in Spokane	City of Spokane

Population and Race/Ethnicity

Population density is shown with 1 dot equaling a certain number of people (the map scales the people per dots based on the level of zoom). Population is based on the 2022 5-Year American Community Survey. Since population density will differ today and in the future based on the growth trends and potential policies of the Comprehensive Plan, population density can be an overlay on top of other layers. It can assist with policy development and resource prioritization.

Race and ethnicity is also provided along with block group information available when right clicking a block group. The data is based on the 2020 Decennial Census. See Exhibit 5. Adaptive Capacity Indicators – Layer List which includes Black, Indigenous, and People of Color (BIPOC) populations. These communities may have cumulative exposures to pollution and health and social disparities that can affect these communities' capacity to adapt to climate hazards. The BIPOC indicator is part of the Adaptive Capacity sub-index. Having the race/ethnicity data available outside of the index allows a person exploring the information to turn the information on top of other spatial information about assets, exposure, sensitivity, or other feature.

Population and race/ethnicity are represented for full block groups whether fully or partially in the city limits in order to accurately represent population density.

Critical Assets

Assets include communities, places, and infrastructure that could be exposed to different climate related hazards.

Exhibit 2. Critical Assets – Layer List

Spatial Layer	Source
Tribal Assets	
Locations of Tribal Importance	American Indian Community Center. Spokane Tribal Gathering Space, plaza adjacent to City Hall. Snxw Mene? (sin-HOO-men-huh). Rededicated to the Spokane Tribe in 2016. Formerly known as Canada Island.
Tribal Areas of Interest	Shows areas of interest for multiple tribes. These areas can be reviewed individually or overlapping. These are from the Department of Archaeology and Historic Preservation WISAARD map .
Public Facilities	
Airports	WSDOT
Public Schools	Washington State
Levees	Washington State Department of Ecology
Environmental Resources	
10-Year Wellhead Protection Areas	Washington State Department of Ecology
Aquifer	City of Spokane (Water Dept)
Hazardous Geology-Landslide Potential	This layer is a selection of geologic formations identified by Washington State Department of Natural Resources and adopted into the Spokane County Critical Area Ordinance as having a high susceptibility for landslides.
Wetlands	City of Spokane based on National Wetlands Inventory
City of Spokane Shoreline Jurisdiction	City of Spokane
Washington DNR Watercourses	Washington State Department of Natural Resources GIS Open Data
Washington DNR Waterbodies	Washington State Department of Natural Resources GIS Open Data

Spatial Layer	Source
Emergency Services and Medical Facilities	
Emergency Response & Law Enforcement	City of Spokane
Hospitals	Washington State
Clinics	Washington State DOH
Energy Facilities	
Dams	Dams ArcGIS Hub (USDOT)
Electric Substations	Geospatial Energy Mapper (GEM)
Power Plants	Geospatial Energy Mapper (GEM)
Transmission Lines	Geospatial Energy Mapper (GEM)
Easements-Yellowstone Pipeline	City of Spokane Valley
Key Community Locations	
Parks	City of Spokane
Libraries	Spokane Public Library
Places of Worship	Esri World Geolocator
Food Access (Grocery Stores and Food Banks)	Esri World Geolocator
Restaurants	Esri World Geolocator
Commercial & Retail Locations	Buildings (City of Spokane)
Entertainment Venues	Open Street Map
Transportation Infrastructure	
City Streets	City of Spokane
Bridges – WSDOT	WSDOT - All Bridge and Tunnel Inventory (State & Local)
Bridges – City of Spokane	Bridge City of Spokane
Sidewalks	City of Spokane
Trails	City of Spokane
Bike Lanes and Paths	City of Spokane
WSDOT Proposed State Highways	WSDOT - Functional Class - Overview
WSDOT State Route Climate Vulnerability	WSDOT
Railroad	City of Spokane

Spatial Layer	Source
Utilities	
Stormwater Swales	City of Spokane
Water Main	City of Spokane
Wastewater Treatment Plants	City of Spokane
Wastewater Sewer Overflow (CSO)	City of Spokane
Sewer Gravity Main	City of Spokane
Waste to Energy & Landfills	Entered manually from DOE

Exposure Indicators

Exposure identifies places that could be adversely affected by hazards including extreme heat, flooding, extreme precipitation, wildfire, and air pollution. The mean and median average for each indicator is included at the end of this document.

Exhibit 3. Exposure Indicators – Layer List

Indicator	Description	Source
Average Land Surface Temperature	Illustrates Urban Heat Islands. Grid cell values averaged by block group.	LANDSAT8 / BERK Consulting. Heat Severity - USA 2023 - Overview (arcgis.com) (source data for the previous Trust for Public Land heat severity data)
Area within Flood Zone	100- and 500-yr Floodplains; potentially exacerbated by extreme precipitation. Percent area of intersection calculated.	FEMA/City of Spokane https://my.spokanecity.org/projects/floodplain-management-update/ https://www.fema.gov/flood-maps
Area within Urban/Wildland Urban Interface	Percent area of intersection calculated with Interface and Intermix areas.	Washington Department of Natural Resources: DNR WUI Maps
Average Ozone Exposure	Ozone Concentration. Grid cell values averaged by block group.	NW-AIRQUEST Regional Background Design Values, 2014-2017 (Hosted on Idaho Department of Environmental Quality's Webpage); Washington Ambient Air Monitoring Network, Department of Ecology; Air Emissions Inventory, WA Department of Ecology; National Emissions Inventory, US EPA

Indicator	Description	Source
Average PM 2.5 Exposure	PM2.5 Concentration. Grid cell values averaged by block group.	NW-AIRQUEST Regional Background Design Values, 2014-2017 (Hosted on Idaho Department of Environmental Quality's Webpage); Washington Ambient Air Monitoring Network, Department of Ecology; Air Emissions Inventory, WA Department of Ecology; National Emissions Inventory, US EPA
Change in Chance of Extreme Precipitation	Extreme Precipitation - Percent Change in Magnitude of 2-year Storm, RCP 8.5, 2040-2069 vs 1980-2009. Grid cell values averaged by block group.	UW Climate Impacts Group https://data.cig.uw.edu/climatemapping/ .

Sensitivity Indicators

Sensitivity addresses location of people with higher sensitivity to climate risks (due to health or demographic attributes) as well as the location of environmental conditions that predispose an area to be more at risk due to an exposure to climate hazards. The mean and median average for each indicator is included at the end of this document.

Exhibit 4. Sensitivity Indicators – Layer List

Indicator	Description	Source	Discussion
Population Under 5 years old	Percent of block group with population under 5 years.	ACS 2022 5-Year estimates for block group, Table B01001.	Children under 5 years of age are likely to experience higher risks for long-term mental health and socioeconomic impacts from climate hazards. They may be more susceptible to asthma, which can be made worse with increasing air pollution.
Population Over 65 years old or Older	Percent of block group with population over 65 years.	ACS 2022 5-Year estimates for block group, Table B01001.	Older individuals are more susceptible to the negative health consequences of heat exposure.
High Blood Pressure Asthma Coronary Heart Disease	Percent of tract adult population. Assign each block group the indicator value associated with its parent tract (all block groups within	CDC Places	Chronic medical conditions can be worsened by climate hazards. Increasing climate hazards can lead to more outdoor air pollutants and increased allergens and asthma, which can especially impact people with asthma and chronic obstructive

Indicator	Description	Source	Discussion
COPD (Chronic obstructive pulmonary disease)	a common tract will have the same value).		pulmonary disease (COPD), among other illnesses.
Diabetes			
Poor Mental Health			
Poor Physical Health			
Area within Potential Geologic Hazard	Percent of block group area intersecting hazard area.	City of Spokane	Extreme precipitation in the form of heavy rain and snow events could increase the frequency of landslides.
Area with Steep Slopes	Percent of block group area intersecting hazard area.	UW DEM files (to cover both city and UGA)	See above. Steep slopes above 40% are considered at risk for landslides.
Coverage by Impaired Waterbodies	Percentage of block group intersecting a 303d-listed freshwater stream or water body.	Ecology (303d)	Hazards such as increased stormwater runoff can further affect water quality, affecting people living near bodies of water.

Adaptive Capacity Indicators

Adaptive Capacity includes indicators regarding the ability of people, places, and community assets to cope with changing climate conditions. The mean and median average for each indicator is included at the end of this document.

Exhibit 5. Adaptive Capacity Indicators – Layer List

Indicator	Description	Source	Discussion
BIPOC Share of Population	Percent of block group population. BIPOC refers to residents who identify as any race other than “White Alone” (e.g., Black, Indigenous, and persons of color) OR who identify as Hispanic/Latino (even if they identify as white).	ACS 2022 5-Year estimates for block group, Table B03002	BIPOC populations may have cumulative exposures to pollution and health and social disparities that can affect these communities’ capacity to adapt to climate hazards.

Indicator	Description	Source	Discussion
Limited English-Speaking Ability	Percent of block group population living in a household where <u>no one</u> speaks English at least “Well.”	ACS 2022 5-Year estimates for block group. Table B16004	Adults with limited English proficiency may not get important information and access to resources in climate events when information is not provided in a language they speak.
People Living Alone	Percent of block group households.	ACS 2022 5-Year estimates for block group. Table B11001	People living alone are more likely to die in periods of unusually intense heat. People who live alone may not be checked on regularly during a climate emergency and have a higher risk of mortality compared to others who have social contacts and access to transportation.
Population Living in Poverty	Percent of block group population experiencing poverty	ACS 2022 5-Year estimates for block group. Table B17021	Low-income communities tend to have greater sources of environmental risk, including higher ambient air pollution concentrations. Workers with low-income levels may experience more hardship associated with reduced pay from lost labor hours. Lacking financial resources also reduces a person’s ability to respond to climate risks (e.g., their ability to rebuild their home, afford health care, or evacuate/relocate to a less risk-prone location)
Persons with Disabilities	Percent of block group population with a disability.	2024 EI Screen	Residents with disabilities may be impacted in several ways due to climate hazards. Emergency warnings may not address the needs of those with low vision, blindness, or hearing loss. Those with mobility difficulties may have trouble getting to safe places during flooding and heat waves. A climate-related disaster may inconvenience and endanger those dependent on transit.
Cost-Burdened Households	Percent of renter households spending more than 30% of income on housing	ACS 2022 5-Year estimates for block group. Table B25070	Housing cost burden can lead to financial stress and limit a household's ability to afford other essentials, such as healthcare and education.

Indicator	Description	Source	Discussion
Energy Cost Burden	Percent of gross household income spent on energy costs, calculated by dividing the average housing energy cost by the average annual household income. A household with 6% or greater energy burden is considered to be a high energy burden household.	Energy.gov	Lower-income households may spend more of their income on energy expenses, and may live in poorly insulated housing and results in higher energy demand. Costs to install more resilient forms of energy may be a barrier.
No High School Diploma	Percent of Population Age 25 or older with less than a high school degree	ACS 2022 5-Year estimates for block group, Table B15003	Individuals with lower educational attainment are at increased risk of ambient air pollution exposure and associated health effects. There may be barriers to understanding warning information and access to recovery information.
College Degree	Percent of block group population	ACS 2022 5-Year estimates for block group, Table B15003	See above.
Unemployment	Unemployment rate	ACS 2022 5-Year estimates for block group, Table B23025	The potential loss of employment following a disaster exacerbates the number of unemployed workers in a community, contributing to a slower recovery from the disaster.
Median Household Income	Median annual income of households in the block group	ACS 2022 5-Year estimates for block group, Table B19013	See poverty above for effects on persons with lower incomes. Those with higher incomes may have more resources to respond to the climate hazard.
No Health Insurance	Percent of block group population	CDC Places	People without health insurance may be more vulnerable to the potential health effects of heat exposure, and more impacted economically by seeking emergency services.
Outdoor Professions	Percent of jobs in sectors likely to be performed outdoors (NAICS 11, 21, 23)	ACS 2022 5-Year estimates for block group, Table C24030	Outdoor workers are exposed to heat and smoke. They and other people dependent on natural resources may also experience anxiety and consequences to their economic stability from income loss.

Indicator	Description	Source	Discussion
Poor Housing Condition	Percent of housing units built before 1960	ACS 2022 5-Year estimates for block group, Table B25034	Homes built prior to modern building codes were often built without prioritization of energy efficiency, e.g., without insulation and with single-paned windows. These can be energy cost burdens to occupants and expensive to retrofit.
Access to Open Space	Residential properties within a 10-minute walk of park or open space.	Spokane Park Master Plan for in-city. Calculated for UGA.	Access to open space can reduce the rate of chronic diseases, and can improve resilience to climate change.
No Access to Vehicle	Percent of block group population <u>without</u> regular access to a vehicle.	ACS 2022 5-Year estimates for block group, Table B25044	A lack of access to a vehicle could limit people's ability to move to safer locations during extreme weather events, access essential resources like food and water, and impede adaptation post impact.
Access to Transit	Number of transit stops within the block group.	Spokane Transit	Transit dependent residents may face extreme weather disruptions.
Tree Canopy	Percent tree canopy coverage	NLCD - National Land Cover Database	Indicators like lack of tree canopy can represent an environmental injustice while also being highly correlated with urban heat islands, a climate impact.
Impervious Surface	Percent impervious surface coverage	NLCD - National Land Cover Database	<p>High amounts of impervious surface contribute to urban heat islands, higher energy consumption, elevated emissions of air pollutant, and higher daytime and evening temperatures.</p> <p>Impervious surface may also hinder capacity to adapt to extreme precipitation.</p>

Climate Context Data

Layers of information that may assist in the understanding of vulnerabilities to climate related impacts are listed below.



Exhibit 6. Planning Source Data – Layer List

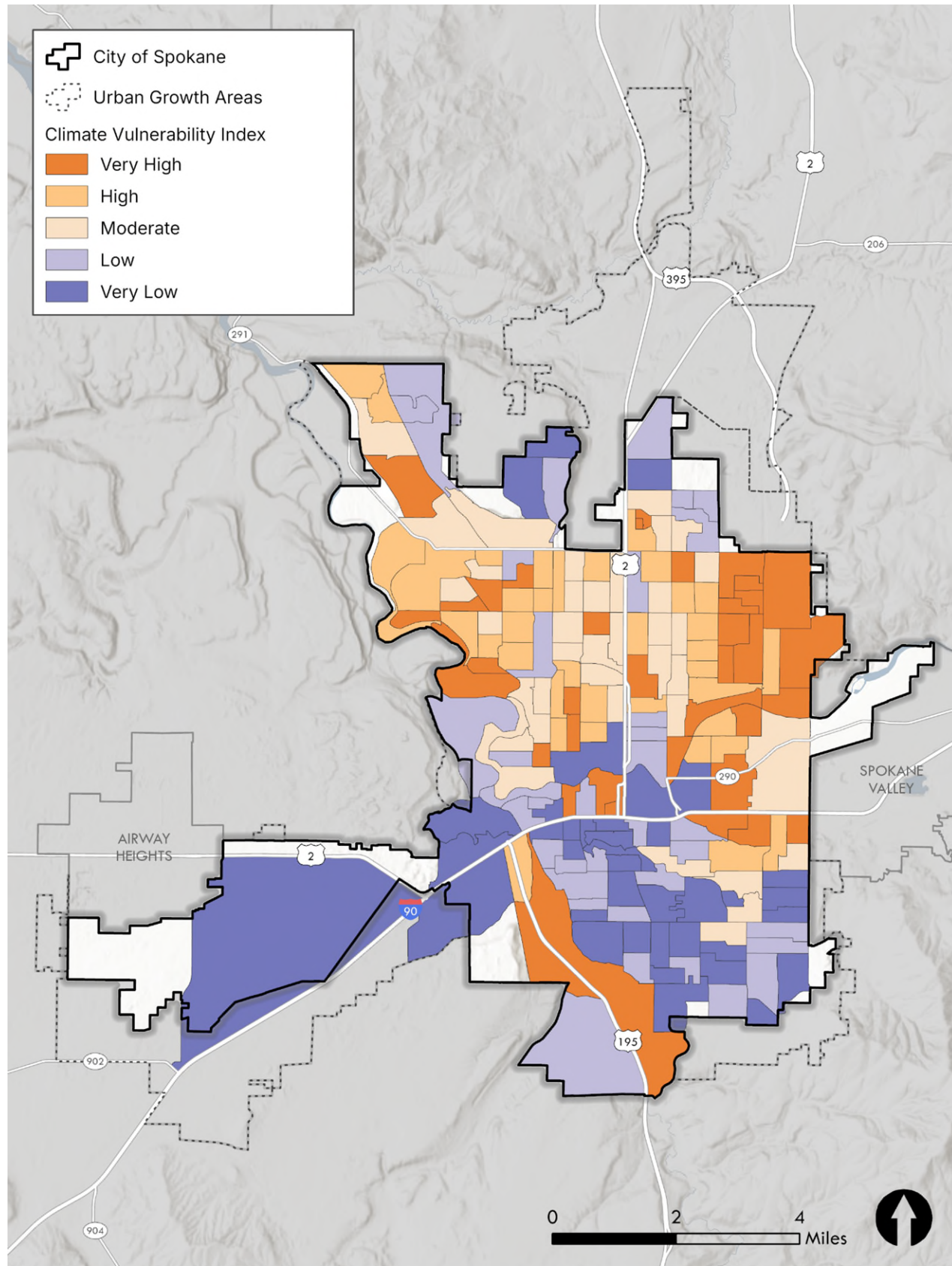
Spatial Layer	Description	Source
Flood Hazards	FEMA 100-Year and 500-Year data.	FEMA and City of Spokane https://my.spokanecity.org/projects/flood-plain-management-update/ https://www.fema.gov/flood-maps
Historic Redlining	<p>Redlining is a “ranking system that categorizes neighborhoods as more or less impoverished largely based on the race of the residents. Government maps were created so that banks could determine where it was a “safe” bet to lend money to residents.”</p> <p>Areas of Spokane were categorized into “grades” – the first grade in green signified the lowest risk for lending, and the fourth grade, indicated in red, signified a “hazardous” risk area for lending.</p> <p>The historical redlining of Black and other minority neighborhoods is linked with more intense urban heat islands and exposes residents to more risk due to extreme heat than other communities.</p>	<p>Spokane Housing Action Plan, 2021 and City of Spokane GIS</p> <p>Data source, Digital Scholarship Lab, University of Richmond, <i>Mapping Inequality: Redlining in New Deal America</i>: https://dsl.richmond.edu/panorama/redlining/</p>
Projected Change in Extreme Heat Days	<p>Change in Days with Maximum Humidex Above 90° F, RCP 8.5, 2040-2069 vs 1980-2009.</p> <p>Assigned value of corresponding grid cell within which the tract falls.</p>	<p>UW Climate Impacts Group</p> <p>https://data.cig.uw.edu/climatemapping/. Due to level of granularity in data and availability of other sources, this layer is not included in the Exposure sub-index.</p>
Projected Change in High Fire Danger Days	Change in the number of days per year, relative to 1971 - 2000, with high fire potential based on dry fuels, fuel moisture below the 20th percentile.	<p>UW Climate Impacts Group</p> <p>https://data.cig.uw.edu/climatemapping/. Due to level of granularity in data and availability of other sources, this layer is not included in the Exposure sub-index.</p>
Wildland Urban Interface	Source layer for the Area within Urban/Wildland Urban Interface layer in Exposure.	Washington State Department of Natural Resources, DNR WUI Maps

Spatial Layer	Description	Source
Ember Ignition Risk Areas	Embers from wildfire can travel and ignite structures up to 1.5 miles away or further, depending on wind conditions. This layer shows a 1.5 mile radius around wildland urban interface areas to represent the area that may be at risk of ember ignition.	City of Spokane Fire Department
Wildfire Risk to Communities Housing Unit Impact	The data depict components of wildfire risk specifically for populated areas in the United States. These datasets represent an index that incorporates the general consequences of fire on a home as a function of fire intensity and uses flame length probabilities from wildfire modeling to capture likely intensity of fire.	USDA, US Forest Service, 2024 Housing Unit Impact
Gonzaga Urban Heat Island Mapping, July 2022	2022 Heat Watch Spokane	Developed by Gonzaga University Institute for Climate, Water, and the Environment. Field data was collected in Spokane on July 16, 2022. Model output includes predicted morning, afternoon, and evening temperatures citywide. https://www.gonzaga.edu/climate-institute/our-work/climate-resilience-project/understanding/heat-mapping

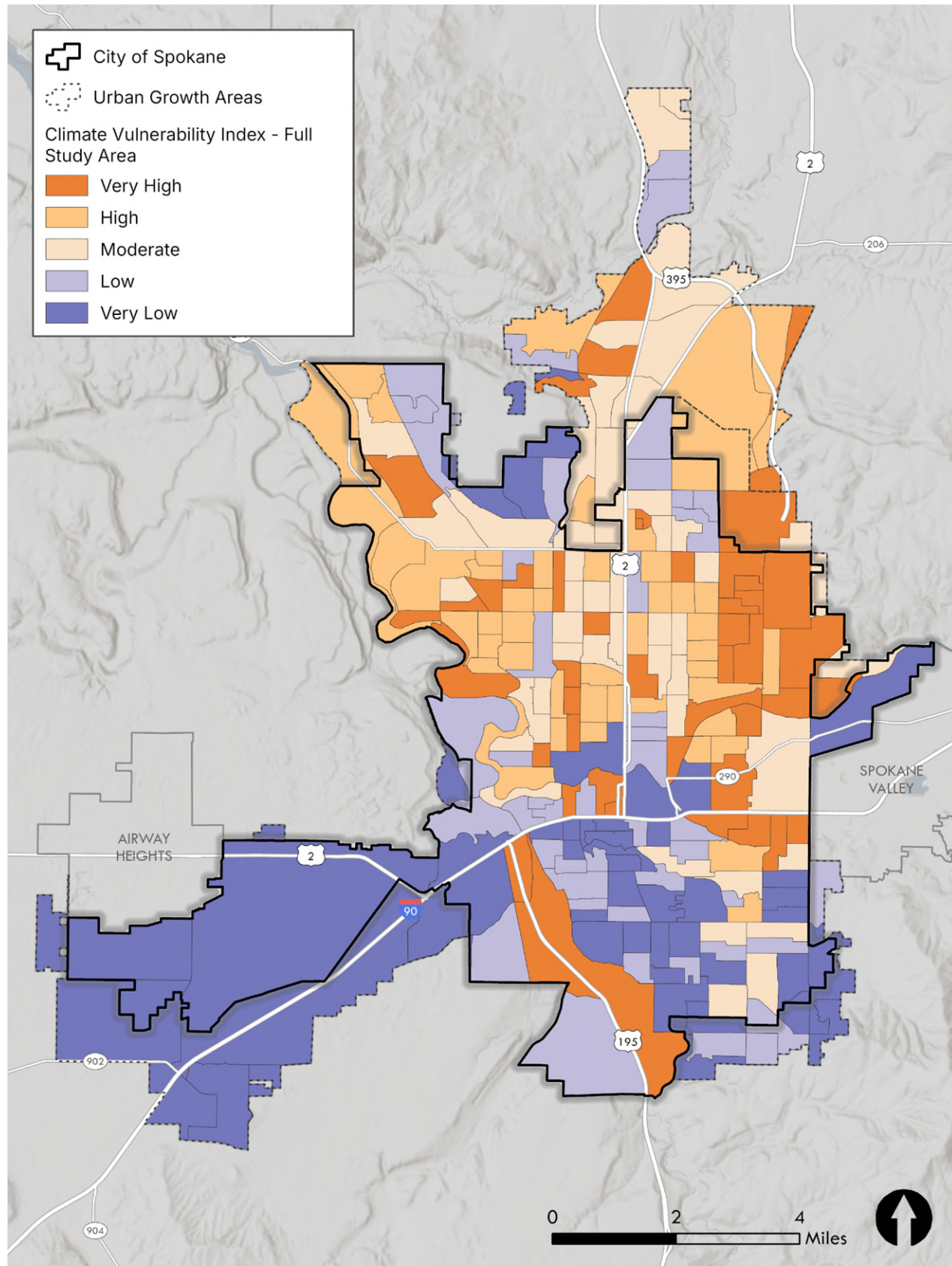
Climate Vulnerability Index Maps

Based on the method and indicators, the overall Climate Vulnerability Index results are shared for the block that primarily lie in city limits. A similar evaluation was conducted addressing blocks that intersect with the unincorporated urban growth area (UGA) abutting the City of Spokane. This captures blocks in Latah/Hangman and Chief Gary Park that straddle the city/UGA boundary. Because the dataset is expanded and indicator averages shift, some blocks shift in quintile scores slightly.

Exhibit 7. City of Spokane Climate Vulnerability Index



Source: BERK Consulting, Inc. 2025.

Exhibit 8. City of Spokane Climate Vulnerability Index: City and Urban Growth Area

Source: BERK Consulting, Inc. 2025.

