Using data to prioritize RSJI communities for place-based City investments

Panel of presentations from OPCD, SDOT and SPU for the Seattle Planning Commission

March 27, 2025 Full Commission Meeting

Seattle
Office of Planning &
Community Development

Today's panel of presentations

Refresher & Update from OPCD on the Racial & Social Equity (RSE) Index

- Diana Canzoneri, Strategic Advisor and City Demographer, she/her
- Phillip Carnell, Planning & Equity Data Analyst, they/them

How SDOT and SPU are Using the RSE Index to Prioritize Equity in Place-based Planning and Investments:

SDOT: Seattle Transportation Plan - Transportation Equity Framework - Transportation Levy

- Jonathan Lewis, Transportation Planning Manager
- Serena Lehman, Manager Project and Portfolio Management Team

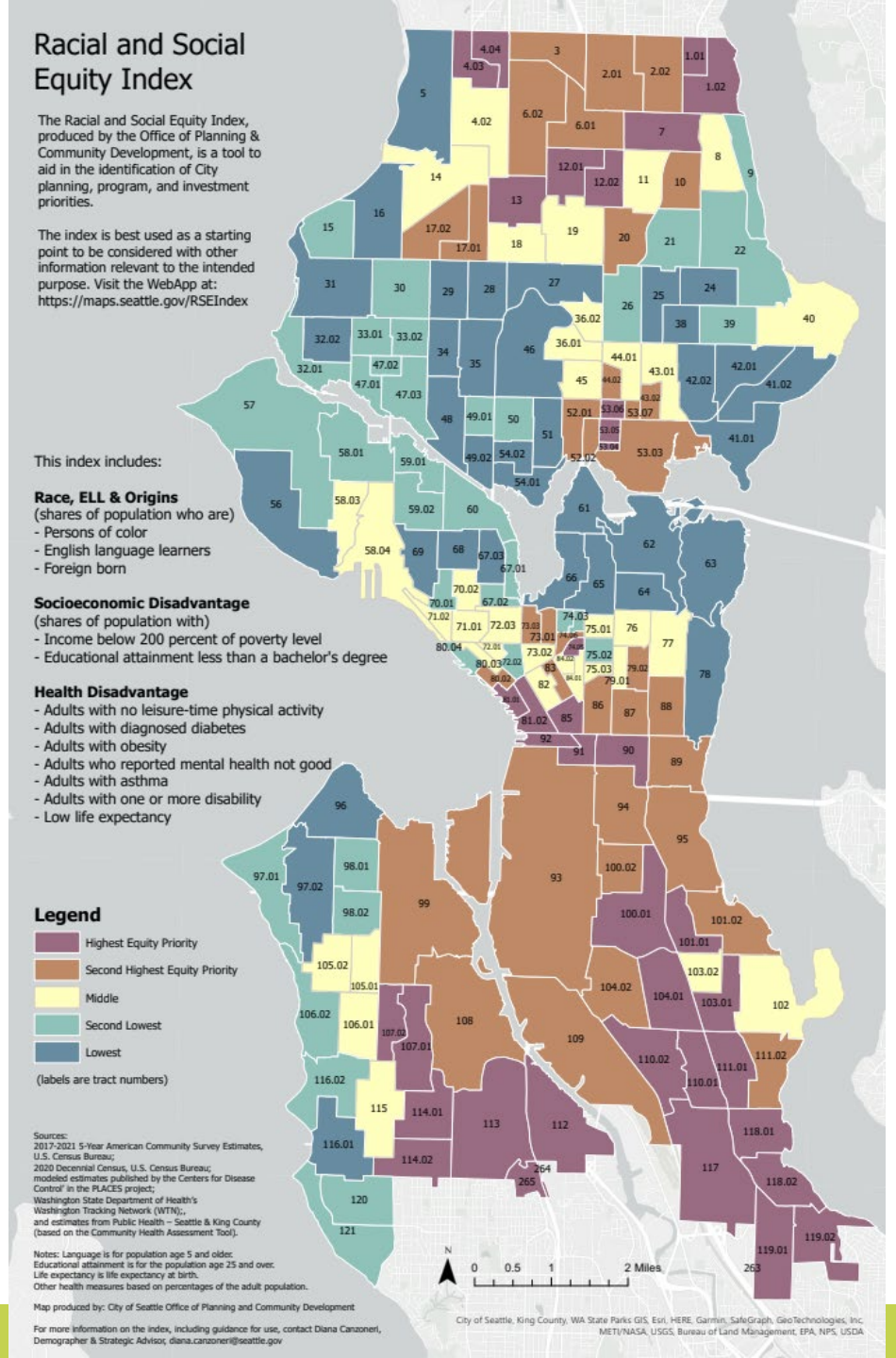
SPU: Drainage & Wastewater Planning & Implementation - Shape our Water

- Leslie Webster, Drainage & Wastewater Planning Manager

The Racial & Social Equity (RSE) Index

Purpose of the Racial & Social Equity (RSE) Index

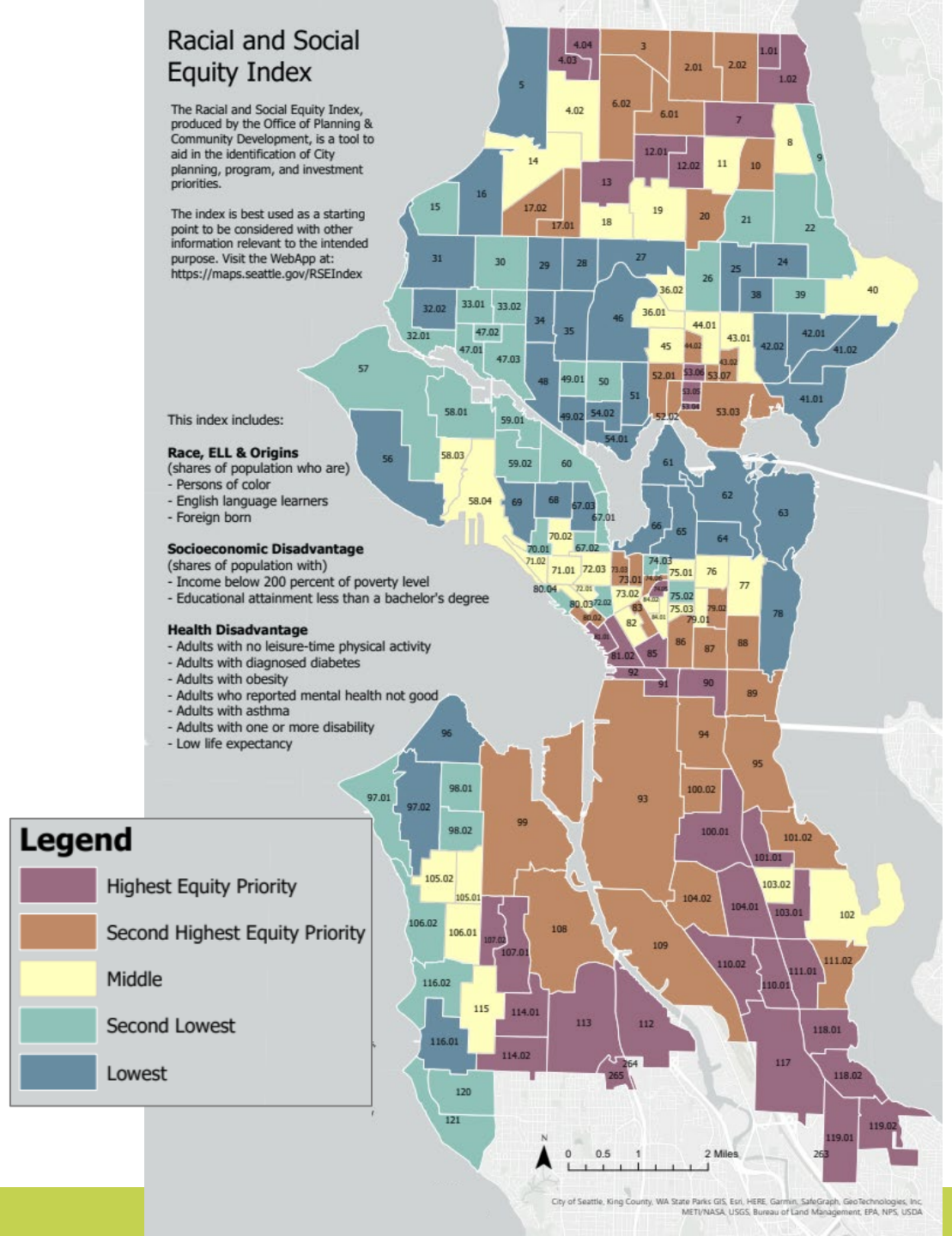
- First developed by the OPCD in 2017 with interdepartmental consultation
- Provides departments w/common set of data identifying *where RSJI priority populations make up a relatively large shares of neighborhood residents*
- Tool for informing design, prioritization, and evaluation of programs, plans, and investments
- Most recent update released in 2023
- Tool in new City-wide “One Seattle Data Strategy”