Vulnerability Indicator Averages

The following matrix lists the exposure sensitivity, and adaptive capacity indicators with the mean and median scores for the Census Blocks in the city limits and in the Urban Growth Area (UGA).

Exhibit 9. Matrix of Indicators and Mean and Median Averages for Census Blocks primarily in City Limits and Urban Growth Area (UGA)

Indicator	Units	Mean (City Only)	Median (City Only)	Mean (Full UGA)	Median (Full UGA)
E PM 2.5 Weighted Avg	Micrograms per cubic meter	19.1	19.4	18.9	19.4
E Ozone Weighted Avg	Parts per billion	58.3	58.2	58.4	58.4
E Urban Heat Island Mean	Degrees Celsius	39.2	39.5	39.1	39.3
E Humidex 8.5 Weighted Avg	Days	30.6	30.8	30.6	30.8
E Humidex 4.5 Weighted Avg	Days	21.0	21.1	21.1	21.1
E HeavyPrecip Weighted Avg	Days	16.7	17.6	16.8	17.6
E Flood Coverage	Percent	3.2%	0.0%	3.0%	0.0%
E WUI_Coverage	Percent	28.3%	0.0%	38.2%	19.2%
E Fire Danger Weighted Avg	Days	8.6	8.6	8.7	8.6
S Over 64 Percent	Percent	16.9%	14.4%	17.1%	14.8%
S Under 5 Percent	Percent	4.8%	3.8%	4.9%	3.8%
S GeoHazard Coverage	Percent	4.0%	0.0%	4.1%	0.0%
S Water Quality Coverage	Percent	0.3%	0.0%	0.3%	0.0%
S Steep Slopes Coverage	Percent	1.1%	0.0%	1.1%	0.0%
S Hypertension Percent	Percent	28.3%	28.2%	28.2%	28.2%
S Asthma Percent	Percent	12.1%	12.3%	12.0%	11.7%
S Heart Disease Percent	Percent	5.5%	5.2%	5.4%	5.2%
S COPD Percent	Percent	6.7%	6.3%	6.5%	6.1%
S Diabetes Percent	Percent	9.5%	8.9%	9.3%	8.9%



Indicator	Units	Mean (City Only)	Median (City Only)	Mean (Full UGA)	Median (Full UGA)
S Poor Mental Health Percent	Percent	18.9%	19.3%	18.4%	18.0%
S Poor Physical Health Percent	Percent	12.1%	11.8%	11.8%	11.3%
AC People of Color Percent	Percent	19.7%	18.0%	18.5%	17.1%
AC Linguistic Isolation Percent	Percent	1.4%	0.0%	1.3%	0.0%
AC Living Alone Percent	Percent	35.0%	31.4%	32.8%	29.3%
AC No Vehicle Percent	Percent	9.9%	5.2%	8.7%	4.2%
AC Below Poverty Percent	Percent	15.7%	10.9%	14.6%	10.1%
AC Housing Cost Burden Percent	Percent	43.7%	45.7%	44.6%	46.1%
AC Median Household Income	Dollars	\$68,294.62	\$65,167.00	\$73,186.68	\$66,563.00
AC Less than High School Percent	Percent	6.9%	4.9%	6.2%	4.8%
AC College Degree Percent	Percent	32.3%	30.2%	33.5%	31.4%
AC Unemployed Percent	Percent	6.7%	5.3%	6.4%	4.9%
AC Outdoor Professions Percent	Percent	6.5%	4.8%	7.0%	5.3%
AC Built before 1960 Percent	Percent	53.7%	59.0%	45.4%	49.0%
AC Disability Percent	Percent	17.1%	15.8%	16.3%	15.4%
AC No Health Insurance Percent	Percent	8.2%	7.9%	7.8%	7.3%
AC Access to Transit	Stops	5.6	4.0	5.0	4.0
AC Impervious Coverage	Percent	49.4%	50.9%	45.0%	48.2%
AC Tree Canopy Coverage	Percent	13.7%	10.3%	13.8%	12.0%
AC Energy Cost Burden	Percent	2.3%	2.0%	2.2%	2.0%
AC Access to Open Space Percent	Percent	88.1%	100.0%	74.3%	100.0%

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Spokane Climate Risk and Vulnerability Assessment: Risk Method

Introduction

The City of Spokane is developing a Climate Risk and Vulnerability Assessment (CRVA) for the following focus areas and sectors:

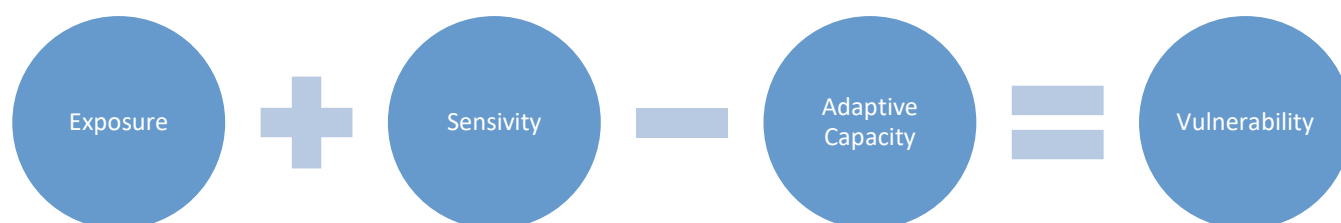
Exhibit 1. City of Spokane Climate Risk and Vulnerability Assessment Focus Areas and Sectors

Focus Area	Sectors Included
Human Well-being and Emergency Management	<ul style="list-style-type: none">Public HealthSocial ServicesEmergency Management
Cultural and Natural Resources	<ul style="list-style-type: none">Cultural ResourcesFood SystemsParks, Trails, and Open SpacesUrban Forests
Infrastructure	<ul style="list-style-type: none">EnergyTransportationWasteWater and Wastewater Infrastructure
Ecosystems and Water Resources	<ul style="list-style-type: none">Critical AreasWater SupplyStormwater
Community Design, Land Use, and Economic Development	<ul style="list-style-type: none">Buildings (Residential, Commercial, Industrial, Office) /Major Facilities (Public and Event)BusinessesNeighborhoods (based on Neighborhood Council boundaries)Housing

Vulnerability is the degree to which communities, assets, and natural systems will be impacted by a changing climate. It is defined using a framework that has three general components: exposure, sensitivity, and adaptive capacity, that are used to understand how climate risks will affect human, natural, and built systems; these terms are defined below and the approach is illustrated in Exhibit 2:

- **Exposure** incorporates the frequency and magnitude of climate impact.
- **Sensitivity** emphasizes the degree to which people, the environment, or other systems will be affected by, or respond to, a given climate shock or stress (e.g., extreme heat).
- **Adaptive capacity** is the capacity of individuals, communities, businesses, governments, institutions, or the natural environment to adapt or adjust to a disturbance, reduce long-term damage, take advantage of opportunities, and cope with consequences.

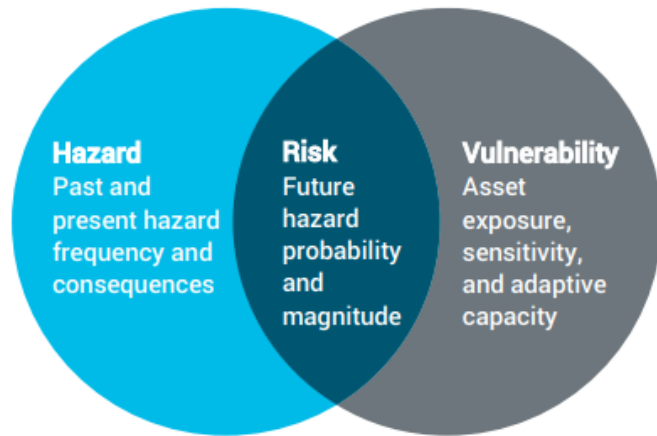
Exhibit 2. Vulnerability Elements



Source: (US Climate Resilience Toolkit, 2024)

According to the Department of Commerce's Climate Element Planning Guidance, *risk is a compound concept — encompassing a hazard's probability and magnitude of occurrence — which describes the chance of sustaining a substantial loss*. Commerce suggests that the cities and counties can identify hazard-asset pairs, and criteria relevant to risk for those pairs. (Washington Department of Commerce, 2023)

Exhibit 3. Relationship Between Hazard, Vulnerability, and Risk



Source: (Washington Department of Commerce, 2023)

Since the City of Spokane Climate Vulnerability Index (CVI) includes indicators and quantile scores, some blend of quantitative and qualitative criteria are helpful to the planning-level identification of risk and the locations in city limits to identify where the City of Spokane could focus its efforts to adapt to climate change.

Method to Determine Risk

To determine risk, the City of Spokane CVI is used since it combines over 30 indicators for census blocks in the city. Considering science and local conditions, individual or groups of indicators can be compared to develop relative risk.

The steps are numbered below with associated tables.

1. **Select** one exposure and adaptive capacity or sensitivity indicator relevant to risk per climate resilience literature. Two or three individual indicators can be compared or groups of indicators can be compared.

Exhibit 4. Indicator List

Index	Sub-Index	Indicator
Exposure	Heat	E Humidex 8.5 Weighted Avg
Exposure	Heat	E Urban Heat Island Mean
Exposure	Flooding and Precipitation	E HeavyPrecip Weighted Avg
Exposure	Flooding and Precipitation	E Flood Coverage
Exposure	Fire Smoke Air Quality	E WUI_Coverage

Index	Sub-Index	Indicator
Exposure	Fire Smoke Air Quality	E PM 2.5 Weighted Avg
Exposure	Fire Smoke Air Quality	E Ozone Weighted Avg
Sensitivity	Age	S Over 64 Percent
Sensitivity	Age	S Under 5 Percent
Sensitivity	Environment	S GeoHazard Coverage
Sensitivity	Environment	S Water Quality Coverage
Sensitivity	Environment	S Steep Slopes Coverage
Sensitivity	Health	S Hypertension Percent
Sensitivity	Health	S Asthma Percent
Sensitivity	Health	S Heart Disease Percent
Sensitivity	Health	S COPD Percent
Sensitivity	Health	S Diabetes Percent
Sensitivity	Health	S Poor Mental Health Percent
Sensitivity	Health	S Poor Physical Health Percent
Adaptive Capacity	Socioeconomic	AC People of Color Percent
Adaptive Capacity	Socioeconomic	AC Linguistic Isolation Percent
Adaptive Capacity	Socioeconomic	AC Living Alone Percent
Adaptive Capacity	Socioeconomic	AC No Vehicle Percent
Adaptive Capacity	Socioeconomic	AC Below Poverty Percent
Adaptive Capacity	Socioeconomic	AC Housing Cost Burden Percent
Adaptive Capacity	Socioeconomic	AC Median Household Income
Adaptive Capacity	Socioeconomic	AC Less than High School Percent
Adaptive Capacity	Socioeconomic	AC College Degree Percent
Adaptive Capacity	Employment	AC Unemployed Percent
Adaptive Capacity	Employment	AC Outdoor Professions Percent
Adaptive Capacity	Housing	AC Built before 1960 Percent
Adaptive Capacity	Socioeconomic	AC Disability Percent
Adaptive Capacity	Health	AC No Health Insurance Percent
Adaptive Capacity	Transportation	AC Access to Transit
Adaptive Capacity	Environment	AC Impervious Coverage
Adaptive Capacity	Environment	AC Tree Canopy Coverage
Adaptive Capacity	Socioeconomic	AC Energy Cost Burden
Adaptive Capacity	Environment	AC Access to Open Space Percent

Legend: E – Exposure, S – Sensitivity, AC – Adaptive Capacity

WUI – Wildland Urban Interface | COPD – chronic obstructive pulmonary disease

2. **Consider** how close scores of each census block are to the average looking at a standard deviation and **quintile scores**. See Exhibit 5 and Exhibit 6 as examples.

Exhibit 5. Indicator 1 and 2 and Combined Risk

Exposure: Urban Heat Island Mean	Sensitivity: Over 64 Years of Age, Percent	Combined Risk
High	High	High
High	Very High	Very High
Very High	High	Very High
Very High	Very High	Very High

Note: Selected blocks reported for example.

Exhibit 6. Indicator 1, 2 and 3 and Combined Risk

Exposure: Urban Heat Island Mean	Sensitivity: Over 64 Percent	Adaptive Capacity: Living Alone Percent	Combined Risk
High	High	Very High	Very High
High	High	Very Low	Moderate
High	High	Moderate	High
High	High	Very Low	Low
High	Very High	High	Very High
High	High	Very Low	Moderate
High	High	High	Very High
Very High	High	Moderate	High
Very High	High	High	High
High	High	Very Low	Moderate
Very High	High	Very High	Very High
Very High	Very High	Very High	Very High
High	Very High	Very High	Very High
Very High	High	Very High	Very High
Very High	Very High	Very Low	Very High
High	High	Moderate	High
Very High	Very High	High	Very High
Very High	High	High	Very High
Very High	Very High	Very High	Very High
High	Very High	High	Very High
Very High	High	High	High

Exposure: Urban Heat Island Mean	Sensitivity: Over 64 Percent	Adaptive Capacity: Living Alone Percent	Combined Risk
Very High	High	High	Very High
Very High	Very High	Very High	Very High
High	High	Low	High
High	Very High	Very High	Very High

Note: The combined risk can vary even if the qualitative quintile results are similar due to the block's score and the average across the selected indicators. A "very high" label could be the equivalent of an 81st percentile or it could be a 98th percentile, but the difference between those impacts affects the total risk score, which is averaged across the three selected indicators.

3. Compare indicators and identify census blocks more at risk.

Air Quality and Health: Respiratory illness (e.g., asthma or Chronic Obstructive Respiratory Disease) and respiratory illness-related hospitalizations will become more common due to declining air quality such as due to transportation sources along highways, further exacerbated by wildfires, increased pollen production, and increased ground-level ozone (Chang., et al., 2023). See Exhibit 7. The area most affected is Hillyard in Northeast Spokane if considering single indicator comparisons.

Exhibit 7. Example 1A – Public Health Sector: High Heat, High Ozone, COPD and Selected Demographics

Census Block Group	City Neighborhood	Exposure: E Humidex 8.5 Weighted Avg	Exposure: E Ozone Weighted Avg	Sensitivity: S COPD Percent	Combined Risk
530630002012	Hillyard	Very High	High	Very High	Very High
530630002021	Hillyard	Very High	High	Very High	Very High
530630144001	Hillyard	Very High	High	High	High

Source: CVI Tool, BERK, 2025.

- Total Block Groups: 3
- Total BG Population: 2,351 (1.0% of city)
- City Population (OFM 2024): 233,000

If considering grouped indicators for heat, smoke/air quality, and the full range of health indicators (respiratory, heart, and others), a wider range of blocks is highlighted. In that case considering demographics could help identify blocks that could use additional attention in adaptation. See Exhibit 8.

Exhibit 8. Example 1B – Public Health Sector: High Heat, High Smoke, High Health Sensitivity and Selected Demographics

Census Block Group	City Neighborhood	Exposure: Heat	Exposure: Fire Smoke Air Quality	Sensitivity: Health	Pop. Over 65	% BIPOC*
530630016002	Bemiss	High	Very High	Very High	14.4%	24.1%
530630016003	Bemiss	Very High	Very High	Very High	29.9%	15.2%
530630016001	Bemiss, Hillyard	Very High	Very High	Very High	6.7%	39.2%
530630018002	Bemiss, Logan	Very High	High	Very High	14.4%	23.6%
530630026001	Chief Garry Park	High	Very High	Very High	13.0%	29.7%
530630145003	Chief Garry Park, East Central	Very High	High	Very High	4.3%	21.5%
530630002012	Hillyard	Very High	Very High	Very High	17.9%	14.3%
530630002021	Hillyard	Very High	Very High	Very High	12.3%	15.0%
530630002022	Hillyard	Very High	Very High	Very High	8.8%	22.7%
530630144001	Hillyard	Very High	Very High	High	13.8%	19.3%
530630144004	Hillyard, Minnehaha	High	Very High	High	13.9%	4.6%
530630018001	Logan, Minnehaha	High	High	Very High	27.8%	17.0%
530630144003	Minnehaha	High	Very High	High	10.8%	30.2%

General Note: The combined risk can vary even if the qualitative quintile results are similar due to the block's score and the average across the selected indicators. A "very high" label could be the equivalent of an 81st percentile or it could be a 98th percentile, but the difference between those values impacts the total risk score, which is averaged across the three selected indicators.

Note: * Black, Indigenous, Persons of Color – BIPOC

Source: CVI Tool, BERK, 2025.

- Total Block Groups: 13
- Total BG Population: 15,157 (6.5% of city)
- City Population (OFM 2024): 233,000

Extreme Precipitation, Flooding, and Transportation: Flooded areas, including those resulting from clogged storm water drains, can prevent transit, rail, and personal vehicles from passing and block walking, rolling, and biking facilities as well as bus stops.

The blocks in northwest Spokane in Audubon/Downriver, Latah/Hangman, and Lincoln Heights as have very high exposure, very high environmental sensitivity (slopes), and very low access to transit which could be locations to focus emergency evacuation plans. See Exhibit 9 Additional consideration for prioritization of adaptive capacity efforts: Older adults

have limited mobility, increasing their risks before, during, and after an extreme weather event:

- Spokane residents 65 to 74 years: 27.9% of the age group have a disability
- Spokane residents 75 years and over: 52.2% of the age group have a disability

Several blocks have particularly high shares of persons over 65 years of age.

Exhibit 9.

Additional consideration for prioritization of adaptive capacity efforts: Older adults have limited mobility, increasing their risks before, during, and after an extreme weather event¹:

- Spokane residents 65 to 74 years: 27.9% of the age group have a disability
- Spokane residents 75 years and over: 52.2% of the age group have a disability

Several blocks have particularly high shares of persons over 65 years of age.

Exhibit 9. Example 2 – Extreme Precipitation, Environmental Sensitivity (Landslide/Slopes/Water Quality), Low Transit Access, Age over 65 Years Old

Census Block Group	City Neighborhood	Exposure: E Flood Coverage	Sensitivity: S Steep Slopes Coverage	Adaptive Capacity: AC Access to Transit	Combined Risk	Pop. 65 years +
530630010005	Audubon/Downriver	Very High	Very High	Very Low	Very High	33.2%
530630106011	Audubon/Downriver, Northwest	High	Very High	Very Low	Very High	12.1%
530630026004	Chief Garry Park	High	High	Low	Low	5.8%
530630136001	Grandview/Thorpe	High	Very High	Very Low	Low	12.1%
530630039001	Latah/Hangman	Very High	Very High	Very Low	Very High	35.3%
530630039002	Latah/Hangman	Very High	Very High	Very Low	Very High	24.3%
530630046012	Lincoln Heights	Very High	Very High	Very Low	High	25.8%
530630144003	Minnehaha	Very High	High	Low	Moderate	10.8%
530630045002	Rockwood	High	High	Very Low	Very Low	20.6%

Note: The combined risk can vary even if the qualitative quintile results are similar due to the block's score and the average across the selected indicators. A "very high" label could be the equivalent of an 81st percentile or it could be a 98th percentile, but the difference between those values impacts the total risk score, which is averaged across the three selected indicators.

¹ See: <https://www.epa.gov/climateimpacts/climate-change-and-health-older-adults>.

Source: CVI Tool, BERK, 2025.

- Total Block Groups: 9
- Total BG Population: 12,042 (5.2% of city)
- City Population (OFM 2024): 233,000

Risk analysis for the sectors are summarized in the 2-page focus area sheets with each major focus area, and details are in an appendix to the CRVA.

Summary Vulnerability and Risk Matrix							Date	6/16/2025
Focus Areas	Sectors	Indicators	Climate Impacts	Exposure	Sensitivity	Adaptive Capacity	Vulnerability	Risk
Human Well-Being and Emergency Management	Public Health	Rates of injury and illness	Extreme Heat, Smoke	High	Very High	Low	Very High	High
		Access to medical care	Wildfire, Flooding	High	High	Moderate	High	Moderate
	Social Services	General social services	All	High	Very High	Moderate	Very High	High
		Childcare and Educational Facilities	All	High	High	Low	High	Moderate
		Correctional facilities	Extreme Heat, Smoke	Moderate	Very High	Low	High	Moderate
	Emergency Management	Critical facilities	All	High	Very High	Moderate	Very High	High
		Major transportation routes	All	High	High	Low	High	High
		Gathering spaces (schools, libraries)	Extreme Heat, Smoke	High	High	Moderate	High	High
Cultural and Natural Resources	Cultural Resources	Social and Tribal Service Centers	All	High	Very High	Moderate	Very High	High
		Community and Tribal Gathering Places	All	High	High	Low	High	High
		Cultural and Heritage Assets and Sites	All	High	Very High	Low	Very High	High
		Schools & Education	Extreme Heat, Smoke	High	High	Moderate	High	High
		Libraries	All	Moderate	Moderate	High	Moderate	Moderate
	Food Systems	Food Processing, Urban Agriculture, Community Gardens	All	Moderate	High	Low	High	Moderate
	Parks, Trails, and Open Space	Parks and trails	All	High	Moderate	Moderate	Moderate	Moderate
		Natural lands	All	High	High	Low	High	Very High
		Indoor facilities	All	Moderate	Moderate	Moderate	Moderate	Moderate
	Urban Forest	Tree Canopy	Extreme Heat, Drought, Wildfire	High	High	Moderate	High	High
Infrastructure	Energy	Supply	All	High	High	Low	High	High
		Energy Infrastructure	All	High	High	Low	High	High
		Consumption/Demand	All	High	Very High	Low	Very High	Very High
	Transportation	Access to transit	All	High	High	Low	High	High
		No vehicle available	All	High	High	Low	High	High
	Solid Waste Management	Recycling Centers	Wildfire, Flooding, Extreme Precipitation	Moderate	Moderate	Moderate	Moderate	Moderate
		Transfer Stations and Landfills	Wildfire, Flooding, Extreme Precipitation	Moderate	High	Low	High	High
		Waste-to-Energy Facility	Wildfire, Flooding, Extreme Precipitation	Moderate	Moderate	Low	Moderate	High
	Water and Wastewater Infrastructure	Water Distribution Pipes	Wildfire, Flooding, Extreme Precipitation	High	Moderate	Low	High	High
		Water Pump Stations	Wildfire, Flooding, Extreme Precipitation	High	High	Low	High	Very High
		Wastewater Collections and Conveyance	Wildfire, Flooding, Extreme Precipitation	High	High	Low	High	Very High
		Wastewater Treatment Plant	Wildfire, Flooding, Extreme Precipitation	Moderate	High	Very Low	High	Very High
		Combined Sewer Tanks	Wildfire, Flooding, Extreme Precipitation	Moderate	High	Low	High	High
	Stormwater	Gray Stormwater Infrastructure	Wildfire, Flooding, Extreme Precipitation	High	High	Low	High	High
		Green Stormwater Infrastructure	Extreme Heat, Flooding, Extreme Precipitation, Drought	High	High	Very Low	Very High	Very High
		Impervious and Pervious Surfaces	Wildfire, Flooding, Extreme Precipitation	High	Moderate	Moderate	High	Moderate
		Water Retention and Treatment Facilities	Wildfire, Flooding, Extreme Precipitation	High	High	Low	High	High
Ecosystems and Water Resources	Critical Areas	Wetlands, Fish and Wildlife	All	High	Very High	Low	Very High	High
		Geologically Hazardous	Extreme Precipitation, Wildfire	High	High	Low	High	High
	Water Supply	Groundwater Supplies	Extreme Heat, Drought, Extreme Precipitation	High	Very High	Low	Very High	Very High
		Water Storage	Extreme Heat, Drought, Extreme Precipitation	High	Very High	Low	Very High	Very High
	Surface Water	Streams	Extreme Precipitation, Flooding	Moderate	Very High	Low	High	Moderate
Community Design, Land Use, and Economic Development	Buildings	Building Stock Age	All	High	Very High	Low	Very High	Very High
	Businesses	Industrial, Recreation/Tourism, Businesses	All	High	High	Low	High	High
	Neighborhoods	Tree Canopy, Heat Islands, and Redlining	All	High	High	Low	High	High
	Housing	Affordability and Availability	All	High	Very High	Low	Very High	Very High