Makeup of the RSE Index

Composite index of three sub-indices:

- **Race, ELL, & Origins Index**
  - Persons of color
  - English language learners (ELL)
  - Foreign born
- **Socioeconomic Disadvantage Index**
  - Income below 200 percent of poverty
  - Educational attainment less than a bachelor's degree
- **Health Disadvantage & Disability Index**
  - Low life expectancy at birth
  - Adults w/no leisure-time physical activity
  - Adults with diagnosed diabetes
  - Adults with obesity
  - Adults reporting their mental health is not good
  - Adults with asthma
  - Adults with one or more disabilities



Considerations for Departments & Organizations Using the RSE Index

- The RSE index is **intended as a *starting point*** along with:
  - **additional data** relevant to the purpose at hand
  - **community voices and input**
- The RSE index shows **characteristics and conditions**—not absolute numbers—of residents; consider viewing population density alongside.

See the RSE Index Users' Guide for more information.

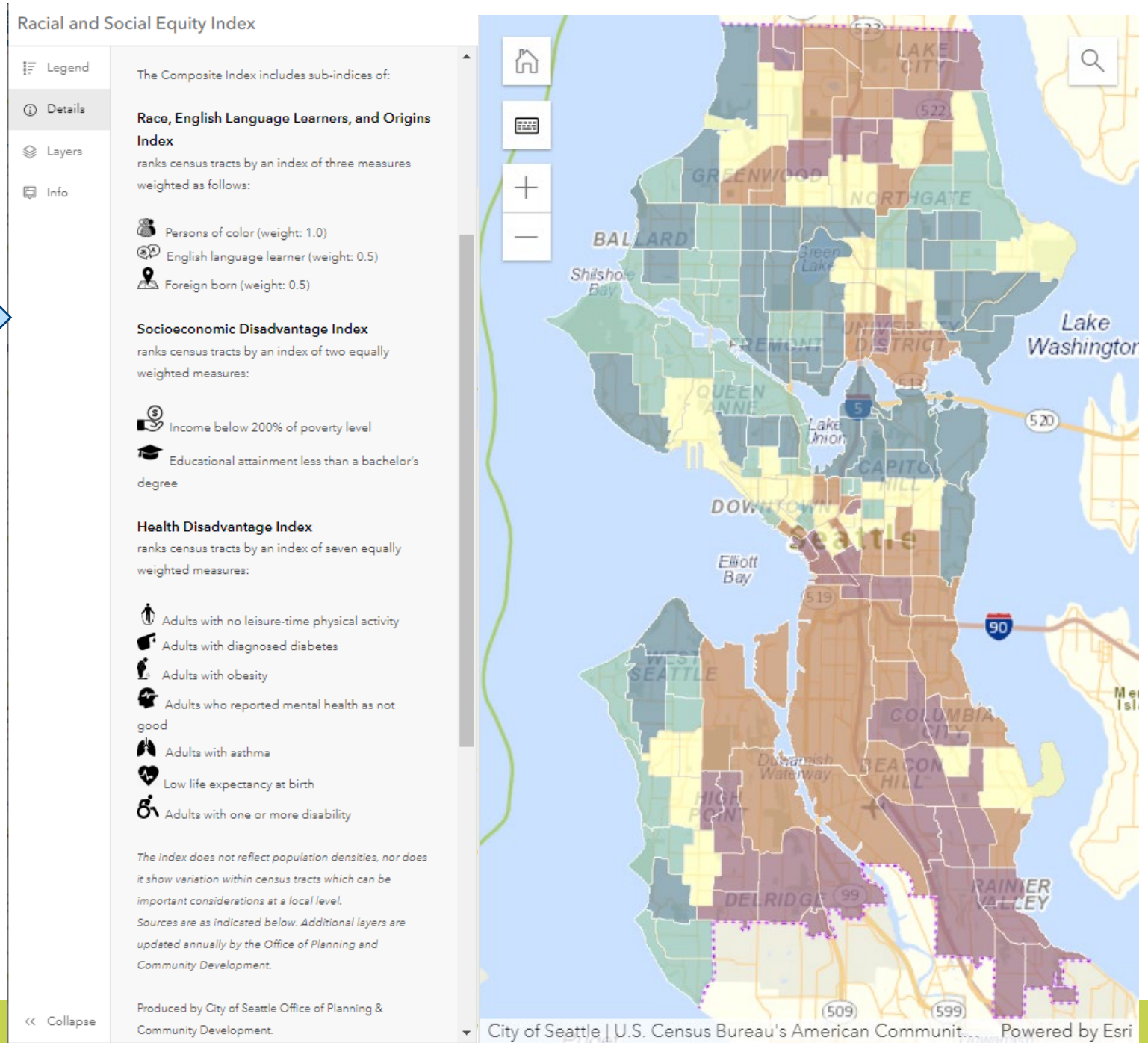
Considerations (continued)

- **There can be variation within, and not just across, census tracts.**
- **Neighborhood level data is limited for some RSJI populations**, including **persons experiencing homelessness** and **LGBTQ persons**; pair the index with programmatic and community-based knowledge.
- **Persons in RSJI priority populations also live outside RSE Priority Areas**; consider how place-based strategies can be complemented with programs that provide services to people regardless of whether they live.

See the RSE Index Users' Guide for more information.

Resources for Accessing and Using the RSE Index: WebApp

- Interactive mapping app available online
- Printable map
- Users' Guide with:
  - info for getting started
  - details on the index and considerations for its use
  - examples of how departments are applying the index
- Dataset and map feature layer available to public on ArcGIS Online, Seattle GeoData (Open Data)



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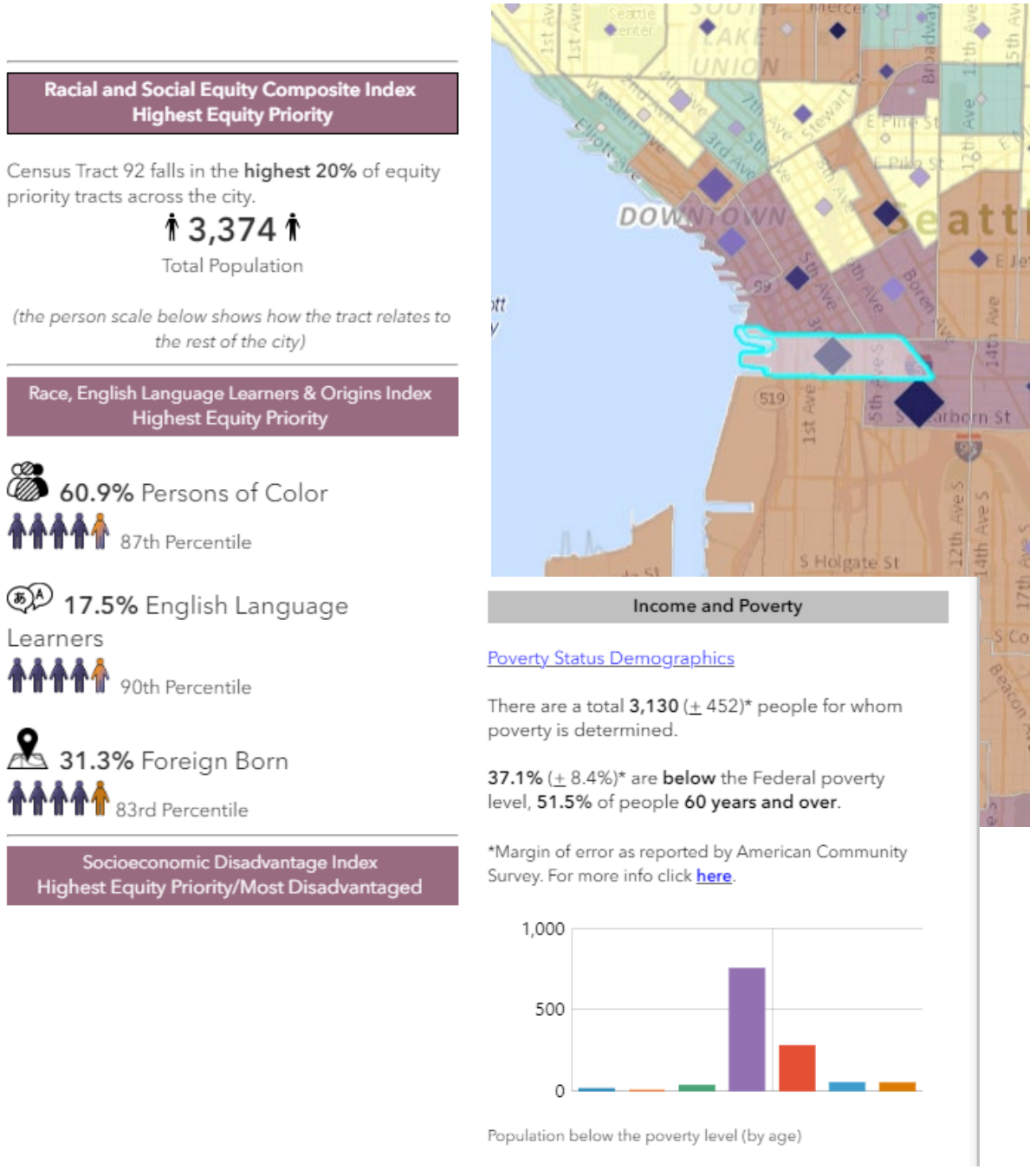


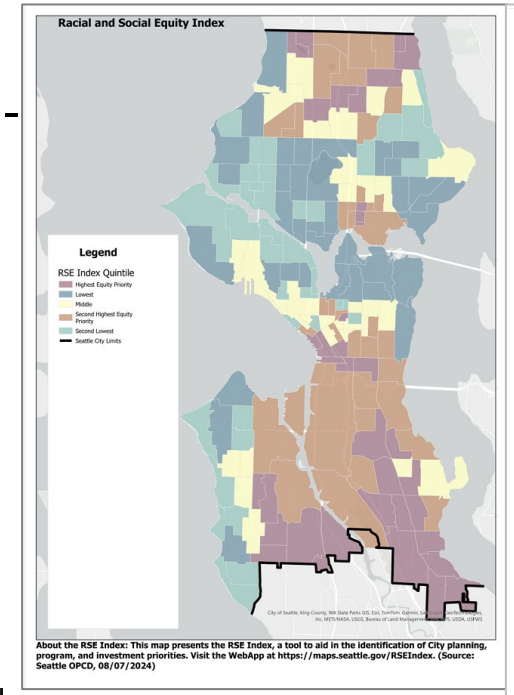
OPCD Activity to support RSE Index adoption

- Department support
  - Introducing the RSE Index to beginning users,
  - acting as a thought partner for ongoing users
- Ongoing updates (while supporting users)
- Exploration of a block-group version, extended version to County for service areas outside City limits
- Support for outside organizations and students

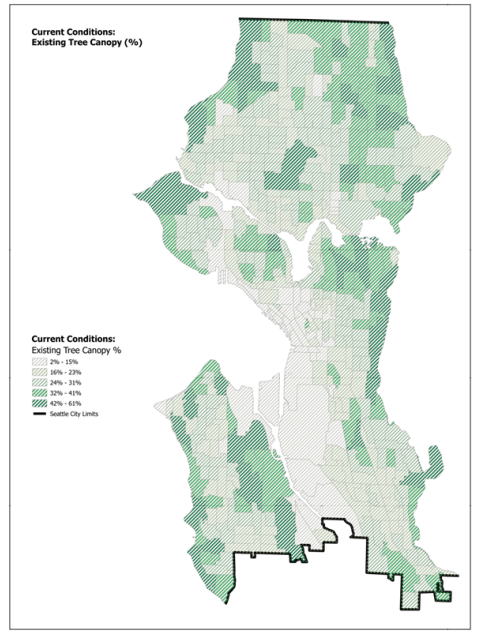
OPCD Activity to support RSE Index adoption