Fire/Smoke & Health										City Blocks																							
Select up to 3 Sub-Index variables of interest:				Variable 1	Variable 2	Variable 3	Respiratory illness (e.g., asthma or Chronic Obstructive Respiratory Disease) and respiratory illness-related hospitalizations will become more common due to declining air quality from more frequent and intense wildfires, increased pollen production, and increased ground-level ozone (Chang., et al., 2023).																										
				Fire Smoke	Health	Socioeconomic																											
				Air Quality																													
				Exposure	Sensitivity	Adaptive Capacity																											
Select quantile scores (at least 1 for each variable):				Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>															<input checked="" type="checkbox"/>												
				High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>															<input checked="" type="checkbox"/>												
				Moderate	<input type="checkbox"/>	<input type="checkbox"/>															<input checked="" type="checkbox"/>												
				Low	<input type="checkbox"/>	<input type="checkbox"/>															<input checked="" type="checkbox"/>												
Total Block Group: 25				Very Low	<input type="checkbox"/>	<input type="checkbox"/>															<input checked="" type="checkbox"/>												
Total BG Population: 31,078 (13.3% of city)																																	
City Population (OFM 2024): 233,000																																	
Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: Fire Smoke Air Quality	Sensitivity: Health	Adaptive Capacity: Socioeconomic															Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index	
																							Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment					
530630002011	Hillyard	City	100.0%	High	Very High	Low	Very High	2,322	5.2%	16.2%	22.6%	3.5%	13.4%	4.7%	High	Very High	Low	Very High															
530630002012	Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	814	2.0%	17.9%	14.3%	3.8%	13.4%	4.7%	Very High	High	Very Low	Very High															
530630002021	Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	739	0.0%	12.3%	15.0%	1.0%	13.4%	12.5%	Very High	Moderate	Very Low	Very High															
530630002022	Hillyard	City	100.0%	Very High	Very High	Low	Very High	1,019	17.5%	8.8%	22.7%	1.3%	13.4%	11.3%	Very High	Very High	Low	Very High															
530630016001	Bemiss, Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	1,496	8.3%	6.7%	39.2%	6.8%	12.5%	8.7%	Very High	High	Moderate	Very High															
530630016002	Bemiss	City	100.0%	Very High	Very High	Very Low	Very High	979	8.6%	14.4%	24.1%	0.0%	12.5%	10.3%	Very High	Very High	Low	Very High															
530630016003	Bemiss	City	100.0%	Very High	Very High	Very Low	Very High	1,330	0.7%	29.9%	15.2%	2.0%	12.5%	8.3%	Very High	Very High	Low	Very High															
530630018001	Logan, Minnehaha	City	100.0%	High	Very High	Very Low	Very High	1,599	3.6%	27.8%	17.0%	2.5%	9.3%	13.0%	Very High	Very High	Low	Very High															
530630018002	Bemiss, Logan	City	100.0%	High	Very High	High	High	1,490	6.3%	14.4%	23.6%	0.0%	9.3%	0.9%	High	High	Moderate	High															
530630023002	West Central	City	100.0%	High	High	Moderate	High	1,667	1.5%	29.0%	9.0%	3.7%	8.7%	0.0%	Low	Very High	Very High	Moderate															
530630023003	West Central	City	100.0%	High	High	Moderate	High	1,519	3.1%	12.8%	32.8%	0.0%	8.7%	13.2%	Low	Low	Low	Low															
530630023004	West Central	City	100.0%	High	High	Very Low	Very High	1,258	0.0%	29.8%	29.5%	0.0%	8.7%	3.4%	Very Low	Moderate	Low	Moderate															
530630026001	Chief Garry Park	City	100.0%	Very High	Very High	Low	Very High	1,388	2.5%	13.0%	29.7%	1.4%	12.1%	0.0%	Very High	High	Moderate	Very High															
530630030001	East Central	City	100.0%	High	Very High	Very Low	Very High	1,182	3.8%	11.5%	27.8%	4.5%	12.5%	11.8%	Very High	High	Moderate	Very High															
530630039001	Latah/Hangman	City	100.0%	High	Very High	Moderate	Very High	783	7.0%	35.3%	11.5%	0.0%	6.1%	2.2%	Low	Very High	High	High															
530630039002	Latah/Hangman	City	100.0%	Very High	Very High	High	Very High	1,456	2.8%	24.3%	5.8%	0.0%	6.1%	12.1%	Low	Very High	High	Very High															
530630046011	Lincoln Heights	City	100.0%	High	High	Moderate	High	1,690	5.5%	14.0%	15.2%	0.6%	6.4%	6.7%	Very Low	Very High	Low	High															
530630046012	Lincoln Heights	City	100.0%	Very High	High	High	High	641	1.8%	25.8%	22.1%	0.0%	6.4%	0.0%	Very Low	Very High	High	Moderate															
530630046013	Lincoln Heights	City	100.0%	High	High	Low	High	613	0.0%	40.0%	18.2%	0.0%	6.4%	0.0%	Very Low	Very High	High	Very Low															
530630046014	Lincoln Heights	City	100.0%	High	High	Very Low	Very High	1,610	1.9%	58.2%	21.2%	3.7%	6.4%	12.7%	Very Low	Very High	High	Moderate															
530630144001	Hillyard	City	100.0%	Very High	High	Moderate	Very High	798	17.3%	13.8%	19.3%	2.0%	9.3%	4.2%	Very High	Very High	Low	Very High															
530630144002	Hillyard, Minnehaha	City	96.7%	Very High	High	Moderate	Very High	1,180	2.5%	18.4%	34.2%	3.0%	9.3%	22.3%	High	High	Very Low	Very High															
530630144003	Minnehaha	City	99.8%	Very High	High	Moderate	Very High	1,771	8.2%	10.8%	30.2%	1.2%	9.3%	6.7%	Very High	High	Low	Very High															
530630144004	Hillyard, Minnehaha	City	100.0%	Very High	High	Moderate	Very High	1,204	11.3%	13.9%	4.6%	0.9%	9.3%	0.0%	Very High	High	High	High															
530630145003	Chief Garry Park, East Central	City	100.0%	High	Very High	Very Low	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate															
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%																			

Heat & Health

City Blocks

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Group: 48

Total BG Population: 59,800 (25.7% of city)

City Population (OFM 2024): 233,000

	Variable 1	Variable 2	Variable 3
	Heat	Health	Socioeconomic
	Exposure	Sensitivity	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Very Low	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The City of Spokane could see an increase in dangerously hot conditions, particularly during the summer months, as projected changes in the city's climate include an increase in the number of peak summer temperatures throughout the season. Populations, including low-income people, aging and elderly people, children, homebound people, unhoused people, outdoor workers, people with mental illness, and those with chronic health conditions, are at a higher risk of developing heat-related illness, such as dehydration, heat exhaustion, and heat stroke (Savioli, et al., 2022; Harris & Albrecht, 2024).

Rising temperatures and urban heat island (UHI) effects will likely lead to greater demand for emergency response and hospital care.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: Heat	Sensitivity: Health	Adaptive Capacity: Socioeconomic	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002012	Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	814	2.0%	17.9%	14.3%	3.8%	13.4%	4.7%	Very High	High	Very Low	Very High
530630002021	Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	739	0.0%	12.3%	15.0%	1.0%	13.4%	12.5%	Very High	Moderate	Very Low	Very High
530630002022	Hillyard	City	100.0%	Very High	Very High	Low	Very High	1,019	17.5%	8.8%	22.7%	1.3%	13.4%	11.3%	Very High	Very High	Low	Very High
530630003012	Whitman	City	100.0%	High	Very High	Very Low	Very High	1,417	0.0%	11.6%	42.5%	2.8%	11.6%	7.5%	Moderate	Low	Very Low	High
530630003021	Nevada Heights, Whitman	City	100.0%	High	Very High	Low	High	1,303	12.8%	20.6%	24.2%	3.7%	11.6%	6.4%	Moderate	Very High	Very Low	Very High
530630004001	Nevada Heights	City	100.0%	High	High	Moderate	High	1,446	12.7%	10.3%	31.7%	0.0%	10.9%	10.3%	Moderate	Very High	Moderate	High
530630004003	Nevada Heights	City	100.0%	Very High	High	Very Low	Very High	1,258	2.7%	13.2%	29.1%	8.3%	10.9%	13.7%	High	Low	Very High	Low
530630012001	North Hill	City	100.0%	High	High	High	Moderate	894	2.0%	10.3%	16.5%	0.0%	8.7%	3.8%	Moderate	Low	Low	Moderate
530630013002	North Hill	City	100.0%	High	High	Low	High	1,372	3.9%	9.7%	18.5%	0.0%	9.4%	5.8%	High	Low	Low	Moderate
530630014001	Nevada Heights	City	100.0%	High	High	Very Low	High	1,679	3.5%	11.5%	19.4%	0.0%	10.4%	8.6%	Moderate	Low	Very Low	Moderate
530630014002	Logan, Nevada Heights	City	100.0%	High	High	Moderate	High	1,698	8.5%	3.7%	27.2%	0.0%	10.4%	6.4%	Moderate	Low	Moderate	Moderate
530630014003	Logan, Nevada Heights	City	100.0%	Very High	High	Low	Very High	1,392	6.2%	18.5%	30.3%	2.0%	10.4%	13.2%	High	Moderate	Very Low	Very High
530630014004	Nevada Heights	City	100.0%	High	High	Very Low	Very High	1,862	8.3%	11.0%	37.6%	7.6%	10.4%	8.5%	Moderate	Moderate	Very Low	High
530630016001	Bemiss, Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	1,496	8.3%	6.7%	39.2%	6.8%	12.5%	8.7%	Very High	High	Moderate	Very High
530630016002	Bemiss	City	100.0%	High	Very High	Very Low	Very High	979	8.6%	14.4%	24.1%	0.0%	12.5%	10.3%	Very High	Very High	Low	Very High
530630016003	Bemiss	City	100.0%	Very High	Very High	Very Low	Very High	1,330	0.7%	29.9%	15.2%	2.0%	12.5%	8.3%	Very High	Very High	Low	Very High
530630018001	Logan, Minnehaha	City	100.0%	High	Very High	Very Low	Very High	1,599	3.6%	27.8%	17.0%	2.5%	9.3%	13.0%	Very High	Very High	Low	Very High
530630018002	Bemiss, Logan	City	100.0%	Very High	Very High	High	High	1,490	6.3%	14.4%	23.6%	0.0%	9.3%	0.9%	High	High	Moderate	High
530630020001	Emerson/Garfield	City	100.0%	High	High	Moderate	High	794	7.0%	18.2%	11.5%	0.0%	11.2%	6.7%	Moderate	High	Low	High
530630020002	Emerson/Garfield	City	100.0%	High	High	Low	High	836	8.5%	3.2%	16.8%	0.0%	11.2%	8.4%	Moderate	Moderate	Very Low	Very High
530630020003	Emerson/Garfield, West Central	City	100.0%	Very High	High	Very Low	Very High	900	5.5%	9.8%	34.5%	13.0%	11.2%	14.3%	Low	Moderate	Very Low	Very High
530630020004	West Central	City	100.0%	Very High	High	Very Low	Very High	999	2.7%	18.3%	24.4%	0.0%	11.2%	1.9%	Moderate	Moderate	Very Low	High
530630020005	Emerson/Garfield	City	100.0%	High	High	Low	Very High	926	6.2%	10.5%	11.3%	4.2%	11.2%	7.0%	High	Moderate	Low	High
530630023001	West Central	City	100.0%	Very High	High	Low	High	1,097	0.0%	12.6%	44.2%	0.0%	8.7%	9.0%	Low	Very Low	Very Low	Very High
530630024001	Emerson/Garfield, Riverside, West	City	100.0%	Very High	Very High	Very Low	Very High	2,181	3.2%	13.4%	32.2%	0.4%	13.2%	7.8%	Moderate	Moderate	Very High	Very Low
530630024002	Emerson/Garfield	City	100.0%	Very High	Very High	Very Low	Very High	1,062	3.0%	26.2%	11.3%	4.7%	13.2%	13.3%	Moderate	High	Low	High
530630026001	Chief Garry Park	City	100.0%	High	Very High	Low	High	1,388	2.5%	13.0%	29.7%	1.4%	12.1%	0.0%	Very High	High	Moderate	Very High
530630026002	Chief Garry Park	City	100.0%	High	Very High	Very Low	Very High	1,454	9.0%	10.9%	35.5%	1.1%	12.1%	2.7%	Low	High	Moderate	High
530630035002	Riverside	City	100.0%	High	Very High	Very Low	Very High	1,141	0.0%	27.4%	20.7%	0.0%	11.6%	13.0%	Low	Very High	Low	Very High
530630035003	Riverside	City	100.0%	Very High	Very High	Very Low	Very High	618	0.0%	19.1%	15.4%	0.0%	11.6%	0.0%	Low	Very High	Very High	Low
530630035004	Riverside	City	100.0%	Very High	Very High	Very Low	Very High	1,001	0.0%	7.5%	28.8%	0.8%	11.6%	49.4%	Moderate	Moderate	Very Low	Very High
530630111021	Shiloh Hills	City	100.0%	High	High	High	High	2,409	6.0%	12.4%	15.1%	0.0%	9.3%	4.8%	Moderate	Moderate	Very High	Very Low
530630111022	Shiloh Hills	City	100.0%	Very High	High	Moderate	Very High	1,413	6.6%	16.8%	8.3%	0.8%	9.3%	2.4%	High	Moderate	Very High	Low
530630111031	Shiloh Hills	City	100.0%	Very High	Very High	Very Low	Very High	1,508	3.0%	47.9%	19.7%	0.0%	11.1%	3.5%	High	Very High	Very High	High
530630111032	Shiloh Hills	City	100.0%	Very High	Very High	Low	Very High	1,671	3.8%	33.8%	11.6%	2.4%	11.1%	5.3%	High	Very High	Very High	Moderate
530630111041	Shiloh Hills	City	100.0%	Very High	Very High	Very Low	Very High	778	0.0%	6.8%	60.4%	0.0%	11.1%	28.9%	High	Very Low	Very Low	Very High
530630111042	Shiloh Hills	City	100.0%	Very High	Very High	Low	Very High	1,584	1.8%	17.6%	14.9%	0.0%	11.1%	11.5%	High	High	High	Moderate
530630111043	Shiloh Hills	City	100.0%	Very High	Very High	Very Low	Very High	507	12.4%	17.8%	41.6%	0.0%	11.1%	23.6%	High	Very High	Low	Very High
530630112032	Shiloh Hills	City	100.0%	High	High	Low	Very High	1,560	3.2%	29.0%	30.1%	4.2%	9.7%	2.2%	High	Moderate	Very High	Low
530630112034	Shiloh Hills	City	100.0%	Very High	High	Moderate	High	873	1.7%	9.9%	11.0%	0.0%	9.7%	6.0%	High	Very Low	Moderate	Low
530630112041	Shiloh Hills	City	100.0%	High	High	Low	High	1,613	3.3%	18.4%	13.2%	7.0%	9.7%	0.0%	Moderate	Low	High	Low
530630112042	Shiloh Hills	City	100.0%	High	High	Low	High	766	0.0%	45.1%	15.8%	2.3%	9.7%	6.4%	High	Very High	High	Moderate
530630144001	Hillyard	City	100.0%	Very High	High	Moderate	High	798	17.3%	13.8%	19.3%	2.0%	9.3%	4.2%	Very High	Very High	Low	Very High
530630144003	Minnehaha	City	99.8%	High	High	Moderate	High	1,771	8.2%	10.8%	30.2%	1.2%	9.3%	6.7%	Very High	High	Low	Very High
530630144004	Hillyard, Minnehaha	City	100.0%	High	High	Moderate	High	1,204	11.3%	13.9%	4.6%	0.9%	9.3%	0.0%	Very High	High	High	High
530630145001	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very Low	Very High	673	6.4%	16.2%	44.6%	1.0%	13.7%	0.0%	High	Very High	Very Low	Very High
530630145002	East Central	City	100.0%	Very High	Very High	Very Low	Very High	1,959	1.1%	8.5%	16.8%	2.1%	13.7%	22.5%	Low	Low	Very High	Very Low
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very Low	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

City Blocks

Fire

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups: 10

Total BG Population: 11,306 (4.9% of city)

City Population (OFM 2024): 233,000

Variable 1	Variable 2	Variable 3
E WUI_Coverage	AC No Vehicle Percent	AC Access to Transit
Exposure	Adaptive Capacity	Adaptive Capacity
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Extreme weather, flooding, and wildfires can hinder transportation to or operations of healthcare facilities, e.g., through supply chain shortages, power outages, or facility damage. Individuals in the City of Spokane without ready access to a vehicle or public transit and those with limited mobility may be especially challenged. During crises, their limited ability to seek timely medical attention can lead to severe health consequences. Flooding, extreme heat, wildfires, and severe storms threaten school infrastructure, disrupt transportation, and create unsafe learning conditions. The impacts of natural hazards will not only intensify with a changing climate, but their seasonal patterns will also shift, making some hazards a year-round threat to emergency management operations and first responders. These threats include the lengthening of wildfire seasons, more frequent and intense extreme heat and drought, and increasingly severe precipitation events (FEMA, 2023)

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E WUI_Coverage	Adaptive Capacity: AC No Vehicle Percent	Adaptive Capacity: AC Access to Transit	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002012	Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	814	2.0%	17.9%	14.3%	3.8%	13.4%	4.7%	Very High	High	Very Low	Very High
530630007004	Northwest	City	100.0%	Very High	High	Very Low	High	1,293	1.8%	11.6%	28.5%	0.0%	8.1%	0.0%	Very High	Very Low	Low	High
530630010004	Audubon/Downriver	City	100.0%	Very High	High	Very Low	Very High	775	2.5%	28.8%	8.1%	0.0%	6.1%	0.0%	Very High	Moderate	Very Low	Very High
530630010005	Audubon/Downriver	City	99.7%	Very High	High	Very Low	High	869	9.5%	33.2%	24.1%	0.0%	6.1%	5.1%	Very High	Very High	Moderate	Very High
530630011003	Audubon/Downriver	City	100.0%	Very High	High	Low	Very High	1,117	3.8%	17.7%	4.0%	0.0%	6.4%	0.0%	High	Moderate	Moderate	High
530630018001	Logan, Minnehaha	City	100.0%	High	Very High	Low	Very High	1,599	3.6%	27.8%	17.0%	2.5%	9.3%	13.0%	Very High	Very High	Low	Very High
530630040013	Cliff-Cannon	City	100.0%	Very High	High	Low	High	709	3.8%	17.0%	20.2%	0.0%	8.4%	19.1%	Low	Low	Low	Low
530630043002	Comstock	City	100.0%	High	High	Low	Moderate	767	2.9%	26.2%	10.3%	0.0%	4.1%	2.1%	Very Low	High	Moderate	Low
530630048001	Southgate	City	100.0%	High	Very High	Low	High	1,766	2.5%	37.7%	17.8%	10.5%	5.1%	6.7%	Low	Moderate	High	Low
530630106011	Audubon/Downriver, Northwest	City	99.9%	Very High	High	Very Low	High	1,598	12.7%	12.1%	14.6%	0.0%	5.1%	0.0%	Very High	Very High	Very High	High
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Flooding

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups: 7

Total BG Population: 8,638 (3.7% of city)

City Population (OFM 2024): 233,000

Variable 1	Variable 2	Variable 3
E Flood Coverage	AC No Vehicle Percent	AC Access to Transit
Exposure	Adaptive Capacity	Adaptive Capacity
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Some shelters and gathering places are already at risk, as several are located within or near flood zones. Notable facilities with heightened flood exposure include Spokane Falls Community College, Scott Elementary, Ferris High School, and the South Hill Library—sites that serve as critical educational, social, and emergency resources during extreme weather events. Would be helpful to list the ones most at risk here. Hard to tell on the map without labels.

While no hospitals are located within the 100-year or 500-year flood zones, many health clinics, law enforcement offices, and fire stations overlap with flood-prone areas.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Flood Coverage	Adaptive Capacity: AC No Vehicle Percent	Adaptive Capacity: AC Access to Transit	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630010005	Audubon/Downriver	City	99.7%	Very High	High	Very Low	Very High	869	9.5%	33.2%	24.1%	0.0%	6.1%	5.1%	Very High	Very High	Moderate	Very High
530630018001	Logan, Minnehaha	City	100.0%	Very High	Very High	Low	Very High	1,599	3.6%	27.8%	17.0%	2.5%	9.3%	13.0%	Very High	Very High	Low	Very High
530630025022	Logan	City	100.0%	Very High	Very High	Very Low	Very High	969	0.0%	16.4%	9.7%	2.7%	11.0%	42.9%	Moderate	Moderate	Very Low	Very High
530630026003	Chief Garry Park	City	100.0%	Very High	Very High	Low	Very High	1,223	7.1%	6.8%	32.0%	6.4%	12.1%	7.2%	Low	High	Very Low	High
530630046013	Lincoln Heights	City	100.0%	Very High	Very High	Very Low	Very High	613	0.0%	40.0%	18.2%	0.0%	6.4%	0.0%	Very Low	Very High	High	Very Low
530630048001	Southgate	City	100.0%	Very High	Very High	Low	Very High	1,766	2.5%	37.7%	17.8%	10.5%	5.1%	6.7%	Low	Moderate	High	Low
530630106011	Audubon/Downriver, Northwest	City	99.9%	High	High	Very Low	Very High	1,598	12.7%	12.1%	14.6%	0.0%	5.1%	0.0%	Very High	Very High	Very High	High
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Heat, Impervious, Poverty

City Blocks

Choose Assessment Area (City only or Full UGA):

City Only

Variable 1

Variable 2

Variable 3

E Humidex 8.5 Weighted Avg

AC Impervious Coverage

AC Below Poverty Percent

Exposure

Adaptive Capacity

Adaptive Capacity

Very High

High

Moderate

Low

Very Low

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Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Group: 10

Total BG Population: 10,281 (4.4% of city)

City Population (OFM 2024): 233,000

High indicator values indicate LOW Adaptive Capacity.

Much of the City of Spokane's social service infrastructure—particularly services for the unhoused—is concentrated Downtown, where over 50% of residents live in poverty (Spokane Neighborhood Action Partners and Downtown Spokane Partnership, 2025). This area also experiences some of the highest land surface temperatures in the city.

High land surface temperatures and impervious surface coverage in Central City, Downtown, and Northeast Spokane, indicating heightened heat vulnerability for many educational facilities.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Humidex 8.5 Weighted Avg	Adaptive Capacity: AC Impervious Coverage	Adaptive Capacity: AC Below Poverty Percent	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002012	Hillyard	City	100.0%	Very High	High	High	Very High	814	2.0%	17.9%	14.3%	3.8%	13.4%	4.7%	Very High	High	Very Low	Very High
530630002021	Hillyard	City	100.0%	Very High	Very High	Very High	Very High	739	0.0%	12.3%	15.0%	1.0%	13.4%	12.5%	Very High	Moderate	Very Low	Very High
530630002022	Hillyard	City	100.0%	Very High	High	High	Very High	1,019	17.5%	8.8%	22.7%	1.3%	13.4%	11.3%	Very High	Very High	Low	Very High
530630015003	Bemiss	City	100.0%	Very High	High	High	High	923	4.1%	15.0%	13.8%	0.0%	9.1%	6.9%	High	Very Low	Very Low	High
530630016001	Bemiss, Hillyard	City	100.0%	Very High	Very High	Very High	Very High	1,496	8.3%	6.7%	39.2%	6.8%	12.5%	8.7%	Very High	High	Moderate	Very High
530630016003	Bemiss	City	100.0%	Very High	High	Very High	Very High	1,330	0.7%	29.9%	15.2%	2.0%	12.5%	8.3%	Very High	Very High	Low	Very High
530630144001	Hillyard	City	100.0%	Very High	Very High	High	Very High	798	17.3%	13.8%	19.3%	2.0%	9.3%	4.2%	Very High	Very High	Low	Very High
530630145001	Chief Garry Park, East Central	City	100.0%	Very High	Very High	High	Very High	673	6.4%	16.2%	44.6%	1.0%	13.7%	0.0%	High	Very High	Very Low	Very High
530630145002	East Central	City	100.0%	Very High	Very High	Very High	Very High	1,959	1.1%	8.5%	16.8%	2.1%	13.7%	22.5%	Low	Low	Very High	Very Low
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very High	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Heat, Impervious Area, Tree Canopy Coverage

City Blocks

Choose Assessment Area (City only or Full UGA:

City Only

Select up to 3 Sub-Index variables of interest:

Variable 1

Variable 2

Variable 3

E Humidex 8.5 Weighted Avg

AC Impervious Coverage

AC Tree Canopy Coverage

Exposure

Adaptive Capacity

Adaptive Capacity

Select quantile scores (at least 1 for each variable):

Very High

High

Moderate

Low

Very Low

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Total Block Groups: 13

Total BG Population: 14,162 (6.1% of city)

City Population (OFM 2024): 233,000

High indicator values indicate LOW Adaptive Capacity.

In urban settings, particularly within the City of Spokane, many older buildings used by Native organizations are located in areas with limited tree canopy and greater urban heat island effects, further increasing exposure to extreme heat and poor air quality.

The Spokane Powwow, salmon feasts, and other ceremonial gatherings are increasingly impacted by extreme heat and wildfire smoke.

Extreme temperatures already impact park use depending on the specific conditions of the park. Parks or trails with shade, air-conditioned indoor facilities, water features, and water access are already often used as a place to cool off during heat events, whereas parks with more impervious surfaces are more unsafe to use.