2024 RSJI Summit session "Using Data to Prioritize RSJI Communities for Place-Based City Investments:"

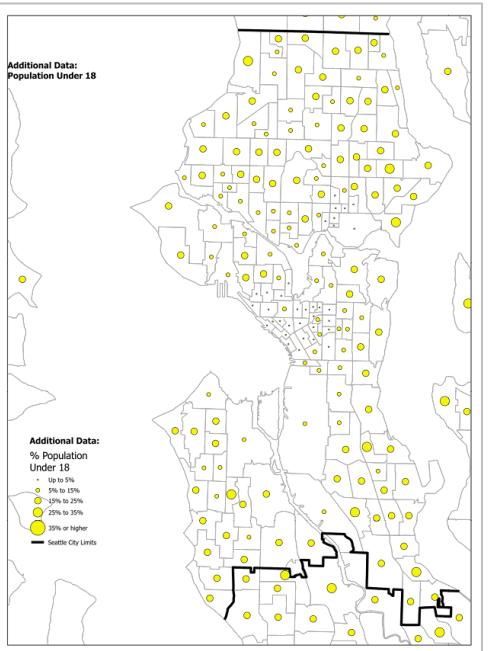
- Introduction
- Use cases by departments
- Mapping mini-workshop



About the RSE Index: This map presents the RSE Index, a tool to aid in the identification of City planning, program, and investment priorities. Visit the WebApp at https://maps.seattle.gov/RSEIndex. (Source: Seattle OPCD, 08/07/2024)



About these Current Conditions: This layer shows the percentage of area with tree coverage in block groups across Seattle as of 2021. This dataset was created as part of the City of Seattle 2021 Tree Canopy Assessment. (Source: City of Seattle OSE, 08/09/2024)



About this Additional Data: This layer shows the percent population under 18 by 2020 census tract boundaries. This layer contains the most currently released American Community Survey (ACS) 5-year data from 2022. (Sources: OPCD, U.S. Census Bureau, 08/09/2024).

Workshop Steps:

1. Overlay the RSE Index with Current Conditions
2. Add additional datasets
3. Discussion questions for report out

Discussion questions:

1. **What information is especially useful for examining along with the RSE Index to identify where to prioritize investment for your table's topic?**
2. **How would you know you were successful in advancing equity with this investment?**

SDOT

Jonathan Lewis, Transportation Planning Manager

Serena Lehman, Manager, Portfolio and Asset Management

Transportation Equity Framework

Decision-Making, Transparency and Accountability

#5 - Data: Coordinate data assessment and transparent data sharing among transportation agencies to ensure that BIPOC and vulnerable communities are not disproportionately burdened and that informed decisions related to revenue spending, are made to positively benefit communities.

Seattle Transportation Plan (STP) Goals

Safety

Prioritize safety for travelers in Seattle, with no serious injury or fatal crashes

Equity

Co-create with community and implement restorative practices to address transportation-related inequities

Sustainability

Respond to climate change through innovation and a lens of climate justice

Mobility & Economic Vitality

Provide reliable and affordable travel options that help people and goods get where they need to go

Livability

Reimagine city streets as inviting places to linger and play

Maintenance & Modernization

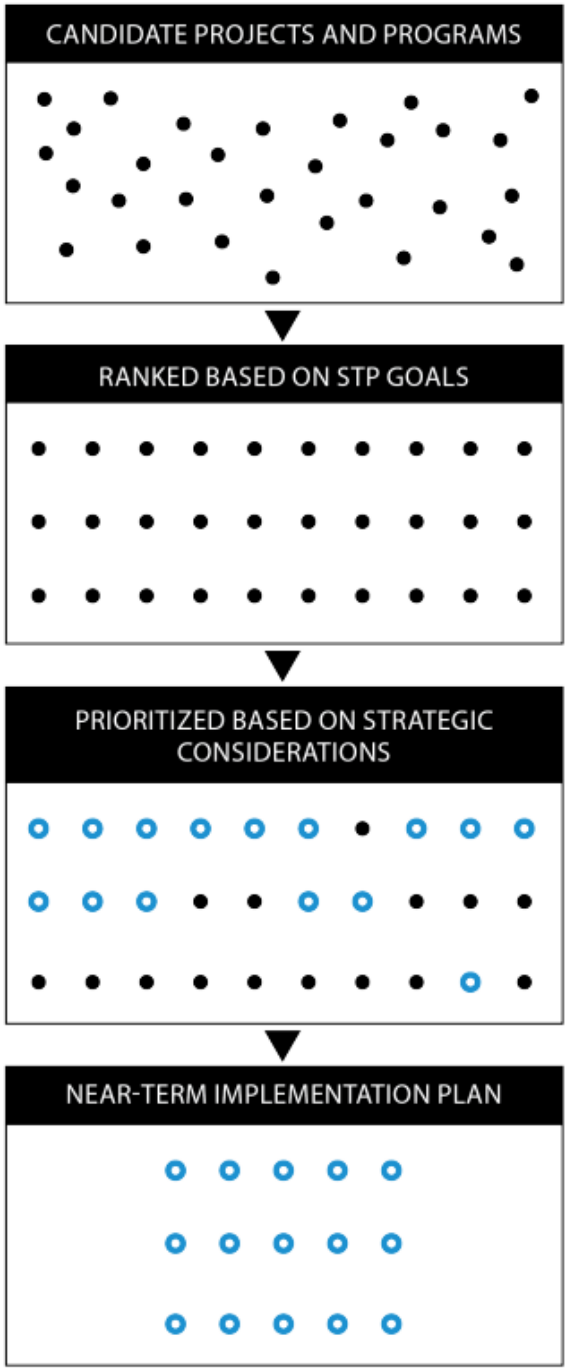
Improve city transportation infrastructure and ready it for the future

Seattle Transportation Plan: Performance Measures

Table 1: Tier 1 Performance Measures

Performance Measure (Source)	Baseline (year)	Desired Trend	Target	Track Measure by RSEI and/or race	Related STP Goals
Number of traffic-related deaths (Seattle Police Department (SPD) Collision reports)	30 fatalities (2022)	Towards zero	Zero traffic-related fatalities by 2030	Yes	Safety Equity Sustainability Livability
Number of traffic-related serious injuries (SPD Collision reports)	226 Serious injuries (2022)	Towards zero	Zero traffic-related serious injuries by 2030	Yes	Safety Equity Sustainability Livability
Greenhouse gas emissions from vehicle trips	2.169 mtCO2e (estimated, 2018)	Towards zero	Net-zero by 2050	No	Safety Equity Sustainability Livability

Seattle Transportation Plan: Prioritization Framework



STP Part 1, Pages 1-108 and 1-109

Transportation Investments

We make many investments!