Some neighborhoods, particularly those with high concentrations of impervious surfaces like roads and buildings, experience localized temperature differences of up to 14°F. For example, on a 90°F day, areas with fewer trees and more paved surfaces can feel as hot as 104°F (Henning, Ducken, Honebein, Corrina, & Brown, 2023).Areas with lower tree canopy tend to correlate with neighborhoods that experience significant heat disparities.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Humidex 8.5 Weighted Avg	Adaptive Capacity: AC Impervious Coverage	Adaptive Capacity: AC Tree Canopy Coverage	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002012	Hillyard	City	100.0%	Very High	High	Very Low	Very High	814	2.0%	17.9%	14.3%	3.8%	13.4%	4.7%	Very High	High	Very Low	Very High
530630002021	Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	739	0.0%	12.3%	15.0%	1.0%	13.4%	12.5%	Very High	Moderate	Very Low	Very High
530630002022	Hillyard	City	100.0%	Very High	High	Low	Very High	1,019	17.5%	8.8%	22.7%	1.3%	13.4%	11.3%	Very High	Very High	Low	Very High
530630015003	Bemiss	City	100.0%	Very High	High	Low	Very High	923	4.1%	15.0%	13.8%	0.0%	9.1%	6.9%	High	Very Low	Very Low	High
530630016001	Bemiss, Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	1,496	8.3%	6.7%	39.2%	6.8%	12.5%	8.7%	Very High	High	Moderate	Very High
530630016002	Bemiss	City	100.0%	Very High	High	Very Low	Very High	979	8.6%	14.4%	24.1%	0.0%	12.5%	10.3%	Very High	Very High	Low	Very High
530630016003	Bemiss	City	100.0%	Very High	High	Very Low	Very High	1,330	0.7%	29.9%	15.2%	2.0%	12.5%	8.3%	Very High	Very High	Low	Very High
530630018002	Bemiss, Logan	City	100.0%	Very High	Very High	Very Low	Very High	1,490	6.3%	14.4%	23.6%	0.0%	9.3%	0.9%	High	High	Moderate	High
530630111022	Shiloh Hills	City	100.0%	Very High	Very High	Low	Very High	1,413	6.6%	16.8%	8.3%	0.8%	9.3%	2.4%	High	Moderate	Very High	Low
530630144001	Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	798	17.3%	13.8%	19.3%	2.0%	9.3%	4.2%	Very High	Very High	Low	Very High
530630145001	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very Low	Very High	673	6.4%	16.2%	44.6%	1.0%	13.7%	0.0%	High	Very High	Very Low	Very High
530630145002	East Central	City	100.0%	Very High	Very High	Very Low	Very High	1,959	1.1%	8.5%	16.8%	2.1%	13.7%	22.5%	Low	Low	Very High	Very Low
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very Low	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups: 21

Total BG Population: 27,429 (11.8% of city)

City Population (OFM 2024): 233,000

	Variable 1	Variable 2
	E Flood Coverage	S GeoHazard Coverage
	Exposure	Sensitivity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Moderate	<input type="checkbox"/>	<input type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>
Very Low	<input type="checkbox"/>	<input type="checkbox"/>

Rising water levels and more intense precipitation events along the Spokane and Columbia Rivers threaten Indigenous burial sites and cultural landmarks (UCUT, 2021). The Spokane Tribe has documented multiple instances of erosion-related damage to historic sites in recent years (Spokane Tribe, 2022).
Flooding could impact certain parks, trails, and open space, depending on their location, by eroding trails and damaging other park assets directly. Potential flooding mechanisms in Spokane include a swollen Spokane River and urban runoff from high-intensity rain events

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Flood Coverage	Sensitivity: S GeoHazard Coverage	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
								Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630008001	Balboa/South Indian Trail	City	100.0%	High	Very High	Very High	2,681	1.4%	27.2%	19.0%	0.0%	5.4%	12.1%	High	Very High	Very High	Moderate
530630010005	Audubon/Downriver	City	99.7%	Very High	Very High	Very High	869	9.5%	33.2%	24.1%	0.0%	6.1%	5.1%	Very High	Very High	Moderate	Very High
530630023002	West Central	City	100.0%	Very High	Very High	Very High	1,667	1.5%	29.0%	9.0%	3.7%	8.7%	0.0%	Low	Very High	Very High	Moderate
530630029001	East Central	City	100.0%	Very High	Very High	Very High	930	8.3%	18.6%	22.4%	1.6%	6.8%	8.7%	Very High	Moderate	Moderate	Very High
530630029002	East Central, Lincoln Heights	City	99.2%	High	Very High	Very High	1,080	5.8%	21.6%	17.6%	0.0%	6.8%	5.3%	Low	Very High	Moderate	Moderate
530630029003	East Central, Lincoln Heights	City	100.0%	Very High	Very High	Very High	1,323	5.5%	12.5%	21.4%	1.5%	6.8%	5.0%	Very High	Low	High	High
530630030001	East Central	City	100.0%	Very High	Very High	Very High	1,182	3.8%	11.5%	27.8%	4.5%	12.5%	11.8%	Very High	High	Moderate	Very High
530630031004	East Central, Lincoln Heights, F	City	100.0%	High	Very High	Very High	1,486	10.4%	7.0%	10.8%	3.2%	7.7%	3.8%	Very Low	Very High	Moderate	Moderate
530630036011	West Hills	City	92.2%	Very High	Very High	Very High	2,203	3.4%	4.5%	28.4%	0.0%	7.5%	11.3%	High	Moderate	Very High	Low
530630036012	Peaceful Valley	City	100.0%	Very High	Very High	Very High	671	0.0%	19.6%	25.1%	0.0%	7.5%	0.0%	Low	Very High	Very High	Low
530630036022	Browne's Addition	City	100.0%	Very High	Very High	Very High	1,128	2.1%	16.6%	19.1%	0.0%	7.5%	0.0%	Very Low	Very High	High	Low
530630038001	West Hills	City	93.7%	Very High	Very High	High	828	7.7%	8.9%	0.5%	0.0%	6.7%	12.2%	Very Low	High	High	Very Low
530630039001	Latah/Hangman	City	100.0%	Very High	Very High	Very High	783	7.0%	35.3%	11.5%	0.0%	6.1%	2.2%	Low	Very High	High	High
530630039002	Latah/Hangman	City	100.0%	Very High	Very High	Very High	1,456	2.8%	24.3%	5.8%	0.0%	6.1%	12.1%	Low	Very High	High	Very High
530630042005	Manito/Cannon Hill	City	100.0%	Very High	Very High	High	1,583	6.1%	23.9%	19.2%	0.0%	3.7%	5.6%	Very Low	High	Moderate	Low
530630045001	Rockwood	City	100.0%	Very High	Very High	Very High	1,247	4.4%	32.3%	10.8%	0.0%	4.0%	0.0%	Very Low	High	Very High	Very Low
530630045002	Rockwood	City	100.0%	High	Very High	Very High	1,026	4.4%	20.6%	14.2%	0.0%	4.0%	10.3%	Very Low	High	Very Low	Low
530630046012	Lincoln Heights	City	100.0%	Very High	Very High	Very High	641	1.8%	25.8%	22.1%	0.0%	6.4%	0.0%	Very Low	Very High	High	Moderate
530630046022	Lincoln Heights	City	100.0%	Very High	Very High	Very High	854	0.9%	12.5%	8.9%	0.0%	7.0%	1.7%	Low	Very Low	High	Very Low
530630106011	Audubon/Downriver, Northwest	City	99.9%	High	Very High	High	1,598	12.7%	12.1%	14.6%	0.0%	5.1%	0.0%	Very High	Very High	Very High	High
530630136001	Grandview/Thorpe	City	54.7%	High	Very High	Very High	2,193	6.2%	12.1%	28.0%	0.0%	6.5%	1.3%	Low	Low	High	Very Low
Average								4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA: City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Group 9

Total BG Populati 16,184 (6.9% of city)

Variable 1	Variable 2	Variable 3
E HeavyPrecip Weighted Avg	S GeoHazard Coverage	S Water Quality Coverage
Exposure	Sensitivity	Sensitivity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Moderate	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Low	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Very Low	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Longer dry periods followed by intense storms will also worsen non-point source pollution, leading to more days when swimming or fishing may be unsafe. Impacts to fishing also affect Tribal members’ access to cultural resources.

City Population (OFM 2024): 233,000

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E HeavyPrecip Weighted Avg	Sensitivity: S GeoHazard Coverage	Sensitivity: S Water Quality Coverage	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630008001	Balboa/South Indian Trail	City	100.0%	Very High	Very High	Very Low	Very High	2,681	1.4%	27.2%	19.0%	0.0%	5.4%	12.1%	High	Very High	Very High	Moderate
530630010005	Audubon/Downriver	City	99.7%	Very High	Very High	Very High	Very High	869	9.5%	33.2%	24.1%	0.0%	6.1%	5.1%	Very High	Very High	Moderate	Very High
530630036011	West Hills	City	92.2%	Very High	Very High	Very High	Very High	2,203	3.4%	4.5%	28.4%	0.0%	7.5%	11.3%	High	Moderate	Very High	Low
530630106011	Audubon/Downriver, Northwest	City	99.9%	Very High	Very High	Very High	Very High	1,598	12.7%	12.1%	14.6%	0.0%	5.1%	0.0%	Very High	Very High	Very High	High
530630106031	Balboa/South Indian Trail, North	City	100.0%	Very High	Very High	Very Low	Very High	1,039	1.3%	31.6%	13.0%	0.0%	5.1%	4.9%	Very High	High	High	Very High
530630106041	North Indian Trail	City	100.0%	Very High	Very High	Very Low	Very High	1,037	1.4%	34.2%	5.8%	0.0%	5.1%	0.0%	Very High	Moderate	Very High	Low
530630106042	North Indian Trail	City	97.2%	Very High	Very High	Very Low	Very High	3,133	4.1%	19.1%	12.9%	0.0%	5.1%	4.7%	Very High	Moderate	Very High	Low
530630107011	Five Mile Prairie	City	100.0%	Very High	Very High	Very Low	High	2,209	6.4%	8.6%	3.4%	0.0%	4.9%	5.0%	High	Very Low	Very High	Very Low
530630107013	Five Mile Prairie	City	55.5%	Very High	Very High	Very Low	High	1,414	4.9%	6.7%	18.0%	0.5%	4.9%	6.1%	High	Very Low	High	Very Low
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Group 22

Total BG Population 24,441 (10.5% of city)

City Population (OFM 2024): 233,000

Variable 1	Variable 2	Variable 3
E WUI_Coverage	AC Built before 1960 Percent	AC No Vehicle Percent
Exposure	Adaptive Capacity	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Moderate	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Low	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Very Low	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Elders and youth are particularly vulnerable to health impacts from wildfire smoke and extreme heat and are also central to cultural transmission. Urban Native populations often face higher barriers to accessing clean air and cooling spaces due to socioeconomic disparities and mobility limitations.

High indicator values indicate LOW Adaptive Capacity.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E WUI_Coverage	Adaptive Capacity: AC Built before 1960 Percent	Adaptive Capacity: AC No Vehicle Percent	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002011	Hillyard	City	100.0%	High	High	Moderate	High	2,322	5.2%	16.2%	22.6%	3.5%	13.4%	4.7%	High	Very High	Low	Very High
530630007004	Northwest	City	100.0%	Very High	Very High	High	Very High	1,293	1.8%	11.6%	28.5%	0.0%	8.1%	0.0%	Very High	Very Low	Low	High
530630009003	Northwest	City	100.0%	Very High	Very High	Moderate	Very High	954	6.3%	24.0%	4.2%	0.0%	7.3%	0.0%	Very High	High	Moderate	Very High
530630009004	Northwest	City	100.0%	Very High	High	Very Low	Very High	631	3.1%	10.8%	10.1%	0.0%	7.3%	14.2%	Very High	Low	Low	Very High
530630010001	Audubon/Downriver	City	100.0%	Very High	Very High	Moderate	Very High	889	2.3%	16.5%	0.0%	0.0%	6.1%	4.3%	Very High	Very Low	Moderate	Moderate
530630010002	Audubon/Downriver	City	100.0%	Very High	Very High	Very Low	Very High	771	2.2%	2.5%	12.8%	0.0%	6.1%	6.6%	Very High	Very Low	Very Low	High
530630010003	Audubon/Downriver	City	100.0%	Very High	Very High	Very Low	Very High	708	0.7%	18.1%	6.1%	0.0%	6.1%	0.0%	Very High	Very Low	Very Low	Very High
530630010004	Audubon/Downriver	City	100.0%	Very High	High	High	Very High	775	2.5%	28.8%	8.1%	0.0%	6.1%	0.0%	Very High	Moderate	Very Low	Very High
530630010006	Audubon/Downriver	City	100.0%	Very High	High	Moderate	Very High	1,533	4.0%	15.2%	15.4%	0.0%	6.1%	2.7%	Very High	Low	Moderate	High
530630011002	Audubon/Downriver	City	100.0%	Very High	High	Very Low	Very High	1,072	14.6%	7.8%	37.6%	6.0%	6.4%	2.7%	Very High	High	Moderate	High
530630011003	Audubon/Downriver	City	100.0%	Very High	Very High	High	Very High	1,117	3.8%	17.7%	4.0%	0.0%	6.4%	0.0%	High	Moderate	Moderate	High
530630018002	Bemiss, Logan	City	100.0%	High	High	Low	High	1,490	6.3%	14.4%	23.6%	0.0%	9.3%	0.9%	High	High	Moderate	High
530630021002	Emerson/Garfield, West Central	City	100.0%	High	Very High	Low	High	1,557	2.2%	10.8%	24.2%	0.9%	8.6%	12.3%	High	Very Low	Low	Moderate
530630023003	West Central	City	100.0%	High	Very High	Moderate	Very High	1,519	3.1%	12.8%	32.8%	0.0%	8.7%	3.4%	Low	Low	Low	Low
530630023004	West Central	City	100.0%	High	Very High	Very High	Very High	1,258	0.0%	29.8%	29.5%	0.0%	8.7%	0.0%	Very Low	Moderate	Low	Moderate
530630040013	Cliff-Cannon	City	100.0%	Very High	High	High	Very High	709	3.8%	17.0%	20.2%	0.0%	8.4%	19.1%	Low	Low	Low	Low
530630040021	Cliff-Cannon	City	100.0%	High	High	Moderate	High	1,248	2.1%	14.8%	22.3%	0.0%	8.4%	3.2%	Low	Low	Moderate	Low
530630042001	Manito/Cannon Hill	City	100.0%	High	Very High	Very Low	High	880	5.0%	11.0%	3.3%	0.0%	3.7%	2.6%	Very Low	Low	Moderate	Very Low
530630042003	Manito/Cannon Hill	City	100.0%	High	High	Very Low	Very High	676	10.3%	14.2%	22.8%	1.7%	3.7%	0.0%	Very Low	Moderate	High	Very Low
530630042004	Manito/Cannon Hill	City	100.0%	High	Very High	Very Low	Very High	691	7.4%	14.8%	33.4%	0.0%	3.7%	9.4%	Very Low	Low	Moderate	Low
530630042005	Manito/Cannon Hill	City	100.0%	High	Very High	Very Low	Very High	1,583	6.1%	23.9%	19.2%	0.0%	3.7%	5.6%	Very Low	High	Moderate	Low
530630043002	Comstock	City	100.0%	High	Very High	High	Very High	767	2.9%	26.2%	10.3%	0.0%	4.1%	2.1%	Very Low	High	Moderate	Low
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA:

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Group 17

Total BG Population 23,118 (9.9% of city)

City Population (OFM 2024): 233,000

Variable 1	Variable 2	Variable 3
E Flood Coverage	AC No Vehicle Percent	AC Below Poverty Percent
Exposure	Adaptive Capacity	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Moderate	<input type="checkbox"/>	<input type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>
Very Low	<input type="checkbox"/>	<input type="checkbox"/>

High indicator values indicate LOW Adaptive Capacity.

The impacts of a changing climate on the City of Spokane’s food system will not be felt equally. More frequent and severe climate-driven disruptions are expected to disproportionately affect vulnerable groups, including women, children, older adults, people with disabilities, and people in neighborhoods that are more than one mile from the nearest super market. These communities already face barriers to accessing fresh, nutritious food—whether due to transportation, cost, or geographic isolation.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Flood Coverage	Adaptive Capacity: AC No Vehicle Percent	Adaptive Capacity: AC Below Poverty Percent	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630007001	Northwest	City	100.0%	Very High	High	Very High	Very High	1,315	6.0%	9.4%	16.7%	0.0%	8.1%	0.0%	High	Low	Very Low	High
530630018001	Logan, Minnehaha	City	100.0%	Very High	Very High	Very High	Very High	1,599	3.6%	27.8%	17.0%	2.5%	9.3%	13.0%	Very High	Very High	Low	Very High
530630024001	Emerson/Garfield, Riverside, W	City	100.0%	High	Very High	Very High	Very High	2,181	3.2%	13.4%	32.2%	0.4%	13.2%	7.8%	Moderate	Moderate	Very High	Very Low
530630025022	Logan	City	100.0%	Very High	Very High	Very High	Very High	969	0.0%	16.4%	9.7%	2.7%	11.0%	42.9%	Moderate	Moderate	Very Low	Very High
530630026003	Chief Garry Park	City	100.0%	Very High	Very High	Very High	Very High	1,223	7.1%	6.8%	32.0%	6.4%	12.1%	7.2%	Low	High	Very Low	High
530630030002	East Central	City	100.0%	Very High	Very High	Very High	Very High	1,436	8.7%	13.8%	37.1%	6.1%	12.5%	3.3%	Very High	Very High	Low	Very High
530630031001	East Central	City	100.0%	High	High	Very High	Very High	1,430	13.3%	12.5%	32.7%	7.8%	7.7%	5.0%	Low	Very High	High	Low
530630035001	Riverside	City	100.0%	Very High	Very High	Very High	Very High	1,609	6.2%	22.5%	15.6%	0.0%	11.6%	12.9%	Low	Very High	High	Very High
530630035002	Riverside	City	100.0%	Very High	Very High	Very High	Very High	1,141	0.0%	27.4%	20.7%	0.0%	11.6%	13.0%	Low	Very High	Low	Very High
530630035003	Riverside	City	100.0%	High	Very High	Very High	Very High	618	0.0%	19.1%	15.4%	0.0%	11.6%	0.0%	Low	Very High	Very High	Low
530630036011	West Hills	City	92.2%	Very High	High	Very High	Very High	2,203	3.4%	4.5%	28.4%	0.0%	7.5%	11.3%	High	Moderate	Very High	Low
530630036012	Peaceful Valley	City	100.0%	Very High	Very High	High	Very High	671	0.0%	19.6%	25.1%	0.0%	7.5%	0.0%	Low	Very High	Very High	Low
530630036022	Browne's Addition	City	100.0%	Very High	Very High	High	High	1,128	2.1%	16.6%	19.1%	0.0%	7.5%	0.0%	Very Low	Very High	High	Low
530630038001	West Hills	City	93.7%	Very High	High	High	High	828	7.7%	8.9%	0.5%	0.0%	6.7%	12.2%	Very Low	High	High	Very Low
530630046014	Lincoln Heights	City	100.0%	Very High	Very High	Very High	Very High	1,610	1.9%	58.2%	21.2%	3.7%	6.4%	12.7%	Very Low	Very High	High	Moderate
530630047022	Lincoln Heights	City	100.0%	Very High	Very High	High	Very High	1,199	9.4%	31.8%	4.4%	10.1%	6.6%	5.1%	Moderate	Very High	Very High	Moderate
530630145002	East Central	City	100.0%	Very High	Very High	Very High	Very High	1,959	1.1%	8.5%	16.8%	2.1%	13.7%	22.5%	Low	Low	Very High	Very Low
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

	Variable 1	Variable 2	Variable 3
	Heat	Health	Socioeconomic
	Exposure	Sensitivity	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Very Low	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Select quantile scores (at least 1 for each variable):

Total Block Groups: 37

Total BG Population: 45,009 (19.3% of city)

City Population (OFM 2024): 233,000

Recently, the City has experienced more frequent power outages and strain to the energy infrastructure due to higher average summer temperatures and increased wildfire risk. The City's energy supply is primarily provided by Avista Utilities (Avista), which has reported an increase in climate-related service disruptions, as well as infrastructure/equipment failures during heat waves and wildfires near critical transmission mains (Avista, 2024).

The effects of climate-related energy disruptions disproportionately impact the City's most vulnerable residents, including low-income individuals and individuals with health conditions.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: Heat	Sensitivity: Health	Adaptive Capacity: Socioeconomic	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002012	Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	814	2.0%	17.9%	14.3%	3.8%	13.4%	4.7%	Very High	High	Very Low	Very High
530630002021	Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	739	0.0%	12.3%	15.0%	1.0%	13.4%	12.5%	Very High	Moderate	Very Low	Very High
530630002022	Hillyard	City	100.0%	Very High	Very High	Low	Very High	1,019	17.5%	8.8%	22.7%	1.3%	13.4%	11.3%	Very High	Very High	Low	Very High
530630003012	Whitman	City	100.0%	High	Very High	Very Low	Very High	1,417	0.0%	11.6%	42.5%	2.8%	11.6%	7.5%	Moderate	Low	Very Low	High
530630003021	Nevada Heights, Whitman	City	100.0%	High	Very High	Low	High	1,303	12.8%	20.6%	24.2%	3.7%	11.6%	6.4%	Moderate	Very High	Very Low	Very High
530630004003	Nevada Heights	City	100.0%	Very High	High	Very Low	Very High	1,258	2.7%	13.2%	29.1%	8.3%	10.9%	13.7%	High	Low	Very High	Low
530630013002	North Hill	City	100.0%	High	High	Low	High	1,372	3.9%	9.7%	18.5%	0.0%	9.4%	5.8%	High	Low	Low	Moderate
530630014001	Nevada Heights	City	100.0%	High	High	Very Low	High	1,679	3.5%	11.5%	19.4%	0.0%	10.4%	8.6%	Moderate	Low	Very Low	Moderate
530630014003	Logan, Nevada Heights	City	100.0%	Very High	High	Low	Very High	1,392	6.2%	18.5%	30.3%	2.0%	10.4%	13.2%	High	Moderate	Very Low	Very High
530630014004	Nevada Heights	City	100.0%	High	High	Very Low	Very High	1,862	8.3%	11.0%	37.6%	7.6%	10.4%	8.5%	Moderate	Moderate	Very Low	High
530630016001	Bemiss, Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	1,496	8.3%	6.7%	39.2%	6.8%	12.5%	8.7%	Very High	High	Moderate	Very High
530630016002	Bemiss	City	100.0%	High	Very High	Very Low	Very High	979	8.6%	14.4%	24.1%	0.0%	12.5%	10.3%	Very High	Very High	Low	Very High
530630016003	Bemiss	City	100.0%	Very High	Very High	Very Low	Very High	1,330	0.7%	29.9%	15.2%	2.0%	12.5%	8.3%	Very High	Very High	Low	Very High
530630018001	Logan, Minnehaha	City	100.0%	High	Very High	Very Low	Very High	1,599	3.6%	27.8%	17.0%	2.5%	9.3%	13.0%	Very High	Very High	Low	Very High
530630020002	Emerson/Garfield	City	100.0%	High	High	Low	High	836	8.5%	3.2%	16.8%	0.0%	11.2%	8.4%	Moderate	Moderate	Very Low	Very High
530630020003	Emerson/Garfield, West Central	City	100.0%	Very High	High	Very Low	Very High	900	5.5%	9.8%	34.5%	13.0%	11.2%	14.3%	Low	Moderate	Very Low	Very High
530630020004	West Central	City	100.0%	Very High	High	Very Low	Very High	999	2.7%	18.3%	24.4%	0.0%	11.2%	1.9%	Moderate	Moderate	Very Low	High
530630020005	Emerson/Garfield	City	100.0%	Very High	High	Low	Very High	926	6.2%	10.5%	11.3%	4.2%	11.2%	7.0%	High	Moderate	Low	High
530630023001	West Central	City	100.0%	Very High	High	Low	High	1,097	0.0%	12.6%	44.2%	0.0%	8.7%	9.0%	Low	Very Low	Very Low	Very High
530630024001	Emerson/Garfield, Riverside, West Central	City	100.0%	Very High	Very High	Very Low	Very High	2,181	3.2%	13.4%	32.2%	0.4%	13.2%	7.8%	Moderate	Moderate	Very High	Very Low
530630024002	Emerson/Garfield	City	100.0%	Very High	Very High	Very Low	Very High	1,062	3.0%	26.2%	11.3%	4.7%	13.2%	13.3%	Moderate	High	Low	High
530630026001	Chief Garry Park	City	100.0%	High	Very High	Low	High	1,388	2.5%	13.0%	29.7%	1.4%	12.1%	0.0%	Very High	High	Moderate	Very High
530630026002	Chief Garry Park	City	100.0%	High	Very High	Very Low	Very High	1,454	9.0%	10.9%	35.5%	1.1%	12.1%	2.7%	Low	High	Moderate	High
530630035002	Riverside	City	100.0%	High	Very High	Very Low	Very High	1,141	0.0%	27.4%	20.7%	0.0%	11.6%	13.0%	Low	Very High	Low	Very High
530630035003	Riverside	City	100.0%	Very High	Very High	Very Low	Very High	618	0.0%	19.1%	15.4%	0.0%	11.6%	0.0%	Low	Very High	Very High	Low
530630035004	Riverside	City	100.0%	Very High	Very High	Very Low	Very High	1,001	0.0%	7.5%	28.8%	0.8%	11.6%	49.4%	Moderate	Moderate	Very Low	Very High
530630111031	Shiloh Hills	City	100.0%	Very High	Very High	Very Low	Very High	1,508	3.0%	47.9%	19.7%	0.0%	11.1%	3.5%	High	Very High	Very High	High
530630111032	Shiloh Hills	City	100.0%	Very High	Very High	Low	Very High	1,671	3.8%	33.8%	11.6%	2.4%	11.1%	5.3%	High	Very High	Very High	Moderate
530630111041	Shiloh Hills	City	100.0%	Very High	Very High	Very Low	Very High	778	0.0%	6.8%	60.4%	0.0%	11.1%	28.9%	High	Very Low	Very Low	Very High
530630111042	Shiloh Hills	City	100.0%	Very High	Very High	Low	Very High	1,584	1.8%	17.6%	14.9%	0.0%	11.1%	11.5%	High	High	High	Moderate
530630111043	Shiloh Hills	City	100.0%	Very High	Very High	Very Low	Very High	507	12.4%	17.8%	41.6%	0.0%	11.1%	23.6%	High	Very High	Low	Very High
530630112032	Shiloh Hills	City	100.0%	High	High	Low	Very High	1,560	3.2%	29.0%	30.1%	4.2%	9.7%	2.2%	High	Moderate	Very High	Low
530630112041	Shiloh Hills	City	100.0%	High	High	Low	High	1,613	3.3%	18.4%	13.2%	7.0%	9.7%	0.0%	Moderate	Low	High	Low
530630112042	Shiloh Hills	City	100.0%	High	High	Low	High	766	0.0%	45.1%	15.8%	2.3%	9.7%	6.4%	High	Very High	High	Moderate
530630145001	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very Low	Very High	673	6.4%	16.2%	44.6%	1.0%	13.7%	0.0%	High	Very High	Very Low	Very High
530630145002	East Central	City	100.0%	Very High	Very High	Very Low	Very High	1,959	1.1%	8.5%	16.8%	2.1%	13.7%	22.5%	Low	Low	Very High	Very Low
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very Low	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups: 28

Total BG Population: 34,715 (14.9% of city)

City Population (OFM 2024): 233,000

	Variable 1	Variable 2	Variable 3
	E Urban Heat Island Mean	AC Built before 1960 Percent	AC Energy Cost Burden
	Exposure	Adaptive Capacity	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Very Low	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

High indicator values indicate LOW Adaptive Capacity.

Extreme weather events can impact residents living in aging housing, as poor insulation increases their susceptibility to extreme temperatures and higher energy bills. Limited financial resources may prevent individuals from obtaining or using air conditioning during extreme heat events, increasing the risk of dehydration or heat injury, or heating during cold weather events, increasing the risk of cold-weather-related injury.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Urban Heat Island Mean	Adaptive Capacity: AC Built before 1960 Percent	Adaptive Capacity: AC Energy Cost Burden	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002011	Hillyard	City	100.0%	High	High	High	Very High	2,322	5.2%	16.2%	22.6%	3.5%	13.4%	4.7%	High	Very High	Low	Very High
530630003011	Whitman	City	100.0%	High	High	Very High	Very High	1,384	2.4%	10.5%	23.2%	0.9%	11.6%	4.9%	Moderate	Low	Very Low	Moderate
530630003021	Nevada Heights, Whitman	City	100.0%	High	High	High	Very High	1,303	12.8%	20.6%	24.2%	3.7%	11.6%	6.4%	Moderate	Very High	Very Low	Very High
530630004001	Nevada Heights	City	100.0%	High	High	High	High	1,446	12.7%	10.3%	31.7%	0.0%	10.9%	10.3%	Moderate	Very High	Moderate	High
530630004002	Nevada Heights	City	100.0%	High	High	High	Very High	1,477	7.0%	7.9%	20.4%	1.2%	10.9%	8.1%	Moderate	Moderate	Low	Moderate
530630005003	North Hill	City	100.0%	High	Very High	High	Very High	1,178	12.4%	13.6%	19.6%	0.4%	7.5%	6.4%	Moderate	High	Low	High
530630006003	North Hill	City	100.0%	High	Very High	High	Very High	1,090	2.4%	10.4%	15.2%	0.0%	7.9%	1.4%	Moderate	Very Low	Very Low	Moderate
530630007003	Northwest	City	100.0%	High	Very High	High	Very High	780	0.0%	20.1%	5.6%	0.0%	8.1%	15.2%	High	Very Low	Very Low	High
530630007004	Northwest	City	100.0%	High	Very High	High	Very High	1,293	1.8%	11.6%	28.5%	0.0%	8.1%	0.0%	Very High	Very Low	Low	High
530630013001	North Hill	City	100.0%	High	High	High	Very High	1,060	0.7%	14.2%	17.2%	0.0%	9.4%	1.6%	Moderate	Low	Low	Moderate
530630013003	North Hill	City	100.0%	High	Very High	High	Very High	1,079	15.4%	20.0%	16.0%	0.0%	9.4%	9.6%	Moderate	Very High	Very Low	Very High
530630014001	Nevada Heights	City	100.0%	High	Very High	High	Very High	1,679	3.5%	11.5%	19.4%	0.0%	10.4%	8.6%	Moderate	Low	Very Low	Moderate
530630014002	Logan, Nevada Heights	City	100.0%	Very High	Very High	High	Very High	1,698	8.5%	3.7%	27.2%	0.0%	10.4%	6.4%	Moderate	Low	Moderate	Moderate
530630014003	Logan, Nevada Heights	City	100.0%	Very High	Very High	High	Very High	1,392	6.2%	18.5%	30.3%	2.0%	10.4%	13.2%	High	Moderate	Very Low	Very High
530630014004	Nevada Heights	City	100.0%	Very High	High	High	Very High	1,862	8.3%	11.0%	37.6%	7.6%	10.4%	8.5%	Moderate	Moderate	Very Low	High
530630015003	Bemiss	City	100.0%	High	Very High	High	Very High	923	4.1%	15.0%	13.8%	0.0%	9.1%	6.9%	High	Very Low	Very Low	High
530630015005	Nevada Heights	City	100.0%	Very High	Very High	High	Very High	1,429	0.0%	13.2%	10.1%	9.3%	9.1%	4.5%	Moderate	Very Low	Low	Moderate
530630019002	Emerson/Garfield	City	100.0%	High	High	High	Very High	1,666	11.3%	11.6%	19.0%	0.0%	7.9%	10.2%	Moderate	Moderate	Low	High
530630019003	Emerson/Garfield	City	100.0%	Very High	Very High	High	Very High	833	11.2%	13.8%	25.2%	0.0%	7.9%	0.0%	Moderate	High	Moderate	Moderate
530630020001	Emerson/Garfield	City	100.0%	High	High	High	Very High	794	7.0%	18.2%	11.5%	0.0%	11.2%	6.7%	Moderate	High	Low	High
530630020002	Emerson/Garfield	City	100.0%	Very High	Very High	High	Very High	836	8.5%	3.2%	16.8%	0.0%	11.2%	8.4%	Moderate	Moderate	Very Low	Very High
530630020004	West Central	City	100.0%	Very High	Very High	High	Very High	999	2.7%	18.3%	24.4%	0.0%	11.2%	1.9%	Moderate	Moderate	Very Low	High
530630020005	Emerson/Garfield	City	100.0%	Very High	High	High	Very High	926	6.2%	10.5%	11.3%	4.2%	11.2%	7.0%	High	Moderate	Low	High
530630021001	Emerson/Garfield	City	100.0%	High	High	High	Very High	943	12.5%	10.1%	7.7%	0.2%	8.6%	8.7%	High	Moderate	Moderate	Moderate
530630021002	Emerson/Garfield, West Central	City	100.0%	High	Very High	High	Very High	1,557	2.2%	10.8%	24.2%	0.9%	8.6%	12.3%	High	Very Low	Low	Moderate
530630025021	Logan	City	100.0%	High	High	High	Very High	1,564	4.9%	9.2%	12.8%	0.6%	11.0%	2.7%	Moderate	Very Low	Moderate	Moderate
530630145001	Chief Garry Park, East Central	City	100.0%	Very High	High	High	Very High	673	6.4%	16.2%	44.6%	1.0%	13.7%	0.0%	High	Very High	Very Low	Very High
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	Very High	High	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups: 21

Total BG Population: 27,429 (11.8% of city)

City Population (OFM 2024): 233,000

Variable 1	Variable 2
E Flood Coverage	S GeoHazard Coverage
Exposure	Sensitivity
Very High	Very High
High	High
Moderate	Moderate
Low	Low
Very Low	Very Low

Water: Severe flooding can lead to ground movement, causing misalignment, cracking, or even complete breakage or transmission of pipe mains, straining the integrity of the system's pipe network or disrupting water delivery across the city.

Wastewater: The City's wastewater collection system faces increasing vulnerability to climate-induced hazards, such as extreme heat, flooding, and ground movement. Aging infrastructure is more susceptible to damage, and these hazards increase the risks for pipe deterioration, infiltrate

Stormwater: Extreme precipitation events and flooding pose significant risks to residents in aging housing, which may lead to property damage, or areas with limited to no drainage infrastructure, such as the Hillyard Industrial Area, known as The YARD, which lacks stormwater management infrastructure (City of Spokane, 2017). Communities with limited-to-no green stormwater infrastructure (GSI), which includes natural and engineered systems like swales, bioretention cells, and infiltration ponds, may also face higher risks of localized flooding, as impervious surfaces prevent natural absorption.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Flood Coverage	Sensitivity: S GeoHazard Coverage	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
								Population Under 5	Population Over 65	Percent BPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630008001	Balboa/South Indian Trail	City	100.0%	High	Very High	Very High	2,681	1.4%	27.2%	19.0%	0.0%	5.4%	12.1%	High	Very High	Very High	Moderate
530630010005	Audubon/Downriver	City	99.7%	Very High	Very High	Very High	869	9.5%	33.2%	24.1%	0.0%	6.1%	5.1%	Very High	Very High	Moderate	Very High
530630023002	West Central	City	100.0%	Very High	Very High	Very High	1,667	1.5%	29.0%	9.0%	3.7%	8.7%	0.0%	Low	Very High	Very High	Moderate
530630029001	East Central	City	100.0%	Very High	Very High	Very High	930	8.3%	18.6%	22.4%	1.6%	6.8%	8.7%	Very High	Moderate	Moderate	Very High
530630029002	East Central, Lincoln Heights	City	99.2%	High	Very High	Very High	1,080	5.8%	21.6%	17.6%	0.0%	6.8%	5.3%	Low	Very High	Moderate	Moderate
530630029003	East Central, Lincoln Heights	City	100.0%	Very High	Very High	Very High	1,323	5.5%	12.5%	21.4%	1.5%	6.8%	5.0%	Very High	Low	High	High
530630030001	East Central	City	100.0%	Very High	Very High	Very High	1,182	3.8%	11.5%	27.8%	4.5%	12.5%	11.8%	Very High	High	Moderate	Very High
530630031004	East Central, Lincoln Heights, Rockwood	City	100.0%	High	Very High	Very High	1,486	10.4%	7.0%	10.8%	3.2%	7.7%	3.8%	Very Low	Very High	Moderate	Moderate
530630036011	West Hills	City	92.2%	Very High	Very High	Very High	2,203	3.4%	4.5%	28.4%	0.0%	7.5%	11.3%	High	Moderate	Very High	Low
530630036012	Peaceful Valley	City	100.0%	Very High	Very High	Very High	671	0.0%	19.6%	25.1%	0.0%	7.5%	0.0%	Low	Very High	Very High	Low
530630036022	Browne's Addition	City	100.0%	Very High	Very High	Very High	1,128	2.1%	16.6%	19.1%	0.0%	7.5%	0.0%	Very Low	Very High	High	Low
530630038001	West Hills	City	93.7%	Very High	Very High	High	828	7.7%	8.9%	0.5%	0.0%	6.7%	12.2%	Very Low	High	High	Very Low
530630039001	Latah/Hangman	City	100.0%	Very High	Very High	Very High	783	7.0%	35.3%	11.5%	0.0%	6.1%	2.2%	Low	Very High	High	High
530630039002	Latah/Hangman	City	100.0%	Very High	Very High	Very High	1,456	2.8%	24.3%	5.8%	0.0%	6.1%	12.1%	Low	Very High	High	Very High
530630042005	Manito/Cannon Hill	City	100.0%	Very High	Very High	High	1,583	6.1%	23.9%	19.2%	0.0%	3.7%	5.6%	Very Low	High	Moderate	Low
530630045001	Rockwood	City	100.0%	Very High	Very High	Very High	1,247	4.4%	32.3%	10.8%	0.0%	4.0%	0.0%	Very Low	High	Very High	Very Low
530630045002	Rockwood	City	100.0%	High	Very High	Very High	1,026	4.4%	20.6%	14.2%	0.0%	4.0%	10.3%	Very Low	High	Very Low	Low
530630046012	Lincoln Heights	City	100.0%	Very High	Very High	Very High	641	1.8%	25.8%	22.1%	0.0%	6.4%	0.0%	Very Low	Very High	High	Moderate
530630046022	Lincoln Heights	City	100.0%	Very High	Very High	Very High	854	0.9%	12.5%	8.9%	0.0%	7.0%	1.7%	Low	Very Low	High	Very Low
530630106011	Audubon/Downriver, Northwest	City	99.9%	High	Very High	High	1,598	12.7%	12.1%	14.6%	0.0%	5.1%	0.0%	Very High	Very High	Very High	High
530630136001	Grandview/Thorpe	City	54.7%	High	Very High	Very High	2,193	6.2%	12.1%	28.0%	0.0%	6.5%	1.3%	Low	Low	High	Very Low
Average								4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups:

7

Total BG Population:

11,129 (4.8% of city)

City Population (OFM 2024):

233,000

Variable 1	Variable 2	Variable 3
E Flood Coverage	AC Impervious Coverage	AC Tree Canopy Coverage
Exposure	Adaptive Capacity	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Moderate	<input type="checkbox"/>	<input type="checkbox"/>
Low	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Very Low	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impervious surfaces prevent natural infiltration, exacerbating the challenge of declining groundwater recharge. While severe precipitation events lead to an increase in runoff from impervious surfaces, overwhelming stormwater drains and treatment facilities. Pervious surfaces, including permeable pavement, vegetated roofs, and storm gardens, can assist in slowing runoff and reducing strain on gray infrastructure, filling a critical role in capturing and storing stormwater for gradual infiltration into aquifers. Furthermore, impervious surfaces contribute to extreme heat with higher temperatures and droughts, further straining vegetation in GSI (Ecology, 2024; City of Spokane, 2008).

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Flood Coverage	Adaptive Capacity: AC Impervious Coverage	Adaptive Capacity: AC Tree Canopy Coverage	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630024001	Emerson/Garfield, Riverside, West Central	City	100.0%	High	Very High	Very Low	Very High	2,181	3.2%	13.4%	32.2%	0.4%	13.2%	7.8%	Moderate	Moderate	Very High	Very Low
530630025031	Logan	City	100.0%	Very High	Very High	Low	Very High	3,091	0.0%	0.7%	25.8%	0.5%	11.0%	16.6%	Low	Very Low	Moderate	Low
530630035001	Riverside	City	100.0%	Very High	Very High	Very Low	Very High	1,609	6.2%	22.5%	15.6%	0.0%	11.6%	12.9%	Low	Very High	High	Very High
530630035002	Riverside	City	100.0%	Very High	Very High	Low	Very High	1,141	0.0%	27.4%	20.7%	0.0%	11.6%	13.0%	Low	Very High	Low	Very High
530630035003	Riverside	City	100.0%	High	Very High	Very Low	Very High	618	0.0%	19.1%	15.4%	0.0%	11.6%	0.0%	Low	Very High	Very High	Low
530630145002	East Central	City	100.0%	Very High	Very High	Very Low	Very High	1,959	1.1%	8.5%	16.8%	2.1%	13.7%	22.5%	Low	Low	Very High	Very Low
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very Low	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

	Variable 1	Variable 2
	Flooding and Precipitation	Environment
	Exposure	Sensitivity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Moderate	<input type="checkbox"/>	<input type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>
Very Low	<input type="checkbox"/>	<input type="checkbox"/>

Wetlands are vulnerable to changes in water regime, such as less water in the summer and more in the winter, more flooding or high-water events, or lower groundwater table. Wetland plants and wildlife may not adapt to changes in conditions and provide opportunities for invasive species. Wetlands may also dry out, resulting in a loss of functions such as flood attenuation, water filtration, and wildlife habitat.

Riverine systems face increasing threats from flooding, erosion, water quality degradation, and altered habitat conditions. Slopes can be more susceptible to erosion and landslides during high-precipitation events. Fire may remove vegetation, or drought may result in low soil moisture **making geologically hazardous areas** more vulnerable to erosion and landslide risks (WSDOT, 2011).

As Spokane experiences more extreme precipitation in shorter windows of the year, runoff and sediment will be increasing concerns for **surface water**. A growing risk of wildfire in the area is also a threat.

Total Block Groups: 27

Total BG Population: 39,653 (17.0% of city)

City Population (OFM 2024): 233,000

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: Flooding and Precipitation	Sensitivity: Environment	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
								Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630008001	Balboa/South Indian Trail	City	100.0%	Very High	Very High	Very High	2,681	1.4%	27.2%	19.0%	0.0%	5.4%	12.1%	High	Very High	Very High	Moderate
530630008002	Balboa/South Indian Trail	City	100.0%	Very High	High	Very High	2,735	6.7%	23.7%	21.5%	0.6%	5.4%	3.5%	Very High	High	Very High	Moderate
530630009003	Northwest	City	100.0%	Very High	High	Very High	954	6.3%	24.0%	4.2%	0.0%	7.3%	0.0%	Very High	High	Moderate	Very High
530630009006	Northwest	City	100.0%	Very High	High	Very High	2,057	5.6%	21.4%	8.7%	0.0%	7.3%	3.9%	Very High	High	High	High
530630010002	Audubon/Downriver	City	100.0%	Very High	High	Very High	771	2.2%	2.5%	12.8%	0.0%	6.1%	6.6%	Very High	Very Low	Very Low	High
530630010003	Audubon/Downriver	City	100.0%	Very High	High	Very High	708	0.7%	18.1%	6.1%	0.0%	6.1%	0.0%	Very High	Very Low	Very Low	Very High
530630010004	Audubon/Downriver	City	100.0%	Very High	High	Very High	775	2.5%	28.8%	8.1%	0.0%	6.1%	0.0%	Very High	Moderate	Very Low	Very High
530630010005	Audubon/Downriver	City	99.7%	Very High	Very High	Very High	869	9.5%	33.2%	24.1%	0.0%	6.1%	5.1%	Very High	Very High	Moderate	Very High
530630010006	Audubon/Downriver	City	100.0%	Very High	High	Very High	1,533	4.0%	15.2%	15.4%	0.0%	6.1%	2.7%	Very High	Low	Moderate	High
530630011003	Audubon/Downriver	City	100.0%	High	High	High	1,117	3.8%	17.7%	4.0%	0.0%	6.4%	0.0%	High	Moderate	Moderate	High
530630018001	Logan, Minnehaha	City	100.0%	Very High	High	Very High	1,599	3.6%	27.8%	17.0%	2.5%	9.3%	13.0%	Very High	Very High	Low	Very High
530630023002	West Central	City	100.0%	High	Very High	Very High	1,667	1.5%	29.0%	9.0%	3.7%	8.7%	0.0%	Low	Very High	Very High	Moderate
530630025022	Logan	City	100.0%	Very High	Very High	Very High	969	0.0%	16.4%	9.7%	2.7%	11.0%	42.9%	Moderate	Moderate	Very Low	Very High
530630026001	Chief Garry Park	City	100.0%	High	High	High	1,388	2.5%	13.0%	29.7%	1.4%	12.1%	0.0%	Very High	High	Moderate	Very High
530630026004	Chief Garry Park	City	100.0%	High	Very High	Very High	1,704	3.4%	5.8%	22.4%	5.7%	12.1%	2.6%	High	High	Low	High
530630029001	East Central	City	100.0%	Very High	High	Very High	930	8.3%	18.6%	22.4%	1.6%	6.8%	8.7%	Very High	Moderate	Moderate	Very High
530630029003	East Central, Lincoln Heights	City	100.0%	Very High	Very High	Very High	1,323	5.5%	12.5%	21.4%	1.5%	6.8%	5.0%	Very High	Low	High	High
530630030001	East Central	City	100.0%	Very High	High	Very High	1,182	3.8%	11.5%	27.8%	4.5%	12.5%	11.8%	Very High	High	Moderate	Very High
530630036011	West Hills	City	92.2%	Very High	Very High	Very High	2,203	3.4%	4.5%	28.4%	0.0%	7.5%	11.3%	High	Moderate	Very High	Low
530630036012	Peaceful Valley	City	100.0%	Very High	Very High	Very High	671	0.0%	19.6%	25.1%	0.0%	7.5%	0.0%	Low	Very High	Very High	Low
530630047021	Lincoln Heights, Southgate	City	100.0%	Very High	High	Very High	1,066	0.0%	22.3%	17.1%	0.2%	6.6%	5.4%	Low	Low	Very High	Very Low
530630106011	Audubon/Downriver, Northwest	City	99.9%	Very High	Very High	Very High	1,598	12.7%	12.1%	14.6%	0.0%	5.1%	0.0%	Very High	Very High	Very High	High
530630106031	Balboa/South Indian Trail, North Indian Trail	City	100.0%	Very High	Very High	Very High	1,039	1.3%	31.6%	13.0%	0.0%	5.1%	4.9%	Very High	High	High	Very High
530630106032	North Indian Trail	City	100.0%	Very High	High	Very High	2,174	4.9%	16.7%	2.8%	0.0%	5.1%	0.0%	Very High	Low	Very High	Moderate
530630106041	North Indian Trail	City	100.0%	Very High	High	Very High	1,037	1.4%	34.2%	5.8%	0.0%	5.1%	0.0%	Very High	Moderate	Very High	Low
530630106042	North Indian Trail	City	97.2%	Very High	Very High	Very High	3,133	4.1%	19.1%	12.9%	0.0%	5.1%	4.7%	Very High	Moderate	Very High	Low
530630144003	Minnehaha	City	99.8%	Very High	High	High	1,771	8.2%	10.8%	30.2%	1.2%	9.3%	6.7%	Very High	High	Low	Very High
Average								4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups: 22

Total BG Population: 30,987 (13.3% of city)

City Population (OFM 2024): 233,000

Variable 1	Variable 2		
E Flood Coverage	S Water Quality Coverage		
Exposure	Sensitivity		
Very High	<input checked="" type="checkbox"/>	Very High	<input checked="" type="checkbox"/>
High	<input checked="" type="checkbox"/>	High	<input checked="" type="checkbox"/>
Moderate	<input type="checkbox"/>	Moderate	<input type="checkbox"/>
Low	<input type="checkbox"/>	Low	<input type="checkbox"/>
Very Low	<input type="checkbox"/>	Very Low	<input type="checkbox"/>

The City has approximately 16-20 NPDES-permitted outfalls located within the 100-year or 500-year flood zone that face increasing risk of inundation due to flooding. Additionally, the system’s lines can also experience backups during flooding events, exacerbating flooding and the possibilities of water quality impacts (CH2MHill, 2014; Vulnerability Map, 2025).