Largest single source of funding: transportation levies

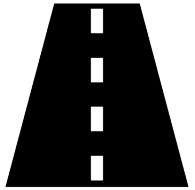
- Bridging the Gap: $365M over 9 years (2006-2014)
- Levy to Move Seattle: $930M over 9 years (2015-2024)
- 2024 Transportation Levy: $1.55B over 8 years (2025-2032)

These investments have a big impact (mostly positive)—it's important to be equitable

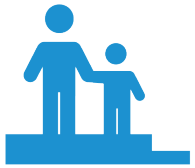
Community mobility, access to opportunity, safety, air quality, health outcomes, economy and affordability, livability

Types of investments funded by transportation levies:


Bridges


Paving


Signals


Sidewalks


Curb Ramps


Crosswalks

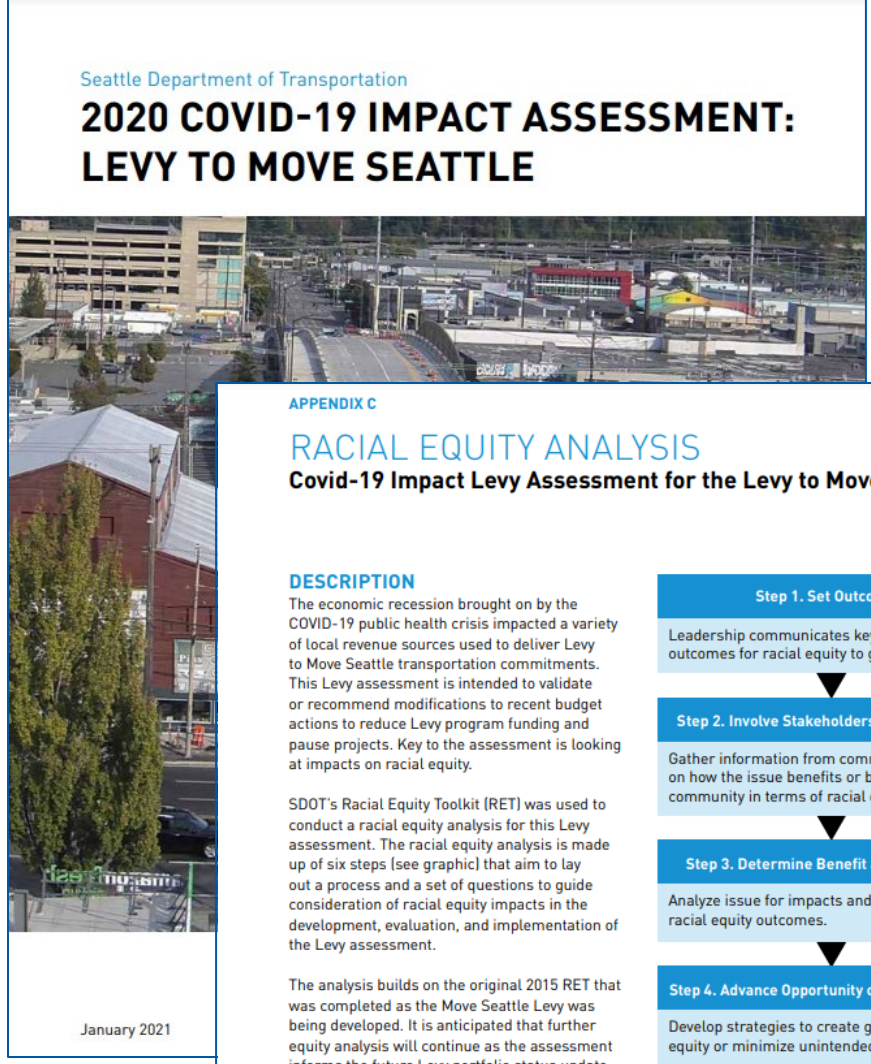
Levy Equity Workplan

Origin: 2020 COVID Impact Assessment - Racial Equity Analysis

Goal: Improve the equitable distribution of Levy investments

Ensuring improvements are prioritized in areas of greatest need/historical disinvestment, not just equal distribution citywide

2024 Levy Proposal: "We aim to distribute our levy investments equitably, with reference to Seattle's Racial and Social Equity Index, our Transportation Equity Framework, and the Seattle Transportation Plan."



Seattle Department of Transportation

2020 COVID-19 IMPACT ASSESSMENT: LEVY TO MOVE SEATTLE

January 2021

APPENDIX C

RACIAL EQUITY ANALYSIS

Covid-19 Impact Levy Assessment for the Levy to Move Seattle

DESCRIPTION

The economic recession brought on by the COVID-19 public health crisis impacted a variety of local revenue sources used to deliver Levy to Move Seattle transportation commitments. This Levy assessment is intended to validate or recommend modifications to recent budget actions to reduce Levy program funding and pause projects. Key to the assessment is looking at impacts on racial equity.

SDOT's Racial Equity Toolkit (RET) was used to conduct a racial equity analysis for this Levy assessment. The racial equity analysis is made up of six steps (see graphic) that aim to lay out a process and a set of questions to guide consideration of racial equity impacts in the development, evaluation, and implementation of the Levy assessment.

The analysis builds on the original 2015 RET that was completed as the Move Seattle Levy was being developed. It is anticipated that further equity analysis will continue as the assessment informs the future Levy portfolio status update, anticipated in 2Q 2021. This may result in a revision to this analysis or a new analysis being completed for the status update.

STEP 1. SET OUTCOMES

One of SDOT's overall goals is to partner with our communities to build a racially equitable and socially just transportation system. Specific to the COVID-19 Impact Levy Assessment, the Levy Oversight Committee (established by ordinance) recommended that we focus investments in areas we historically have underserved to better address racial inequities. At the same time, they also identified needs to address safety, climate change, and reduced car dependence

Step 1. Set Outcomes

Leadership communicates key community outcomes for racial equity to guide analysis.

Step 2. Involve Stakeholders + Analyze Data

Gather information from community and staff on how the issue benefits or burdens the community in terms of racial equity.

Step 3. Determine Benefit and/or Burden

Analyze issue for impacts and alignment with racial equity outcomes.

Step 4. Advance Opportunity or Minimize Harm

Develop strategies to create greater racial equity or minimize unintended consequences.

Step 5. Evaluate. Raise Racial Awareness. Be Accountable.

Track impacts on communities of color over time. Continue to communicate with and involve stakeholders. Document unresolved issues.

Step 6. Report Back

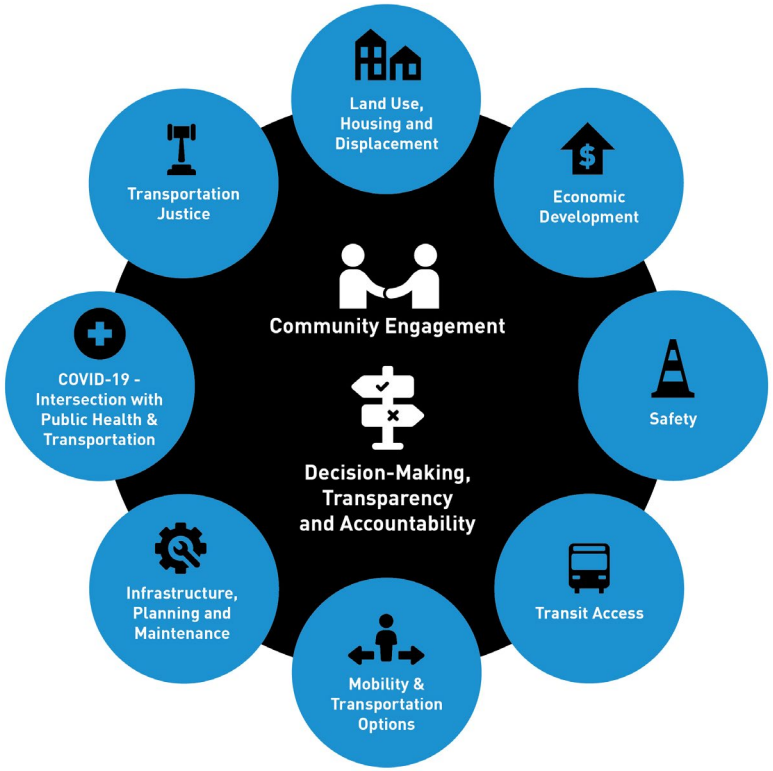
Share information learned from analysis and unresolved issue with Department Leadership and Change Team.