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Flood Coverage	Sensitivity: S Water Quality Coverage	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
								Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630010005	Audubon/Downriver	City	99.7%	Very High	Very High	Very High	869	9.5%	33.2%	24.1%	0.0%	6.1%	5.1%	Very High	Very High	Moderate	Very High
530630018001	Logan, Minnehaha	City	100.0%	Very High	Very High	Very High	1,599	3.6%	27.8%	17.0%	2.5%	9.3%	13.0%	Very High	Very High	Low	Very High
530630023002	West Central	City	100.0%	Very High	Very High	Very High	1,667	1.5%	29.0%	9.0%	3.7%	8.7%	0.0%	Low	Very High	Very High	Moderate
530630024001	Emerson/Garfield, Riverside, West Central	City	100.0%	High	Very High	Very High	2,181	3.2%	13.4%	32.2%	0.4%	13.2%	7.8%	Moderate	Moderate	Very High	Very Low
530630025022	Logan	City	100.0%	Very High	Very High	Very High	969	0.0%	16.4%	9.7%	2.7%	11.0%	42.9%	Moderate	Moderate	Very Low	Very High
530630025031	Logan	City	100.0%	Very High	Very High	Very High	3,091	0.0%	0.7%	25.8%	0.5%	11.0%	16.6%	Low	Very Low	Moderate	Low
530630026001	Chief Garry Park	City	100.0%	Very High	Very High	Very High	1,388	2.5%	13.0%	29.7%	1.4%	12.1%	0.0%	Very High	High	Moderate	Very High
530630026003	Chief Garry Park	City	100.0%	Very High	Very High	Very High	1,223	7.1%	6.8%	32.0%	6.4%	12.1%	7.2%	Low	High	Very Low	High
530630026004	Chief Garry Park	City	100.0%	High	Very High	Very High	1,704	3.4%	5.8%	22.4%	5.7%	12.1%	2.6%	High	High	Low	High
530630035001	Riverside	City	100.0%	Very High	Very High	Very High	1,609	6.2%	22.5%	15.6%	0.0%	11.6%	12.9%	Low	Very High	High	Very High
530630035002	Riverside	City	100.0%	Very High	Very High	Very High	1,141	0.0%	27.4%	20.7%	0.0%	11.6%	13.0%	Low	Very High	Low	Very High
530630035003	Riverside	City	100.0%	High	Very High	Very High	618	0.0%	19.1%	15.4%	0.0%	11.6%	0.0%	Low	Very High	Very High	Low
530630036011	West Hills	City	92.2%	Very High	Very High	Very High	2,203	3.4%	4.5%	28.4%	0.0%	7.5%	11.3%	High	Moderate	Very High	Low
530630036012	Peaceful Valley	City	100.0%	Very High	Very High	Very High	671	0.0%	19.6%	25.1%	0.0%	7.5%	0.0%	Low	Very High	Very High	Low
530630036022	Browne's Addition	City	100.0%	Very High	Very High	Very High	1,128	2.1%	16.6%	19.1%	0.0%	7.5%	0.0%	Very Low	Very High	High	Low
530630038001	West Hills	City	93.7%	Very High	Very High	Very High	828	7.7%	8.9%	0.5%	0.0%	6.7%	12.2%	Very Low	High	High	Very Low
530630039001	Latah/Hangman	City	100.0%	Very High	Very High	Very High	783	7.0%	35.3%	11.5%	0.0%	6.1%	2.2%	Low	Very High	High	High
530630039002	Latah/Hangman	City	100.0%	Very High	Very High	Very High	1,456	2.8%	24.3%	5.8%	0.0%	6.1%	12.1%	Low	Very High	High	Very High
530630106011	Audubon/Downriver, Northwest	City	99.9%	High	Very High	Very High	1,598	12.7%	12.1%	14.6%	0.0%	5.1%	0.0%	Very High	Very High	Very High	High
530630144003	Minnehaha	City	99.8%	Very High	Very High	Very High	1,771	8.2%	10.8%	30.2%	1.2%	9.3%	6.7%	Very High	High	Low	Very High
530630145002	East Central	City	100.0%	Very High	Very High	Very High	1,959	1.1%	8.5%	16.8%	2.1%	13.7%	22.5%	Low	Low	Very High	Very Low
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average								4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups: 43
Total BG Population: 51,160 (22.0% of city)

City Population (OFM 2024): 233,000

	Variable 1	Variable 2	Variable 3
	E HeavyPrecip Weighted Avg	AC Impervious Coverage	AC Tree Canopy Coverage
	Exposure	Adaptive Capacity	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Moderate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Very Low	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Changes to seasonal precipitation, such as reduced snowpack, limits runoff that feeds into the Spokane River, further limiting **groundwater recharge** to the SVRP Aquifer. Warmer winters are further decreasing snow accumulation, weakening the aquifer's ability to replenish during crucial recharge months (GSI, 2024; City of Spokane, 2023b).

High indicator values
indicate LOW
Adaptive Capacity.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E HeavyPrecip Weighted Avg	Adaptive Capacity: AC Impervious Coverage	Adaptive Capacity: AC Tree Canopy Coverage	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002011	Hillyard	City	100.0%	Moderate	High	Very Low	Very High	2,322	5.2%	16.2%	22.6%	3.5%	13.4%	4.7%	High	Very High	Low	Very High
530630002012	Hillyard	City	100.0%	Moderate	High	Very Low	Very High	814	2.0%	17.9%	14.3%	3.8%	13.4%	4.7%	Very High	High	Very Low	Very High
530630002021	Hillyard	City	100.0%	Moderate	Very High	Very Low	Very High	739	0.0%	12.3%	15.0%	1.0%	13.4%	12.5%	Very High	Moderate	Very Low	Very High
530630002022	Hillyard	City	100.0%	Moderate	High	Low	Very High	1,019	17.5%	8.8%	22.7%	1.3%	13.4%	11.3%	Very High	Very High	Low	Very High
530630003011	Whitman	City	100.0%	Moderate	High	Very Low	Very High	1,384	2.4%	10.5%	23.2%	0.9%	11.6%	4.9%	Moderate	Low	Very Low	Moderate
530630003021	Nevada Heights, Whitman	City	100.0%	Moderate	High	Low	High	1,303	12.8%	20.6%	24.2%	3.7%	11.6%	6.4%	Moderate	Very High	Very Low	Very High
530630003022	Nevada Heights, Whitman	City	100.0%	Moderate	High	Low	High	1,621	6.2%	6.1%	46.3%	7.2%	11.6%	5.4%	Moderate	Low	Very Low	High
530630004001	Nevada Heights	City	100.0%	Moderate	High	Very Low	Very High	1,446	12.7%	10.3%	31.7%	0.0%	10.9%	10.3%	Moderate	Very High	Moderate	High
530630004002	Nevada Heights	City	100.0%	Moderate	High	Low	High	1,477	7.0%	7.9%	20.4%	1.2%	10.9%	8.1%	Moderate	Moderate	Low	Moderate
530630004003	Nevada Heights	City	100.0%	Moderate	Very High	Very Low	Very High	1,258	2.7%	13.2%	29.1%	8.3%	10.9%	13.7%	High	Low	Very High	Low
530630006001	North Hill	City	100.0%	Moderate	High	Low	High	980	8.0%	7.4%	27.0%	1.8%	7.9%	7.6%	Moderate	Low	Very Low	Moderate
530630007003	Northwest	City	100.0%	Moderate	High	Low	High	780	0.0%	20.1%	5.6%	0.0%	8.1%	15.2%	High	Very Low	Very Low	High
530630009001	Northwest	City	100.0%	Very High	High	Low	Very High	719	2.1%	8.3%	22.4%	0.0%	7.3%	10.2%	High	Very Low	Very Low	High
530630009002	Northwest	City	100.0%	Very High	High	Low	Very High	962	0.0%	21.3%	11.2%	0.0%	7.3%	3.7%	Very High	Low	High	Moderate
530630011002	Audubon/Downriver	City	100.0%	Very High	Very High	Low	Very High	1,072	14.6%	7.8%	37.6%	6.0%	6.4%	2.7%	Very High	High	Moderate	High
530630014001	Nevada Heights	City	100.0%	Moderate	High	Very Low	Very High	1,679	3.5%	11.5%	19.4%	0.0%	10.4%	8.6%	Moderate	Low	Very Low	Moderate
530630014002	Logan, Nevada Heights	City	100.0%	Moderate	Very High	Very Low	Very High	1,698	8.5%	3.7%	27.2%	0.0%	10.4%	6.4%	Moderate	Low	Moderate	Moderate
530630014003	Logan, Nevada Heights	City	100.0%	Moderate	Very High	Very Low	Very High	1,392	6.2%	18.5%	30.3%	2.0%	10.4%	13.2%	High	Moderate	Very Low	Very High
530630014004	Nevada Heights	City	100.0%	Moderate	Very High	Very Low	Very High	1,862	8.3%	11.0%	37.6%	7.6%	10.4%	8.5%	Moderate	Moderate	Very Low	High
530630015003	Bemiss	City	100.0%	Moderate	High	Low	High	923	4.1%	15.0%	13.8%	0.0%	9.1%	6.9%	High	Very Low	Very Low	High
530630015004	Logan, Nevada Heights	City	100.0%	Moderate	Very High	Very Low	Very High	809	0.0%	16.9%	25.1%	0.4%	9.1%	5.5%	High	Very Low	Low	Moderate
530630015005	Nevada Heights	City	100.0%	Moderate	Very High	Very Low	Very High	1,429	0.0%	13.2%	10.1%	9.3%	9.1%	4.5%	Moderate	Very Low	Low	Moderate
530630016001	Bemiss, Hillyard	City	100.0%	Moderate	Very High	Very Low	Very High	1,496	8.3%	6.7%	39.2%	6.8%	12.5%	8.7%	Very High	High	Moderate	Very High
530630016002	Bemiss	City	100.0%	Moderate	High	Very Low	Very High	979	8.6%	14.4%	24.1%	0.0%	12.5%	10.3%	Very High	Very High	Low	Very High
530630016003	Bemiss	City	100.0%	Moderate	High	Very Low	Very High	1,330	0.7%	29.9%	15.2%	2.0%	12.5%	8.3%	Very High	Very High	Low	Very High
530630018002	Bemiss, Logan	City	100.0%	Moderate	Very High	Very Low	Very High	1,490	6.3%	14.4%	23.6%	0.0%	9.3%	0.9%	High	High	Moderate	High
530630019003	Emerson/Garfield	City	100.0%	Moderate	Very High	Low	High	833	11.2%	13.8%	25.2%	0.0%	7.9%	0.0%	Moderate	High	Moderate	Moderate
530630020004	West Central	City	100.0%	Moderate	Very High	Low	High	999	2.7%	18.3%	24.4%	0.0%	11.2%	1.9%	Moderate	Moderate	Very Low	High
530630020005	Emerson/Garfield	City	100.0%	Moderate	High	Low	High	926	6.2%	10.5%	11.3%	4.2%	11.2%	7.0%	High	Moderate	Low	High
530630021001	Emerson/Garfield	City	100.0%	Moderate	High	Low	High	943	12.5%	10.1%	7.7%	0.2%	8.6%	8.7%	High	Moderate	Moderate	Moderate
530630024002	Emerson/Garfield	City	100.0%	Moderate	Very High	Low	High	1,062	3.0%	26.2%	11.3%	4.7%	13.2%	13.3%	Moderate	High	Low	High
530630025011	Logan	City	100.0%	Moderate	Very High	Very Low	Very High	796	6.2%	5.1%	50.0%	25.7%	11.0%	0.0%	High	Very Low	Very Low	High
530630025021	Logan	City	100.0%	Moderate	High	Low	High	1,564	4.9%	9.2%	12.8%	0.6%	11.0%	2.7%	Moderate	Very Low	Moderate	Moderate
530630111022	Shiloh Hills	City	100.0%	Moderate	Very High	Low	Very High	1,413	6.6%	16.8%	8.3%	0.8%	9.3%	2.4%	High	Moderate	Very High	Low
530630111031	Shiloh Hills	City	100.0%	Moderate	Very High	Very Low	Very High	1,508	3.0%	47.9%	19.7%	0.0%	11.1%	3.5%	High	Very High	Very High	High
530630111041	Shiloh Hills	City	100.0%	Moderate	Very High	Very Low	Very High	778	0.0%	6.8%	60.4%	0.0%	11.1%	28.9%	High	Very Low	Very Low	Very High
530630111042	Shiloh Hills	City	100.0%	Moderate	Very High	Low	Very High	1,584	1.8%	17.6%	14.9%	0.0%	11.1%	11.5%	High	High	High	Moderate
530630111043	Shiloh Hills	City	100.0%	Moderate	Very High	Low	Very High	507	12.4%	17.8%	41.6%	0.0%	11.1%	23.6%	High	Very High	Low	Very High
530630112032	Shiloh Hills	City	100.0%	Moderate	Very High	Low	High	1,560	3.2%	29.0%	30.1%	4.2%	9.7%	2.2%	High	Moderate	Very High	Low
530630112041	Shiloh Hills	City	100.0%	Moderate	Very High	Low	Very High	1,613	3.3%	18.4%	13.2%	7.0%	9.7%	0.0%	Moderate	Low	High	Low
530630112042	Shiloh Hills	City	100.0%	Moderate	Very High	Very Low	Very High	766	0.0%	45.1%	15.8%	2.3%	9.7%	6.4%	High	Very High	High	Moderate
530630144001	Hillyard	City	100.0%	Moderate	Very High	Very Low	Very High	798	17.3%	13.8%	19.3%	2.0%	9.3%	4.2%	Very High	Very High	Low	Very High
530630145003	Chief Garry Park, East Central	City	100.0%	Moderate	Very High	Very Low	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups: 48

Total BG Population: 57,027 (24.5% of city)

City Population (OFM 2024): 233,000

	Variable 1	Variable 2	Variable 3
	E Urban Heat Island Mean	AC Impervious Coverage	AC Tree Canopy Coverage
	Exposure	Adaptive Capacity	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Very Low	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

High indicator values indicate LOW Adaptive Capacity.

Rising temperatures contribute to higher demand, necessitating more frequent refilling to maintain adequate reserves At the same time, reduced snowpack levels mean less water flows into the SVRP Aquifer, further limiting water availability for the City's system storage and exacerbating water shortage during summer months (GSI, 2024).

								Demographic Context											
Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Urban Heat Island Mean	Adaptive Capacity: AC Impervious Coverage	Adaptive Capacity: AC Tree Canopy Coverage	Combined Risk	Total Population (OFM 2024)	Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment	Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index	
530630002011	Hillyard	City	100.0%	High	High	Very Low	High	2,322	5.2%	16.2%	22.6%	3.5%	13.4%	4.7%	High	Very High	Low	Very High	
530630002012	Hillyard	City	100.0%	High	High	Very Low	Very High	814	2.0%	17.9%	14.3%	3.8%	13.4%	4.7%	Very High	High	Very Low	Very High	
530630002021	Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	739	0.0%	12.3%	15.0%	1.0%	13.4%	12.5%	Very High	Moderate	Very Low	Very High	
530630002022	Hillyard	City	100.0%	High	High	Low	High	1,019	17.5%	8.8%	22.7%	1.3%	13.4%	11.3%	Very High	Very High	Low	Very High	
530630003011	Whitman	City	100.0%	High	High	Very Low	High	1,384	2.4%	10.5%	23.2%	0.9%	11.6%	4.9%	Moderate	Low	Very Low	Moderate	
530630003021	Nevada Heights, Whitman	City	100.0%	High	High	Low	High	1,303	12.8%	20.6%	24.2%	3.7%	11.6%	6.4%	Moderate	Very High	Very Low	Very High	
530630003022	Nevada Heights, Whitman	City	100.0%	High	High	Low	High	1,621	6.2%	6.1%	46.3%	7.2%	11.6%	5.4%	Moderate	Low	Very Low	High	
530630004001	Nevada Heights	City	100.0%	High	High	Very Low	Very High	1,446	12.7%	10.3%	31.7%	0.0%	10.9%	10.3%	Moderate	Very High	Moderate	High	
530630004002	Nevada Heights	City	100.0%	High	High	Low	High	1,477	7.0%	7.9%	20.4%	1.2%	10.9%	8.1%	Moderate	Moderate	Low	Moderate	
530630004003	Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	1,258	2.7%	13.2%	29.1%	8.3%	10.9%	13.7%	High	Low	Very High	Low	
530630006001	North Hill	City	100.0%	High	High	Low	High	980	8.0%	7.4%	27.0%	1.8%	7.9%	7.6%	Moderate	Low	Very Low	Moderate	
530630007003	Northwest	City	100.0%	High	High	Low	High	780	0.0%	20.1%	5.6%	0.0%	8.1%	15.2%	High	Very Low	Very Low	High	
530630009001	Northwest	City	100.0%	High	High	Low	High	719	2.1%	8.3%	22.4%	0.0%	7.3%	10.2%	High	Very Low	Very Low	High	
530630009002	Northwest	City	100.0%	High	High	Low	High	962	0.0%	21.3%	11.2%	0.0%	7.3%	3.7%	Very High	Low	High	Moderate	
530630014001	Nevada Heights	City	100.0%	High	High	Very Low	Very High	1,679	3.5%	11.5%	19.4%	0.0%	10.4%	8.6%	Moderate	Low	Very Low	Moderate	
530630014002	Logan, Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	1,698	8.5%	3.7%	27.2%	0.0%	10.4%	6.4%	Moderate	Low	Moderate	Moderate	
530630014003	Logan, Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	1,392	6.2%	18.5%	30.3%	2.0%	10.4%	13.2%	High	Moderate	Very Low	Very High	
530630014004	Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	1,862	8.3%	11.0%	37.6%	7.6%	10.4%	8.5%	Moderate	Moderate	Very Low	High	
530630015003	Bemiss	City	100.0%	High	High	Low	High	923	4.1%	15.0%	13.8%	0.0%	9.1%	6.9%	High	Very Low	Very Low	High	
530630015004	Logan, Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	809	0.0%	16.9%	25.1%	0.4%	9.1%	5.5%	High	Very Low	Low	Moderate	
530630015005	Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	1,429	0.0%	13.2%	10.1%	9.3%	9.1%	4.5%	Moderate	Very Low	Low	Moderate	
530630016001	Bemiss, Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	1,496	8.3%	6.7%	39.2%	6.8%	12.5%	8.7%	Very High	High	Moderate	Very High	
530630018002	Bemiss, Logan	City	100.0%	High	Very High	Very Low	Very High	1,490	6.3%	14.4%	23.6%	0.0%	9.3%	0.9%	High	High	Moderate	High	
530630019003	Emerson/Garfield	City	100.0%	Very High	Very High	Low	Very High	833	11.2%	13.8%	25.2%	0.0%	7.9%	0.0%	Moderate	High	Moderate	Moderate	
530630020004	West Central	City	100.0%	Very High	Very High	Low	Very High	999	2.7%	18.3%	24.4%	0.0%	11.2%	1.9%	Moderate	Moderate	Very Low	High	
530630020005	Emerson/Garfield	City	100.0%	Very High	High	Low	Very High	926	6.2%	10.5%	11.3%	4.2%	11.2%	7.0%	High	Moderate	Low	High	
530630021001	Emerson/Garfield	City	100.0%	High	High	Low	High	943	12.5%	10.1%	7.7%	0.2%	8.6%	8.7%	High	Moderate	Moderate	Moderate	
530630023001	West Central	City	100.0%	High	High	Low	High	1,097	0.0%	12.6%	44.2%	0.0%	8.7%	9.0%	Low	Very Low	Very Low	Very High	
530630024001	Emerson/Garfield, Riverside, West Central	City	100.0%	Very High	Very High	Very Low	Very High	2,181	3.2%	13.4%	32.2%	0.4%	13.2%	7.8%	Moderate	Moderate	Very High	Very Low	
530630024002	Emerson/Garfield	City	100.0%	Very High	Very High	Low	Very High	1,062	3.0%	26.2%	11.3%	4.7%	13.2%	13.3%	Moderate	High	Low	High	
530630025011	Logan	City	100.0%	Very High	Very High	Very Low	Very High	796	6.2%	5.1%	50.0%	25.7%	11.0%	0.0%	High	Very Low	Very Low	High	
530630025021	Logan	City	100.0%	High	High	Low	High	1,564	4.9%	9.2%	12.8%	0.6%	11.0%	2.7%	Moderate	Very Low	Moderate	Moderate	
530630035002	Riverside	City	100.0%	High	Very High	Low	Very High	1,141	0.0%	27.4%	20.7%	0.0%	11.6%	13.0%	Low	Very High	Low	Very High	
530630035003	Riverside	City	100.0%	Very High	Very High	Very Low	Very High	618	0.0%	19.1%	15.4%	0.0%	11.6%	0.0%	Low	Very High	Very High	Low	
530630035004	Riverside	City	100.0%	Very High	Very High	Very Low	Very High	1,001	0.0%	7.5%	28.8%	0.8%	11.6%	49.4%	Moderate	Moderate	Very Low	Very High	
530630036021	Browne's Addition, Riverside	City	100.0%	Very High	Very High	Very Low	Very High	578	3.1%	5.5%	15.9%	0.0%	7.5%	10.6%	Low	Very Low	Moderate	Very Low	
530630111022	Shiloh Hills	City	100.0%	Very High	Very High	Low	Very High	1,413	6.6%	16.8%	8.3%	0.8%	9.3%	2.4%	High	Moderate	Very High	Low	
530630111031	Shiloh Hills	City	100.0%	Very High	Very High	Very Low	Very High	1,508	3.0%	47.9%	19.7%	0.0%	11.1%	3.5%	High	Very High	Very High	High	
530630111041	Shiloh Hills	City	100.0%	Very High	Very High	Very Low	Very High	778	0.0%	6.8%	60.4%	0.0%	11.1%	28.9%	High	Very Low	Very Low	Very High	
530630111042	Shiloh Hills	City	100.0%	Very High	Very High	Low	Very High	1,584	1.8%	17.6%	14.9%	0.0%	11.1%	11.5%	High	High	High	Moderate	
530630111043	Shiloh Hills	City	100.0%	Very High	Very High	Low	Very High	507	12.4%	17.8%	41.6%	0.0%	11.1%	23.6%	High	Very High	Low	Very High	
530630112032	Shiloh Hills	City	100.0%	Very High	Very High	Low	Very High	1,560	3.2%	29.0%	30.1%	4.2%	9.7%	2.2%	High	Moderate	Very High	Low	
530630112041	Shiloh Hills	City	100.0%	High	Very High	Low	Very High	1,613	3.3%	18.4%	13.2%	7.0%	9.7%	0.0%	Moderate	Low	High	Low	
530630112042	Shiloh Hills	City	100.0%	High	Very High	Very Low	Very High	766	0.0%	45.1%	15.8%	2.3%	9.7%	6.4%	High	Very High	High	Moderate	
530630144001	Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	798	17.3%	13.8%	19.3%	2.0%	9.3%	4.2%	Very High	Very High	Low	Very High	
530630145001	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very Low	Very High	673	6.4%	16.2%	44.6%	1.0%	13.7%	0.0%	High	Very High	Very Low	Very High	
530630145002	East Central	City	100.0%	Very High	Very High	Very Low	Very High	1,959	1.1%	8.5%	16.8%	2.1%	13.7%	22.5%	Low	Low	Very High	Very Low	
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very Low	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate	
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%					

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups: 25
Total BG Population: 30,676 (13.2% of city)

City Population (OFM 2024): 233,000

	Variable 1	Variable 2	Variable 3
	E Urban Heat Island Mean	AC Built before 1960 Percent	AC Tree Canopy Coverage
	Exposure	Adaptive Capacity	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Very Low	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

High indicator values indicate LOW Adaptive Capacity.