Transportation Equity Framework (TEF) Tactics Advanced through Levy Equity Workplan

- Develop SDOT work plans that equitably allocate resources for capital projects and maintenance efforts in communities hit hardest by COVID.
  (8.2 - COVID-19 Intersection with Public Health & Transportation)

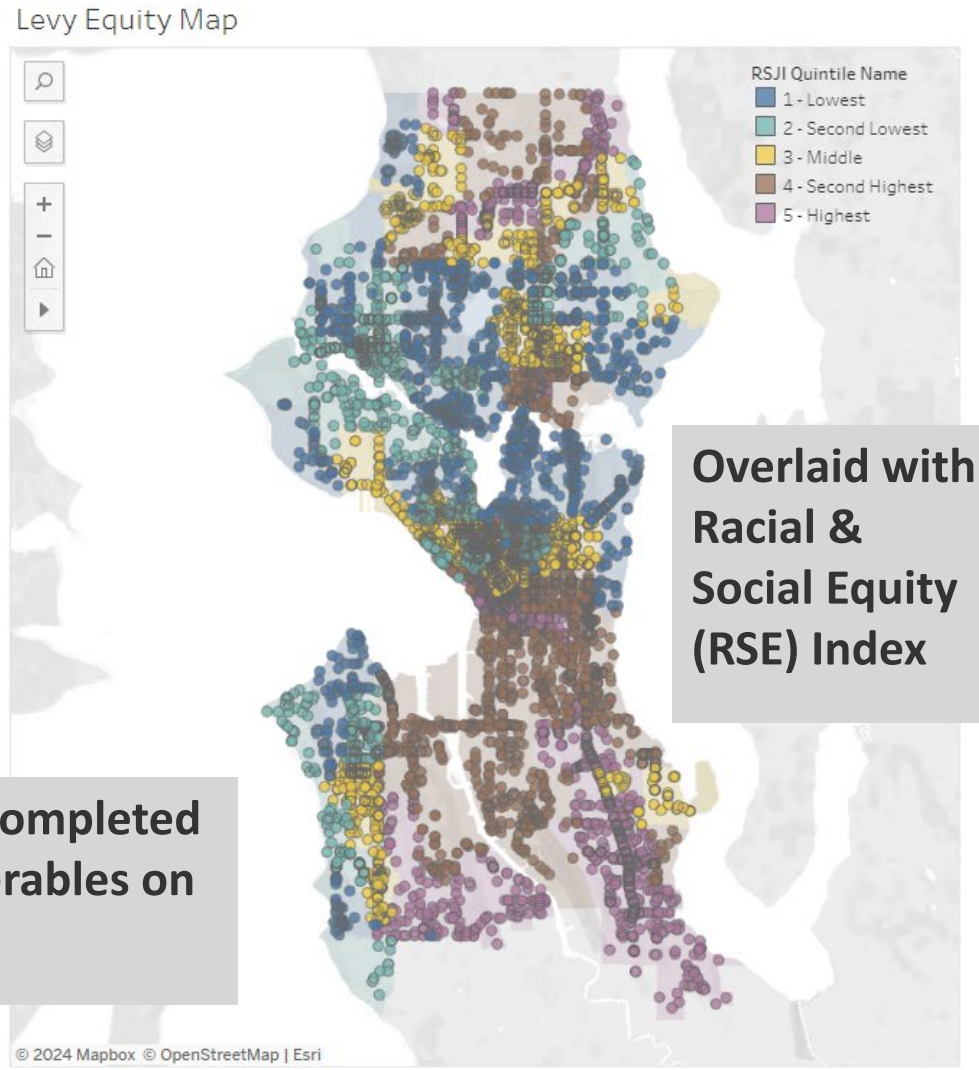
- Focus maintenance resources in communities and neighborhoods currently underserved by government that have significant maintenance needs; use findings from the racial equity assessment.
  (19.4 - Infrastructure, Planning, and Maintenance)

- Add equity-related data layers into all SDOT-produced web maps and ensure that staff are trained and use this as part of their research, decision-making, project outline, etc.
  (20.2 - Infrastructure, Planning, and Maintenance)



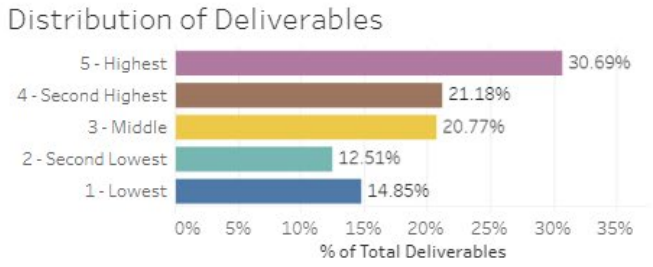
Levy Equity Dashboard - 2024

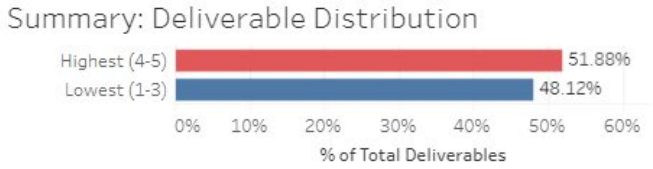
Summarizes distribution of deliverables by equity priority area

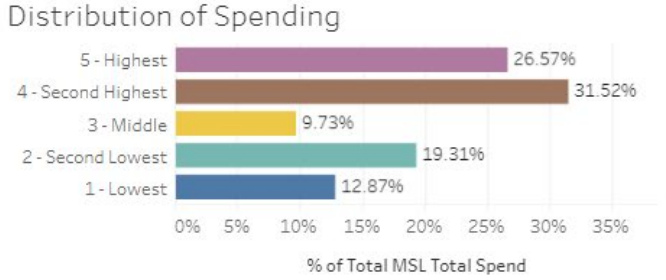


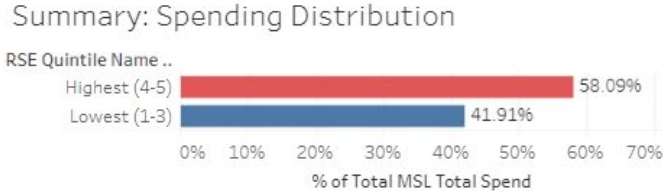
Overlaid with Racial & Social Equity (RSE) Index

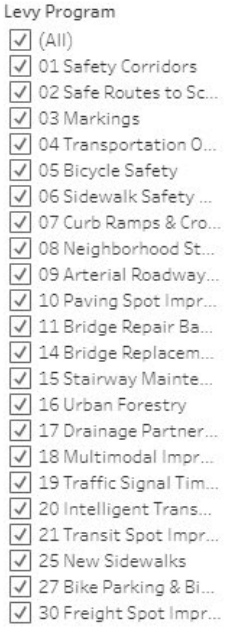
Shows all completed Levy deliverables on one map

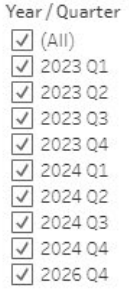












Filter by Levy program and quarter/year

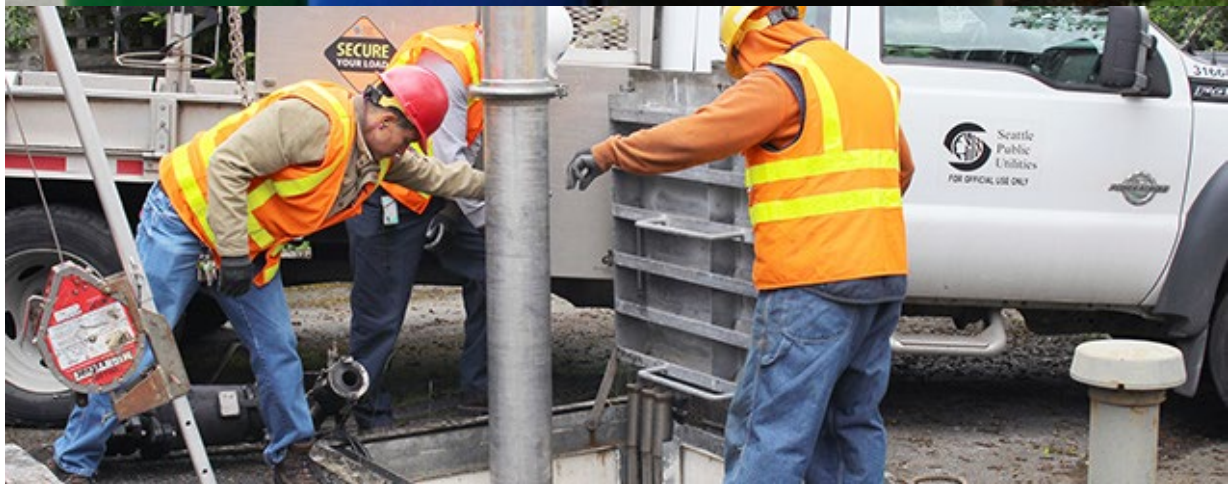
Seattle Department of Transportation

SPU

Leslie Webster, Drainage & Wastewater Planning Manager

Seattle Public Utilities

- We provide drinking water to residents and businesses in Seattle and supply wholesale water to the greater Seattle region.
- We manage sewer, drainage, and waste collection services for residents and businesses in Seattle.

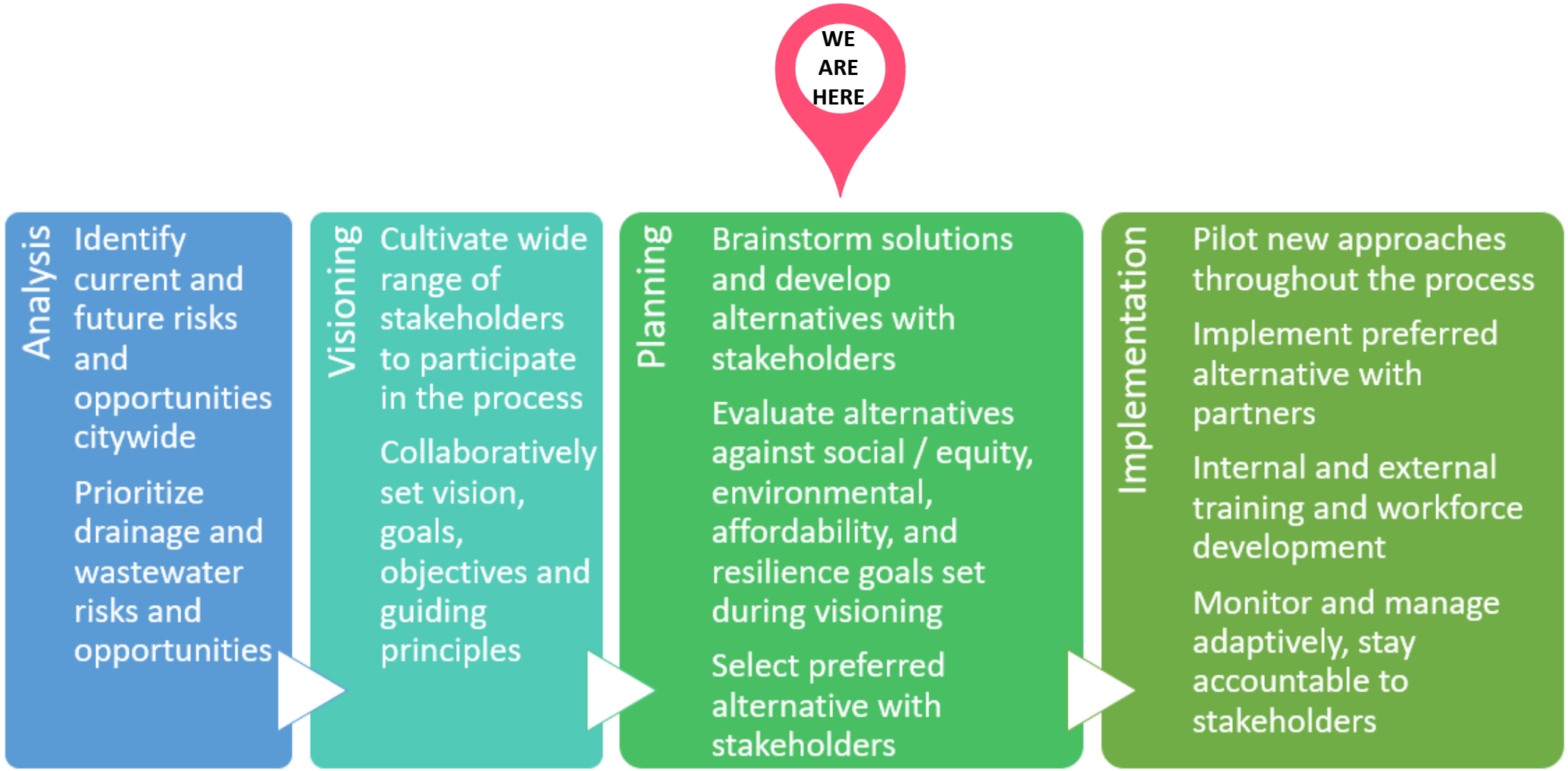


Drainage and Wastewater Core Services

- Maintain and improve systems to provide reliable service
- Reduce pollutants in stormwater with system improvements and maintenance
- Help homes and businesses reduce sources of pollution
- Prevent and respond to sewer backups and overflows
- Prevent and respond to flooding
- Monitor systems to identify any potential problems
- Meet federal, state, and local water quality standards
- Prioritize system improvements in communities that need investments the most

What is Shape Our Water?