Rising annual average temperatures, with particularly higher summer and winter temperatures, coupled with more frequent and sustained heatwaves, pose significant risks to both residents and workers. Older building s tend to be less insulated and energy-efficient compared to newer structures built under more stringent codes (Power, 2008). For the purposes of this analysis, older buildings are defined as those built before 1960. As a result, increased cooling demands during the summer and extreme heat events may negatively impact the health and comfort of occupants in older buildings.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Urban Heat Island Mean	Adaptive Capacity: AC Built before 1960 Percent	Adaptive Capacity: AC Tree Canopy Coverage	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002011	Hillyard	City	100.0%	High	High	Very Low	Very High	2,322	5.2%	16.2%	22.6%	3.5%	13.4%	4.7%	High	Very High	Low	Very High
530630003011	Whitman	City	100.0%	High	High	Very Low	Very High	1,384	2.4%	10.5%	23.2%	0.9%	11.6%	4.9%	Moderate	Low	Very Low	Moderate
530630003021	Nevada Heights, Whitman	City	100.0%	High	High	Low	Very High	1,303	12.8%	20.6%	24.2%	3.7%	11.6%	6.4%	Moderate	Very High	Very Low	Very High
530630004001	Nevada Heights	City	100.0%	High	High	Very Low	Very High	1,446	12.7%	10.3%	31.7%	0.0%	10.9%	10.3%	Moderate	Very High	Moderate	High
530630004002	Nevada Heights	City	100.0%	High	High	Low	Very High	1,477	7.0%	7.9%	20.4%	1.2%	10.9%	8.1%	Moderate	Moderate	Low	Moderate
530630007003	Northwest	City	100.0%	High	Very High	Low	Very High	780	0.0%	20.1%	5.6%	0.0%	8.1%	15.2%	High	Very Low	Very Low	High
530630007004	Northwest	City	100.0%	High	Very High	Low	Very High	1,293	1.8%	11.6%	28.5%	0.0%	8.1%	0.0%	Very High	Very Low	Low	High
530630010004	Audubon/Downriver	City	100.0%	High	High	Low	High	775	2.5%	28.8%	8.1%	0.0%	6.1%	0.0%	Very High	Moderate	Very Low	Very High
530630014001	Nevada Heights	City	100.0%	High	Very High	Very Low	Very High	1,679	3.5%	11.5%	19.4%	0.0%	10.4%	8.6%	Moderate	Low	Very Low	Moderate
530630014002	Logan, Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	1,698	8.5%	3.7%	27.2%	0.0%	10.4%	6.4%	Moderate	Low	Moderate	Moderate
530630014003	Logan, Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	1,392	6.2%	18.5%	30.3%	2.0%	10.4%	13.2%	High	Moderate	Very Low	Very High
530630014004	Nevada Heights	City	100.0%	Very High	High	Very Low	Very High	1,862	8.3%	11.0%	37.6%	7.6%	10.4%	8.5%	Moderate	Moderate	Very Low	High
530630015003	Bemiss	City	100.0%	High	Very High	Low	Very High	923	4.1%	15.0%	13.8%	0.0%	9.1%	6.9%	High	Very Low	Very Low	High
530630015005	Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	1,429	0.0%	13.2%	10.1%	9.3%	9.1%	4.5%	Moderate	Very Low	Low	Moderate
530630018002	Bemiss, Logan	City	100.0%	High	High	Very Low	Very High	1,490	6.3%	14.4%	23.6%	0.0%	9.3%	0.9%	High	High	Moderate	High
530630019003	Emerson/Garfield	City	100.0%	Very High	Very High	Low	Very High	833	11.2%	13.8%	25.2%	0.0%	7.9%	0.0%	Moderate	High	Moderate	Moderate
530630020004	West Central	City	100.0%	Very High	Very High	Low	Very High	999	2.7%	18.3%	24.4%	0.0%	11.2%	1.9%	Moderate	Moderate	Very Low	High
530630020005	Emerson/Garfield	City	100.0%	Very High	High	Low	Very High	926	6.2%	10.5%	11.3%	4.2%	11.2%	7.0%	High	Moderate	Low	High
530630021001	Emerson/Garfield	City	100.0%	High	High	Low	Very High	943	12.5%	10.1%	7.7%	0.2%	8.6%	8.7%	High	Moderate	Moderate	Moderate
530630023001	West Central	City	100.0%	High	Very High	Low	Very High	1,097	0.0%	12.6%	44.2%	0.0%	8.7%	9.0%	Low	Very Low	Very Low	Very High
530630024002	Emerson/Garfield	City	100.0%	Very High	High	Low	Very High	1,062	3.0%	26.2%	11.3%	4.7%	13.2%	13.3%	Moderate	High	Low	High
530630025011	Logan	City	100.0%	Very High	Very High	Very Low	Very High	796	6.2%	5.1%	50.0%	25.7%	11.0%	0.0%	High	Very Low	Very Low	High
530630025021	Logan	City	100.0%	High	High	Low	Very High	1,564	4.9%	9.2%	12.8%	0.6%	11.0%	2.7%	Moderate	Very Low	Moderate	Moderate
530630145001	Chief Garry Park, East Central	City	100.0%	Very High	High	Very Low	Very High	673	6.4%	16.2%	44.6%	1.0%	13.7%	0.0%	High	Very High	Very Low	Very High
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very Low	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups: 22

Total BG Population: 24,441 (10.5% of city)

City Population (OFM 2024): 233,000

Variable 1	Variable 2
E WUI_Coverage	AC Built before 1960 Percent
Exposure	Adaptive Capacity
Very High High Moderate Low Very Low	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

High indicator values indicate LOW Adaptive Capacity.

Older buildings are also less likely to have ventilation or air conditioning systems, which are essential not only for maintaining indoor air quality during smoke events, but also for managing indoor temperatures during extreme heat. Older windows, in particular, tend to be less airtight and more prone to leakage, making these buildings especially vulnerable to the infiltration of polluted air during and after wildfire events, as well as to heat loss or gain year-round. Wildfires and smoke present a serious risk to building safety, especially for those situated in the wildland-urban interface along the city's periphery, where direct damage may occur.

							Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E WUI_Coverage	Adaptive Capacity: AC Built before 1960 Percent	Combined Risk		Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002011	Hillyard	City	100.0%	High	High	Very High	2,322	5.2%	16.2%	22.6%	3.5%	13.4%	4.7%	High	Very High	Low	Very High
530630007004	Northwest	City	100.0%	Very High	Very High	Very High	1,293	1.8%	11.6%	28.5%	0.0%	8.1%	0.0%	Very High	Very Low	Low	High
530630009003	Northwest	City	100.0%	Very High	Very High	Very High	954	6.3%	24.0%	4.2%	0.0%	7.3%	0.0%	Very High	High	Moderate	Very High
530630009004	Northwest	City	100.0%	Very High	High	Very High	631	3.1%	10.8%	10.1%	0.0%	7.3%	14.2%	Very High	Low	Low	Very High
530630010001	Audubon/Downriver	City	100.0%	Very High	Very High	Very High	889	2.3%	16.5%	0.0%	0.0%	6.1%	4.3%	Very High	Very Low	Moderate	Moderate
530630010002	Audubon/Downriver	City	100.0%	Very High	Very High	Very High	771	2.2%	2.5%	12.8%	0.0%	6.1%	6.6%	Very High	Very Low	Very Low	High
530630010003	Audubon/Downriver	City	100.0%	Very High	Very High	Very High	708	0.7%	18.1%	6.1%	0.0%	6.1%	0.0%	Very High	Very Low	Very Low	Very High
530630010004	Audubon/Downriver	City	100.0%	Very High	High	Very High	775	2.5%	28.8%	8.1%	0.0%	6.1%	0.0%	Very High	Moderate	Very Low	Very High
530630010006	Audubon/Downriver	City	100.0%	Very High	High	Very High	1,533	4.0%	15.2%	15.4%	0.0%	6.1%	2.7%	Very High	Low	Moderate	High
530630011002	Audubon/Downriver	City	100.0%	Very High	High	Very High	1,072	14.6%	7.8%	37.6%	6.0%	6.4%	2.7%	Very High	High	Moderate	High
530630011003	Audubon/Downriver	City	100.0%	Very High	Very High	Very High	1,117	3.8%	17.7%	4.0%	0.0%	6.4%	0.0%	High	Moderate	Moderate	High
530630018002	Bemiss, Logan	City	100.0%	High	High	Very High	1,490	6.3%	14.4%	23.6%	0.0%	9.3%	0.9%	High	High	Moderate	High
530630021002	Emerson/Garfield, West Central	City	100.0%	High	Very High	Very High	1,557	2.2%	10.8%	24.2%	0.9%	8.6%	12.3%	High	Very Low	Low	Moderate
530630023003	West Central	City	100.0%	High	Very High	Very High	1,519	3.1%	12.8%	32.8%	0.0%	8.7%	13.2%	Low	Low	Low	Low
530630023004	West Central	City	100.0%	High	Very High	Very High	1,258	0.0%	29.8%	29.5%	0.0%	8.7%	3.4%	Very Low	Moderate	Low	Moderate
530630040013	Cliff-Cannon	City	100.0%	Very High	High	Very High	709	3.8%	17.0%	20.2%	0.0%	8.4%	19.1%	Low	Low	Low	Low
530630040021	Cliff-Cannon	City	100.0%	High	High	High	1,248	2.1%	14.8%	22.3%	0.0%	8.4%	3.2%	Low	Low	Moderate	Low
530630042001	Manito/Cannon Hill	City	100.0%	High	Very High	Very High	880	5.0%	11.0%	3.3%	0.0%	3.7%	2.6%	Very Low	Low	Moderate	Very Low
530630042003	Manito/Cannon Hill	City	100.0%	High	High	Very High	676	10.3%	14.2%	22.8%	1.7%	3.7%	0.0%	Very Low	Moderate	High	Very Low
530630042004	Manito/Cannon Hill	City	100.0%	High	Very High	Very High	691	7.4%	14.8%	33.4%	0.0%	3.7%	9.4%	Very Low	Low	Moderate	Low
530630042005	Manito/Cannon Hill	City	100.0%	High	Very High	Very High	1,583	6.1%	23.9%	19.2%	0.0%	3.7%	5.6%	Very Low	High	Moderate	Low
530630043002	Comstock	City	100.0%	High	Very High	High	767	2.9%	26.2%	10.3%	0.0%	4.1%	2.1%	Very Low	High	Moderate	Low
Average								4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Variable 1	Variable 2
Flooding and Precipitation	Socioeconomic
Exposure	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>
High	<input type="checkbox"/>
Moderate	<input type="checkbox"/>
Low	<input checked="" type="checkbox"/>
Very Low	<input checked="" type="checkbox"/>

Select quantile scores (at least 1 for each variable):

Very High
High
Moderate
Low
Very Low

Total Block Groups:

11

Total BG Population:

15,431 (6.6% of city)

City Population (OFM 2024): 233,000

The University District PDA, situated near the Spokane River, is especially vulnerable due to its proximity to flood hazard zones, compounded by a concentration of residents living in poverty and with disabilities.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: Flooding and Precipitation	Adaptive Capacity: Socioeconomic	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
								Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630007001	Northwest	City	100.0%	Very High	Low	Very High	1,315	6.0%	9.4%	16.7%	0.0%	8.1%	0.0%	High	Low	Very Low	High
530630018001	Logan, Minnehaha	City	100.0%	Very High	Very Low	Very High	1,599	3.6%	27.8%	17.0%	2.5%	9.3%	13.0%	Very High	Very High	Low	Very High
530630025022	Logan	City	100.0%	Very High	Very Low	Very High	969	0.0%	16.4%	9.7%	2.7%	11.0%	42.9%	Moderate	Moderate	Very Low	Very High
530630026001	Chief Garry Park	City	100.0%	High	Low	Very High	1,388	2.5%	13.0%	29.7%	1.4%	12.1%	0.0%	Very High	High	Moderate	Very High
530630026004	Chief Garry Park	City	100.0%	High	Low	Very High	1,704	3.4%	5.8%	22.4%	5.7%	12.1%	2.6%	High	High	Low	High
530630030001	East Central	City	100.0%	Very High	Very Low	Very High	1,182	3.8%	11.5%	27.8%	4.5%	12.5%	11.8%	Very High	High	Moderate	Very High
530630030002	East Central	City	100.0%	Very High	Very Low	Very High	1,436	8.7%	13.8%	37.1%	6.1%	12.5%	3.3%	Very High	Very High	Low	Very High
530630036011	West Hills	City	92.2%	Very High	Low	Very High	2,203	3.4%	4.5%	28.4%	0.0%	7.5%	11.3%	High	Moderate	Very High	Low
530630036012	Peaceful Valley	City	100.0%	Very High	Low	Very High	671	0.0%	19.6%	25.1%	0.0%	7.5%	0.0%	Low	Very High	Very High	Low
530630047022	Lincoln Heights	City	100.0%	Very High	Low	Very High	1,199	9.4%	31.8%	4.4%	10.1%	6.6%	5.1%	Moderate	Very High	Very High	Moderate
530630048001	Southgate	City	100.0%	Very High	Very Low	Very High	1,766	2.5%	37.7%	17.8%	10.5%	5.1%	6.7%	Low	Moderate	High	Low
Average								4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Variable 1	Variable 2
E Flood Coverage	AC Built before 1960 Percent
Exposure	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>
High	<input checked="" type="checkbox"/>
Moderate	<input type="checkbox"/>
Low	<input type="checkbox"/>
Very Low	<input type="checkbox"/>

Select quantile scores (at least 1 for each variable):

Very High
High
Moderate
Low
Very Low

Total Block Groups:

8

Total BG Population:

9,788 (4.2% of city)

City Population (OFM 2024): 233,000

Increased stormwater and riverine flooding, driven by higher precipitation levels in winter, further threatens Spokane's built environment, particularly in neighborhoods such as East Central, Southgate, Lincoln Heights, and Grandview/Thorpe, as well as areas along the Spokane River and Hangman Creek.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Flood Coverage	Adaptive Capacity: AC Built before 1960 Percent	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
								Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630007001	Northwest	City	100.0%	Very High	Very High	Very High	1,315	6.0%	9.4%	16.7%	0.0%	8.1%	0.0%	High	Low	Very Low	High
530630010006	Audubon/Downriver	City	100.0%	High	High	High	1,533	4.0%	15.2%	15.4%	0.0%	6.1%	2.7%	Very High	Low	Moderate	High
530630030002	East Central	City	100.0%	Very High	High	Very High	1,436	8.7%	13.8%	37.1%	6.1%	12.5%	3.3%	Very High	Very High	Low	Very High
530630031004	East Central, Lincoln Heights, Rockwood	City	100.0%	High	High	Moderate	1,486	10.4%	7.0%	10.8%	3.2%	7.7%	3.8%	Very Low	Very High	Moderate	Moderate
530630042001	Manito/Cannon Hill	City	100.0%	High	Very High	Very High	880	5.0%	11.0%	3.3%	0.0%	3.7%	2.6%	Very Low	Low	Moderate	Very Low
530630042005	Manito/Cannon Hill	City	100.0%	Very High	Very High	Very High	1,583	6.1%	23.9%	19.2%	0.0%	3.7%	5.6%	Very Low	High	Moderate	Low
530630045002	Rockwood	City	100.0%	High	Very High	Very High	1,026	4.4%	20.6%	14.2%	0.0%	4.0%	10.3%	Very Low	High	Very Low	Low
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average								4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups: 22
Total BG Population: 25,117 (10.8% of city)

City Population (OFM 2024): 233,000

Variable 1	Variable 2	Variable 3
E Urban Heat Island Mean	AC Housing Cost Burden Percent	AC Energy Cost Burden
Exposure	Adaptive Capacity	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Moderate	<input type="checkbox"/>	<input type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>
Very Low	<input type="checkbox"/>	<input type="checkbox"/>

High indicator values indicate LOW Adaptive Capacity.

Older building s tend to be less insulated and energy-efficient compared to newer structures built under more stringent codes (Power, 2008). The heightened demand for electricity during extreme heat events raises the risk of power failures. While lower-income homeowners spend a larger share of their income on maintenance, they invest significantly less overall than higher-income households, often prioritizing urgent repairs and disaster recovery over long-term improvements. Without resources for routine upkeep or essential replacements, many are left in unstable and unhealthy housing (Joint Center for Housing Studies, 2021). In contrast, higher-income households living in older units are often better positioned to afford the upkeep and upgrades that aging homes require. Heat and smoke events in the City of Spokane have already put pressure on households due to the costs of air conditioning or lack of cooling. The city's housing stock is likely to be affected by climate-related hazards over the next twenty years. Increases in the number of extreme heat days are likely to increase household energy costs for cooling, which could especially impact households that are already housing cost-burdened.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Urban Heat Island Mean	Adaptive Capacity: AC Housing Cost Burden Percent	Adaptive Capacity: AC Energy Cost Burden	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002012	Hillyard	City	100.0%	High	High	High	Very High	814	2.0%	17.9%	14.3%	3.8%	13.4%	4.7%	Very High	High	Very Low	Very High
530630002021	Hillyard	City	100.0%	Very High	Very High	High	Very High	739	0.0%	12.3%	15.0%	1.0%	13.4%	12.5%	Very High	Moderate	Very Low	Very High
530630003011	Whitman	City	100.0%	High	Very High	Very High	Very High	1,384	2.4%	10.5%	23.2%	0.9%	11.6%	4.9%	Moderate	Low	Very Low	Moderate
530630003021	Nevada Heights, Whitman	City	100.0%	High	High	High	Very High	1,303	12.8%	20.6%	24.2%	3.7%	11.6%	6.4%	Moderate	Very High	Very Low	Very High
530630003022	Nevada Heights, Whitman	City	100.0%	High	High	High	High	1,621	6.2%	6.1%	46.3%	7.2%	11.6%	5.4%	Moderate	Low	Very Low	High
530630006003	North Hill	City	100.0%	High	Very High	High	Very High	1,090	2.4%	10.4%	15.2%	0.0%	7.9%	1.4%	Moderate	Very Low	Very Low	Moderate
530630014001	Nevada Heights	City	100.0%	High	Very High	High	Very High	1,679	3.5%	11.5%	19.4%	0.0%	10.4%	8.6%	Moderate	Low	Very Low	Moderate
530630014003	Logan, Nevada Heights	City	100.0%	Very High	High	High	Very High	1,392	6.2%	18.5%	30.3%	2.0%	10.4%	13.2%	High	Moderate	Very Low	Very High
530630014004	Nevada Heights	City	100.0%	Very High	Very High	High	Very High	1,862	8.3%	11.0%	37.6%	7.6%	10.4%	8.5%	Moderate	Moderate	Very Low	High
530630015004	Logan, Nevada Heights	City	100.0%	Very High	Very High	High	Very High	809	0.0%	16.9%	25.1%	0.4%	9.1%	5.5%	High	Very Low	Low	Moderate
530630015005	Nevada Heights	City	100.0%	Very High	Very High	High	Very High	1,429	0.0%	13.2%	10.1%	9.3%	9.1%	4.5%	Moderate	Very Low	Low	Moderate
530630016001	Bemiss, Hillyard	City	100.0%	Very High	High	High	Very High	1,496	8.3%	6.7%	39.2%	6.8%	12.5%	8.7%	Very High	High	Moderate	Very High
530630019002	Emerson/Garfield	City	100.0%	High	High	High	Very High	1,666	11.3%	11.6%	19.0%	0.0%	7.9%	10.2%	Moderate	Moderate	Low	High
530630020001	Emerson/Garfield	City	100.0%	High	High	High	Very High	794	7.0%	18.2%	11.5%	0.0%	11.2%	6.7%	Moderate	High	Low	High
530630020002	Emerson/Garfield	City	100.0%	Very High	Very High	High	Very High	836	8.5%	3.2%	16.8%	0.0%	11.2%	8.4%	Moderate	Moderate	Very Low	Very High
530630020003	Emerson/Garfield, West Central	City	100.0%	Very High	Very High	High	Very High	900	5.5%	9.8%	34.5%	13.0%	11.2%	14.3%	Low	Moderate	Very Low	Very High
530630020004	West Central	City	100.0%	Very High	High	High	Very High	999	2.7%	18.3%	24.4%	0.0%	11.2%	1.9%	Moderate	Moderate	Very Low	High
530630020005	Emerson/Garfield	City	100.0%	Very High	Very High	High	Very High	926	6.2%	10.5%	11.3%	4.2%	11.2%	7.0%	High	Moderate	Low	High
530630025021	Logan	City	100.0%	High	High	High	Very High	1,564	4.9%	9.2%	12.8%	0.6%	11.0%	2.7%	Moderate	Very Low	Moderate	Moderate
530630111041	Shiloh Hills	City	100.0%	Very High	Very High	High	Very High	778	0.0%	6.8%	60.4%	0.0%	11.1%	28.9%	High	Very Low	Very Low	Very High
530630111043	Shiloh Hills	City	100.0%	Very High	High	High	Very High	507	12.4%	17.8%	41.6%	0.0%	11.1%	23.6%	High	Very High	Low	Very High
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	High	High	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups:

40

Total BG Population:

45,813 (19.7% of city)

City Population (OFM 2024):

233,000

	Variable 1	Variable 2
	E Urban Heat Island Mean	AC Outdoor Professions Percent
	Exposure	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Moderate	<input type="checkbox"/>	<input type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>
Very Low	<input type="checkbox"/>	<input type="checkbox"/>

High indicator values indicate LOW Adaptive Capacity.

Workers in climate-exposed sectors, such as manufacturing, transportation, and warehousing, may experience reduced working hours, job losses, or furloughs due to unsafe working conditions or infrastructure shutdowns (United States Environmental Protection Agency, 2025).
Accommodation, food services, and retail trade may suffer from changing tourism patterns due to natural landscape degradation and increased temperatures, leading to fewer tourists, reduced revenues, and fewer outdoor activities (International Economic Development Council, 2022).

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Demographic Context			Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
				Exposure: E Urban Heat Island Mean	Adaptive Capacity: AC Outdoor Professions Percent	Combined Risk		Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002012	Hillyard	City	100.0%	High	High	High	814	2.0%	17.9%	14.3%	3.8%	13.4%	4.7%	Very High	High	Very Low	Very High
530630002021	Hillyard	City	100.0%	Very High	Very High	Very High	739	0.0%	12.3%	15.0%	1.0%	13.4%	12.5%	Very High	Moderate	Very Low	Very High
530630002022	Hillyard	City	100.0%	High	Very High	High	1,019	17.5%	8.8%	22.7%	1.3%	13.4%	11.3%	Very High	Very High	Low	Very High
530630003011	Whitman	City	100.0%	High	High	High	1,384	2.4%	10.5%	23.2%	0.9%	11.6%	4.9%	Moderate	Low	Very Low	Moderate
530630003021	Nevada Heights, Whitman	City	100.0%	High	High	High	1,303	12.8%	20.6%	24.2%	3.7%	11.6%	6.4%	Moderate	Very High	Very Low	Very High
530630003022	Nevada Heights, Whitman	City	100.0%	High	High	High	1,621	6.2%	6.1%	46.3%	7.2%	11.6%	5.4%	Moderate	Low	Very Low	High
530630004001	Nevada Heights	City	100.0%	High	High	High	1,446	12.7%	10.3%	31.7%	0.0%	10.9%	10.3%	Moderate	Very High	Moderate	High
530630006001	North Hill	City	100.0%	High	Very High	Very High	980	8.0%	7.4%	27.0%	1.8%	7.9%	7.6%	Moderate	Low	Very Low	Moderate
530630007003	Northwest	City	100.0%	High	High	High	780	0.0%	20.1%	5.6%	0.0%	8.1%	15.2%	High	Very Low	Very Low	High
530630009001	Northwest	City	100.0%	High	Very High	Very High	719	2.1%	8.3%	22.4%	0.0%	7.3%	10.2%	High	Very Low	Very Low	High
530630012001	North Hill	City	100.0%	High	High	High	894	2.0%	10.3%	16.5%	0.0%	8.7%	3.8%	Moderate	Low	Low	Moderate
530630012002	North Hill	City	100.0%	High	High	High	1,480	6.6%	13.9%	24.9%	1.0%	8.7%	3.4%	Moderate	Moderate	Moderate	Moderate
530630013001	North Hill	City	100.0%	High	Very High	Very High	1,060	0.7%	14.2%	17.2%	0.0%	9.4%	1.6%	Moderate	Low	Low	Moderate
530630014001	Nevada Heights	City	100.0%	High	Very High	Very High	1,679	3.5%	11.5%	19.4%	0.0%	10.4%	8.6%	Moderate	Low	Very Low	Moderate
530630014003	Logan, Nevada Heights	City	100.0%	Very High	Very High	Very High	1,392	6.2%	18.5%	30.3%	2.0%	10.4%	13.2%	High	Moderate	Very Low	Very High
530630015004	Logan, Nevada Heights	City	100.0%	Very High	Very High	Very High	809	0.0%	16.9%	25.1%	0.4%	9.1%	5.5%	High	Very Low	Low	Moderate
530630016001	Bemiss, Hillyard	City	100.0%	Very High	Very High	Very High	1,496	8.3%	6.7%	39.2%	6.8%	12.5%	8.7%	Very High	High	Moderate	Very High
530630018002	Bemiss, Logan	City	100.0%	High	High	High	1,490	6.3%	14.4%	23.6%	0.0%	9.3%	0.9%	High	High	Moderate	High
530630019002	Emerson/Garfield	City	100.0%	High	High	High	1,666	11.3%	11.6%	19.0%	0.0%	7.9%	10.2%	Moderate	Moderate	Low	High
530630019003	Emerson/Garfield	City	100.0%	Very High	Very High	Very High	833	11.2%	13.8%	25.2%	0.0%	7.9%	0.0%	Moderate	High	Moderate	Moderate
530630020002	Emerson/Garfield	City	100.0%	Very High	Very High	Very High	836	8.5%	3.2%	16.8%	0.0%	11.2%	8.4%	Moderate	Moderate	Very Low	Very High
530630020003	Emerson/Garfield, West Central	City	100.0%	Very High	Very High	Very High	900	5.5%	9.8%	34.5%	13.0%	11.2%	14.3%	Low	Moderate	Very Low	Very High
530630020004	West Central	City	100.0%	Very High	Very High	Very High	999	2.7%	18.3%	24.4%	0.0%	11.2%	1.9%	Moderate	Moderate	Very Low	High
530630021002	Emerson/Garfield, West Central	City	100.0%	High	Very High	Very High	1,557	2.2%	10.8%	24.2%	0.9%	8.6%	12.3%	High	Very Low	Low	Moderate
530630023001	West Central	City	100.0%	High	Very High	Very High	1,097	0.0%	12.6%	44.2%	0.0%	8.7%	9.0%	Low	Very Low	Very Low	Very High
530630025011	Logan	City	100.0%	Very High	High	Very High	796	6.2%	5.1%	50.0%	25.7%	11.0%	0.0%	High	Very Low	Very Low	High
530630025012	Logan	City	100.0%	Very High	Very High	Very High	1,333	0.0%	7.4%	37.5%	0.0%	11.0%	5.5%	Moderate	Very Low	Moderate	Low
530630025021	Logan	City	100.0%	High	Very High	Very High	1,564	4.9%	9.2%	12.8%	0.6%	11.0%	2.7%	Moderate	Very Low	Moderate	Moderate
530630035004	Riverside	City	100.0%	Very High	Very High	Very High	1,001	0.0%	7.5%	28.8%	0.8%	11.6%	49.4%	Moderate	Moderate	Very Low	Very High
530630106031	Balboa/South Indian Trail, North Indian Trail	City	100.0%	Very High	Very High	Very High	1,039	1.3%	31.6%	13.0%	0.0%	5.1%	4.9%	Very High	High	High	Very High
530630106032	North Indian Trail	City	100.0%	High	Very High	Very High	2,174	4.9%	16.7%	2.8%	0.0%	5.1%	0.0%	Very High	Low	Very High	Moderate
530630111041	Shiloh Hills	City	100.0%	Very High	Very High	Very High	778	0.0%	6.8%	60.4%	0.0%	11.1%	28.9%	High	Very Low	Very Low	Very High
530630112034	Shiloh Hills	City	100.0%	Very High	Very High	Very High	873	1.7%	9.9%	11.0%	0.0%	9.7%	6.0%	High	Very Low	Moderate	Low
530630112041	Shiloh Hills	City	100.0%	High	Very High	Very High	1,613	3.3%	18.4%	13.2%	7.0%	9.7%	0.0%	Moderate	Low	High	Low
530630112042	Shiloh Hills	City	100.0%	High	High	High	766	0.0%	45.1%	15.8%	2.3%	9.7%	6.4%	High	Very High	High	Moderate
530630137001	West Hills	City	76.6%	Very High	High	Very High	926	4.1%	6.2%	28.4%	0.0%	8.1%	0.0%	Very Low	Very Low	Very High	Very Low
530630144001	Hillyard	City	100.0%	Very High	High	Very High	798	17.3%	13.8%	19.3%	2.0%	9.3%	4.2%	Very High	Very High	Low	Very High
530630145001	Chief Garry Park, East Central	City	100.0%	Very High	High	Very High	673	6.4%	16.2%	44.6%	1.0%	13.7%	0.0%	High	Very High	Very Low	Very High
530630145002	East Central	City	100.0%	Very High	High	Very High	1,959	1.1%	8.5%	16.8%	2.1%	13.7%	22.5%	Low	Low	Very High	Very Low
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average								4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups: 26
Total BG Population: 37,325 (16.0% of city)

City Population (OFM 2024): 233,000

Variable 1	Variable 2
E WUI_Coverage	AC Outdoor Professions Percent
Exposure	Adaptive Capacity
Very High <input checked="" type="checkbox"/>	Very High <input checked="" type="checkbox"/>
High <input checked="" type="checkbox"/>	High <input checked="" type="checkbox"/>
Moderate <input type="checkbox"/>	Moderate <input type="checkbox"/>
Low <input type="checkbox"/>	Low <input type="checkbox"/>
Very Low <input type="checkbox"/>	Very Low <input type="checkbox"/>

Businesses that depend on outdoor recreation are particularly vulnerable to climate hazards such as extreme heat, drought, flooding, and wildfires. Between 2012 and 2022, 66 days failed health standards in the Spokane area due to wildfire smoke, which limited the number of days safe for outdoor activities. (Spokane Regional Health District, 2023).

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E WUI_Coverage	Adaptive Capacity: AC Outdoor Professions Percent	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
								Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002012	Hillyard	City	100.0%	Very High	High	Very High	814	2.0%	17.9%	14.3%	3.8%	13.4%	4.7%	Very High	High	Very Low	Very High
530630002021	Hillyard	City	100.0%	Very High	Very High	Very High	739	0.0%	12.3%	15.0%	1.0%	13.4%	12.5%	Very High	Moderate	Very Low	Very High
530630002022	Hillyard	City	100.0%	Very High	Very High	Very High	1,019	17.5%	8.8%	22.7%	1.3%	13.4%	11.3%	Very High	Very High	Low	Very High
530630008002	Balboa/South Indian Trail	City	100.0%	High	High	High	2,735	6.7%	23.7%	21.5%	0.6%	5.4%	3.5%	Very High	High	Very High	Moderate
530630009005	Northwest	City	100.0%	Very High	High	Very High	991	1.8%	5.0%	30.8%	0.0%	7.3%	3.7%	Very High	Very Low	Moderate	Moderate
530630010003	Audubon/Downriver	City	100.0%	Very High	Very High	Very High	708	0.7%	18.1%	6.1%	0.0%	6.1%	0.0%	Very High	Very Low	Very Low	Very High
530630011002	Audubon/Downriver	City	100.0%	Very High	High	Very High	1,072	14.6%	7.8%	37.6%	6.0%	6.4%	2.7%	Very High	High	Moderate	High
530630011003	Audubon/Downriver	City	100.0%	Very High	High	Very High	1,117	3.8%	17.7%	4.0%	0.0%	6.4%	0.0%	High	Moderate	Moderate	High
530630016001	Bemiss, Hillyard	City	100.0%	Very High	Very High	Very High	1,496	8.3%	6.7%	39.2%	6.8%	12.5%	8.7%	Very High	High	Moderate	Very High
530630016003	Bemiss	City	100.0%	Very High	High	Very High	1,330	0.7%	29.9%	15.2%	2.0%	12.5%	8.3%	Very High	Very High	Low	Very High
530630018001	Logan, Minnehaha	City	100.0%	High	High	High	1,599	3.6%	27.8%	17.0%	2.5%	9.3%	13.0%	Very High	Very High	Low	Very High
530630018002	Bemiss, Logan	City	100.0%	High	High	High	1,490	6.3%	14.4%	23.6%	0.0%	9.3%	0.9%	High	High	Moderate	High
530630021002	Emerson/Garfield, West Central	City	100.0%	High	Very High	High	1,557	2.2%	10.8%	24.2%	0.9%	8.6%	12.3%	High	Very Low	Low	Moderate
530630029001	East Central	City	100.0%	High	High	Moderate	930	8.3%	18.6%	22.4%	1.6%	6.8%	8.7%	Very High	Moderate	Moderate	Very High
530630046021	Lincoln Heights	City	100.0%	High	Very High	High	1,050	3.6%	14.4%	17.1%	2.3%	7.0%	9.3%	Very Low	Very Low	Moderate	Very Low
530630046022	Lincoln Heights	City	100.0%	High	High	Moderate	854	0.9%	12.5%	8.9%	0.0%	7.0%	1.7%	Low	Very Low	High	Very Low
530630047012	Lincoln Heights	City	100.0%	High	Very High	Very High	1,667	7.5%	8.7%	40.0%	2.0%	6.6%	8.4%	Very Low	Low	Moderate	Low
530630106011	Audubon/Downriver, Northwest	City	99.9%	Very High	High	Very High	1,598	12.7%	12.1%	14.6%	0.0%	5.1%	0.0%	Very High	Very High	Very High	High
530630106031	Balboa/South Indian Trail, North Indian Trail	City	100.0%	High	Very High	Very High	1,039	1.3%	31.6%	13.0%	0.0%	5.1%	4.9%	Very High	High	High	Very High
530630106032	North Indian Trail	City	100.0%	Very High	Very High	Very High	2,174	4.9%	16.7%	2.8%	0.0%	5.1%	0.0%	Very High	Low	Very High	Moderate
530630107011	Five Mile Prairie	City	100.0%	High	Very High	Very High	2,209	6.4%	8.6%	3.4%	0.0%	4.9%	5.0%	High	Very Low	Very High	Very Low
530630135033	Latah/Hangman	City	79.2%	Very High	High	Very High	4,463	13.2%	17.6%	9.6%	0.0%	4.2%	0.3%	Low	Very High	Very High	Low
530630137001	West Hills	City	76.6%	High	High	High	926	4.1%	6.2%	28.4%	0.0%	8.1%	0.0%	Very Low	Very Low	Very High	Very Low
530630144001	Hillyard	City	100.0%	Very High	High	Very High	798	17.3%	13.8%	19.3%	2.0%	9.3%	4.2%	Very High	Very High	Low	Very High
530630144002	Hillyard, Minnehaha	City	96.7%	Very High	Very High	Very High	1,180	2.5%	18.4%	34.2%	3.0%	9.3%	22.3%	High	High	Very Low	Very High
530630144003	Minnehaha	City	99.8%	Very High	Very High	Very High	1,771	8.2%	10.8%	30.2%	1.2%	9.3%	6.7%	Very High	High	Low	Very High
Average								4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups:

48

Total BG Population:

57,027 (24.5% of city)

City Population (OFM 2024): 233,000

	Variable 1	Variable 2	Variable 3
	E Urban Heat Island Mean	AC Impervious Coverage	AC Tree Canopy Coverage
	Exposure	Adaptive Capacity	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Very Low	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Extreme heat events combined with a lack of greenspace and predominance of impervious areas such as in Northeast Spokane are shown with a higher vulnerability. This area has less than the city's average street trees; and more people lack access to a vehicle, exposing residents to extreme heat or wildfire smoke.

									Demographic Context									
Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Urban Heat Island Mean	Adaptive Capacity: AC Impervious Coverage	Adaptive Capacity: AC Tree Canopy Coverage	Combined Risk	Total Population (OFM 2024)	Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment	Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
530630002011	Hillyard	City	100.0%	High	High	Very Low	High	2,322	5.2%	16.2%	22.6%	3.5%	13.4%	4.7%	High	Very High	Low	Very High
530630002012	Hillyard	City	100.0%	High	High	Very Low	Very High	814	2.0%	17.9%	14.3%	3.8%	13.4%	4.7%	Very High	High	Very Low	Very High
530630002021	Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	739	0.0%	12.3%	15.0%	1.0%	13.4%	12.5%	Very High	Moderate	Very Low	Very High
530630002022	Hillyard	City	100.0%	High	High	Low	High	1,019	17.5%	8.8%	22.7%	1.3%	13.4%	11.3%	Very High	Very High	Low	Very High
530630003011	Whitman	City	100.0%	High	High	Very Low	High	1,384	2.4%	10.5%	23.2%	0.9%	11.6%	4.9%	Moderate	Low	Very Low	Moderate
530630003021	Nevada Heights, Whitman	City	100.0%	High	High	Low	High	1,303	12.8%	20.6%	24.2%	3.7%	11.6%	6.4%	Moderate	Very High	Very Low	Very High
530630003022	Nevada Heights, Whitman	City	100.0%	High	High	Low	High	1,621	6.2%	6.1%	46.3%	7.2%	11.6%	5.4%	Moderate	Low	Very Low	High
530630004001	Nevada Heights	City	100.0%	High	High	Very Low	Very High	1,446	12.7%	10.3%	31.7%	0.0%	10.9%	10.3%	Moderate	Very High	Moderate	High
530630004002	Nevada Heights	City	100.0%	High	High	Low	High	1,477	7.0%	7.9%	20.4%	1.2%	10.9%	8.1%	Moderate	Moderate	Low	Moderate
530630004003	Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	1,258	2.7%	13.2%	29.1%	8.3%	10.9%	13.7%	High	Low	Very High	Low
530630006001	North Hill	City	100.0%	High	High	Low	High	980	8.0%	7.4%	27.0%	1.8%	7.9%	7.6%	Moderate	Low	Very Low	Moderate
530630007003	Northwest	City	100.0%	High	High	Low	High	780	0.0%	20.1%	5.6%	0.0%	8.1%	15.2%	High	Very Low	Very Low	High
530630009001	Northwest	City	100.0%	High	High	Low	High	719	2.1%	8.3%	22.4%	0.0%	7.3%	10.2%	High	Very Low	Very Low	High
530630009002	Northwest	City	100.0%	High	High	Low	High	962	0.0%	21.3%	11.2%	0.0%	7.3%	3.7%	Very High	Low	High	Moderate
530630014001	Nevada Heights	City	100.0%	High	High	Very Low	Very High	1,679	3.5%	11.5%	19.4%	0.0%	10.4%	8.6%	Moderate	Low	Very Low	Moderate
530630014002	Logan, Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	1,698	8.5%	3.7%	27.2%	0.0%	10.4%	6.4%	Moderate	Low	Moderate	Moderate
530630014003	Logan, Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	1,392	6.2%	18.5%	30.3%	2.0%	10.4%	13.2%	High	Moderate	Very Low	Very High
530630014004	Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	1,862	8.3%	11.0%	37.6%	7.6%	10.4%	8.5%	Moderate	Moderate	Very Low	High
530630015003	Bemiss	City	100.0%	High	High	Low	High	923	4.1%	15.0%	13.8%	0.0%	9.1%	6.9%	High	Very Low	Very Low	High
530630015004	Logan, Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	809	0.0%	16.9%	25.1%	0.4%	9.1%	5.5%	High	Very Low	Low	Moderate
530630015005	Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	1,429	0.0%	13.2%	10.1%	9.3%	9.1%	4.5%	Moderate	Very Low	Low	Moderate
530630016001	Bemiss, Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	1,496	8.3%	6.7%	39.2%	6.8%	12.5%	8.7%	Very High	High	Moderate	Very High
530630018002	Bemiss, Logan	City	100.0%	High	Very High	Very Low	Very High	1,490	6.3%	14.4%	23.6%	0.0%	9.3%	0.9%	High	High	Moderate	High
530630019003	Emerson/Garfield	City	100.0%	Very High	Very High	Low	Very High	833	11.2%	13.8%	25.2%	0.0%	7.9%	0.0%	Moderate	High	Moderate	Moderate
530630020004	West Central	City	100.0%	Very High	Very High	Low	Very High	999	2.7%	18.3%	24.4%	0.0%	11.2%	1.9%	Moderate	Moderate	Very Low	High
530630020005	Emerson/Garfield	City	100.0%	Very High	High	Low	Very High	926	6.2%	10.5%	11.3%	4.2%	11.2%	7.0%	High	Moderate	Low	High
530630021001	Emerson/Garfield	City	100.0%	High	High	Low	High	943	12.5%	10.1%	7.7%	0.2%	8.6%	8.7%	High	Moderate	Moderate	Moderate
530630023001	West Central	City	100.0%	High	High	Low	High	1,097	0.0%	12.6%	44.2%	0.0%	8.7%	9.0%	Low	Very Low	Very Low	Very High
530630024001	Emerson/Garfield, Riverside, West Central	City	100.0%	Very High	Very High	Very Low	Very High	2,181	3.2%	13.4%	32.2%	0.4%	13.2%	7.8%	Moderate	Moderate	Very High	Very Low
530630024002	Emerson/Garfield	City	100.0%	Very High	Very High	Low	Very High	1,062	3.0%	26.2%	11.3%	4.7%	13.2%	13.3%	Moderate	High	Low	High
530630025011	Logan	City	100.0%	Very High	Very High	Very Low	Very High	796	6.2%	5.1%	50.0%	25.7%	11.0%	0.0%	High	Very Low	Very Low	High
530630025021	Logan	City	100.0%	High	High	Low	High	1,564	4.9%	9.2%	12.8%	0.6%	11.0%	2.7%	Moderate	Very Low	Moderate	Moderate
530630035002	Riverside	City	100.0%	High	Very High	Low	Very High	1,141	0.0%	27.4%	20.7%	0.0%	11.6%	13.0%	Low	Very High	Low	Very High
530630035003	Riverside	City	100.0%	Very High	Very High	Very Low	Very High	618	0.0%	19.1%	15.4%	0.0%	11.6%	0.0%	Low	Very High	Very High	Low
530630035004	Riverside	City	100.0%	Very High	Very High	Very Low	Very High	1,001	0.0%	7.5%	28.8%	0.8%	11.6%	49.4%	Moderate	Moderate	Very Low	Very High
530630036021	Browne's Addition, Riverside	City	100.0%	Very High	Very High	Very Low	Very High	578	3.1%	5.5%	15.9%	0.0%	7.5%	10.6%	Low	Very Low	Moderate	Very Low
530630111022	Shiloh Hills	City	100.0%	Very High	Very High	Low	Very High	1,413	6.6%	16.8%	8.3%	0.8%	9.3%	2.4%	High	Moderate	Very High	Low
530630111031	Shiloh Hills	City	100.0%	Very High	Very High	Very Low	Very High	1,508	3.0%	47.9%	19.7%	0.0%	11.1%	3.5%	High	Very High	Very High	High
530630111041	Shiloh Hills	City	100.0%	Very High	Very High	Very Low	Very High	778	0.0%	6.8%	60.4%	0.0%	11.1%	28.9%	High	Very Low	Very Low	Very High
530630111042	Shiloh Hills	City	100.0%	Very High	Very High	Low	Very High	1,584	1.8%	17.6%	14.9%	0.0%	11.1%	11.5%	High	High	High	Moderate
530630111043	Shiloh Hills	City	100.0%	Very High	Very High	Low	Very High	507	12.4%	17.8%	41.6%	0.0%	11.1%	23.6%	High	Very High	Low	Very High
530630112032	Shiloh Hills	City	100.0%	Very High	Very High	Low	Very High	1,560	3.2%	29.0%	30.1%	4.2%	9.7%	2.2%	High	Moderate	Very High	Low
530630112041	Shiloh Hills	City	100.0%	High	Very High	Low	Very High	1,613	3.3%	18.4%	13.2%	7.0%	9.7%	0.0%	Moderate	Low	High	Low
530630112042	Shiloh Hills	City	100.0%	High	Very High	Very Low	Very High	766	0.0%	45.1%	15.8%	2.3%	9.7%	6.4%	High	Very High	High	Moderate
530630144001	Hillyard	City	100.0%	Very High	Very High	Very Low	Very High	798	17.3%	13.8%	19.3%	2.0%	9.3%	4.2%	Very High	Very High	Low	Very High
530630145001	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very Low	Very High	673	6.4%	16.2%	44.6%	1.0%	13.7%	0.0%	High	Very High	Very Low	Very High
530630145002	East Central	City	100.0%	Very High	Very High	Very Low	Very High	1,959	1.1%	8.5%	16.8%	2.1%	13.7%	22.5%	Low	Low	Very High	Very Low
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very Low	Very High	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				

Choose Assessment Area (City only or Full UGA):

City Only

Select up to 3 Sub-Index variables of interest:

Select quantile scores (at least 1 for each variable):

Total Block Groups:

28

Total BG Population:

35,875 (15.4% of city)

City Population (OFM 2024): 233,000

Variable 1	Variable 2	Variable 3
E Urban Heat Island Mean	AC Access to Transit	AC Tree Canopy Coverage
Exposure	Adaptive Capacity	Adaptive Capacity
Very High	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Moderate	<input type="checkbox"/>	<input type="checkbox"/>
Low	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Very Low	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Areas with less access to centers and transit include the West Hills/Latah Valley area and West Plains near the airport. Many of the transit access areas have less tree canopy cover or shade structures, leaving transit riders exposed during extreme heat events.

Census Block Group	City Neighborhood	Study Area	Percent of Block Group in City	Exposure: E Urban Heat Island Mean	Adaptive Capacity: AC Access to Transit	Adaptive Capacity: AC Tree Canopy Coverage	Combined Risk	Total Population (OFM 2024)	Demographic Context						Exposure Index	Sensitivity Index	Adaptive Capacity Index	Vulnerability Index
									Population Under 5	Population Over 65	Percent BIPOC	Linguistic Isolation	No Health Insurance	Unemployment				
530630002011	Hillyard	City	100.0%	High	High	Very Low	High	2,322	5.2%	16.2%	22.6%	3.5%	13.4%	4.7%	High	Very High	Low	Very High
530630002022	Hillyard	City	100.0%	High	High	Low	High	1,019	17.5%	8.8%	22.7%	1.3%	13.4%	11.3%	Very High	Very High	Low	Very High
530630004001	Nevada Heights	City	100.0%	High	Very High	Very Low	Moderate	1,446	12.7%	10.3%	31.7%	0.0%	10.9%	10.3%	Moderate	Very High	Moderate	High
530630004003	Nevada Heights	City	100.0%	Very High	Very High	Very Low	Moderate	1,258	2.7%	13.2%	29.1%	8.3%	10.9%	13.7%	High	Low	Very High	Low
530630014001	Nevada Heights	City	100.0%	High	Very High	Very Low	Moderate	1,679	3.5%	11.5%	19.4%	0.0%	10.4%	8.6%	Moderate	Low	Very Low	Moderate
530630014002	Logan, Nevada Heights	City	100.0%	Very High	High	Very Low	Very High	1,698	8.5%	3.7%	27.2%	0.0%	10.4%	6.4%	Moderate	Low	Moderate	Moderate
530630014003	Logan, Nevada Heights	City	100.0%	Very High	High	Very Low	Very High	1,392	6.2%	18.5%	30.3%	2.0%	10.4%	13.2%	High	Moderate	Very Low	Very High
530630014004	Nevada Heights	City	100.0%	Very High	High	Very Low	Very High	1,862	8.3%	11.0%	37.6%	7.6%	10.4%	8.5%	Moderate	Moderate	Very Low	High
530630015004	Logan, Nevada Heights	City	100.0%	Very High	Very High	Very Low	Very High	809	0.0%	16.9%	25.1%	0.4%	9.1%	5.5%	High	Very Low	Low	Moderate
530630015005	Nevada Heights	City	100.0%	Very High	High	Very Low	Very High	1,429	0.0%	13.2%	10.1%	9.3%	9.1%	4.5%	Moderate	Very Low	Low	Moderate
530630016001	Bemiss, Hillyard	City	100.0%	Very High	Very High	Very Low	High	1,496	8.3%	6.7%	39.2%	6.8%	12.5%	8.7%	Very High	High	Moderate	Very High
530630019003	Emerson/Garfield	City	100.0%	Very High	Very High	Low	Moderate	833	11.2%	13.8%	25.2%	0.0%	7.9%	0.0%	Moderate	High	Moderate	Moderate
530630020004	West Central	City	100.0%	Very High	High	Low	Very High	999	2.7%	18.3%	24.4%	0.0%	11.2%	1.9%	Moderate	Moderate	Very Low	High
530630020005	Emerson/Garfield	City	100.0%	Very High	High	Low	Very High	926	6.2%	10.5%	11.3%	4.2%	11.2%	7.0%	High	Moderate	Low	High
530630021001	Emerson/Garfield	City	100.0%	High	High	Low	High	943	12.5%	10.1%	7.7%	0.2%	8.6%	8.7%	High	Moderate	Moderate	Moderate
530630024001	Emerson/Garfield, Riverside, West Central	City	100.0%	Very High	Very High	Very Low	Very Low	2,181	3.2%	13.4%	32.2%	0.4%	13.2%	7.8%	Moderate	Moderate	Very High	Very Low
530630024002	Emerson/Garfield	City	100.0%	Very High	Very High	Low	High	1,062	3.0%	26.2%	11.3%	4.7%	13.2%	13.3%	Moderate	High	Low	High
530630025021	Logan	City	100.0%	High	Very High	Low	Moderate	1,564	4.9%	9.2%	12.8%	0.6%	11.0%	2.7%	Moderate	Very Low	Moderate	Moderate
530630035002	Riverside	City	100.0%	High	High	Low	High	1,141	0.0%	27.4%	20.7%	0.0%	11.6%	13.0%	Low	Very High	Low	Very High
530630035003	Riverside	City	100.0%	Very High	Very High	Very Low	Low	618	0.0%	19.1%	15.4%	0.0%	11.6%	0.0%	Low	Very High	Very High	Low
530630036021	Browne's Addition, Riverside	City	100.0%	Very High	High	Very Low	Very High	578	3.1%	5.5%	15.9%	0.0%	7.5%	10.6%	Low	Very Low	Moderate	Very Low
530630111022	Shiloh Hills	City	100.0%	Very High	Very High	Low	Moderate	1,413	6.6%	16.8%	8.3%	0.8%	9.3%	2.4%	High	Moderate	Very High	Low
530630111031	Shiloh Hills	City	100.0%	Very High	Very High	Very Low	Very High	1,508	3.0%	47.9%	19.7%	0.0%	11.1%	3.5%	High	Very High	Very High	High
530630112041	Shiloh Hills	City	100.0%	High	High	Low	High	1,613	3.3%	18.4%	13.2%	7.0%	9.7%	0.0%	Moderate	Low	High	Low
530630137001	West Hills	City	76.6%	Very High	Very High	Very Low	Moderate	926	4.1%	6.2%	28.4%	0.0%	8.1%	0.0%	Very Low	Very Low	Very High	Very Low
530630145001	Chief Garry Park, East Central	City	100.0%	Very High	High	Very Low	Very High	673	6.4%	16.2%	44.6%	1.0%	13.7%	0.0%	High	Very High	Very Low	Very High
530630145002	East Central	City	100.0%	Very High	Very High	Very Low	Very Low	1,959	1.1%	8.5%	16.8%	2.1%	13.7%	22.5%	Low	Low	Very High	Very Low
530630145003	Chief Garry Park, East Central	City	100.0%	Very High	Very High	Very Low	Very Low	530	5.6%	4.3%	21.5%	1.9%	13.7%	11.3%	High	Moderate	Very High	Moderate
Average									4.8%	16.9%	19.7%	1.4%	8.2%	6.7%				