Shape Our Water Planning Stages



Analysis Stage

ANALYSIS THEMES

- TOO MUCH, TOO FAST
- WATER QUALITY & AQUATIC HEALTH
- SYSTEM STEWARDSHIP
- SHOCKS AND STRESSES
- SYSTEM DEVELOPMENT

- Largely completed from 2018-2022

Equity in Analysis

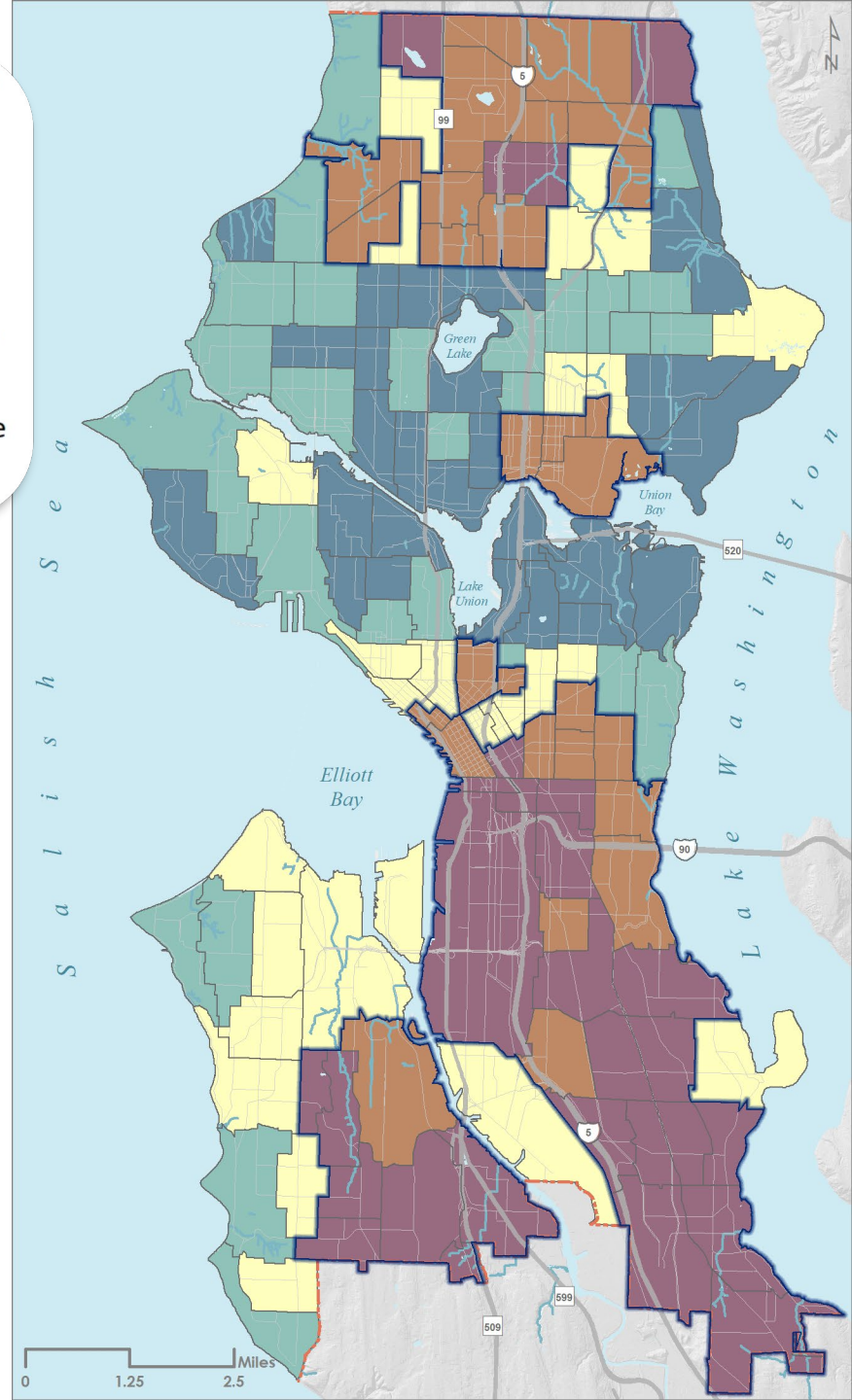
A complaint-based approach is inequitable. Instead, we:

- Used models to identify risks citywide
- Focused outreach to ID problems in equity priority areas
- Incorporated racial and social equity into our prioritization process

So that we can…

…give a voice to historically underrepresented communities, and ultimately

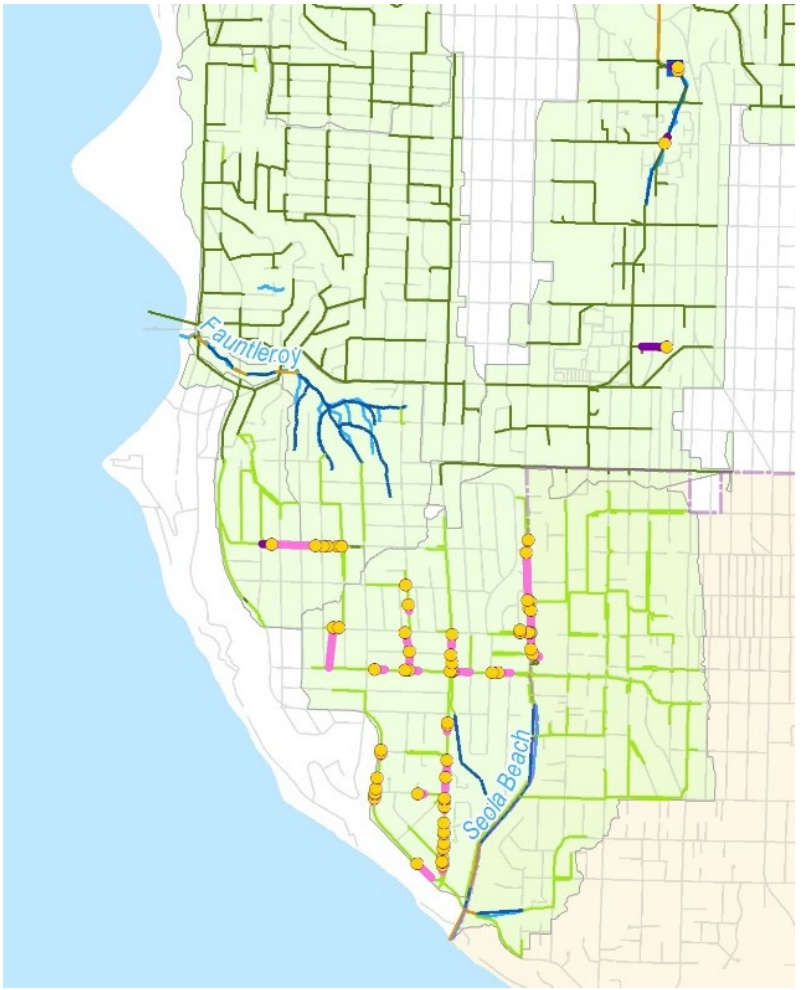
…distribute SPU investment more equitably




Where do we have flooding in the drainage system?
Which of those locations should we prioritize for projects?
Seattle Public Utilities
City of Seattle

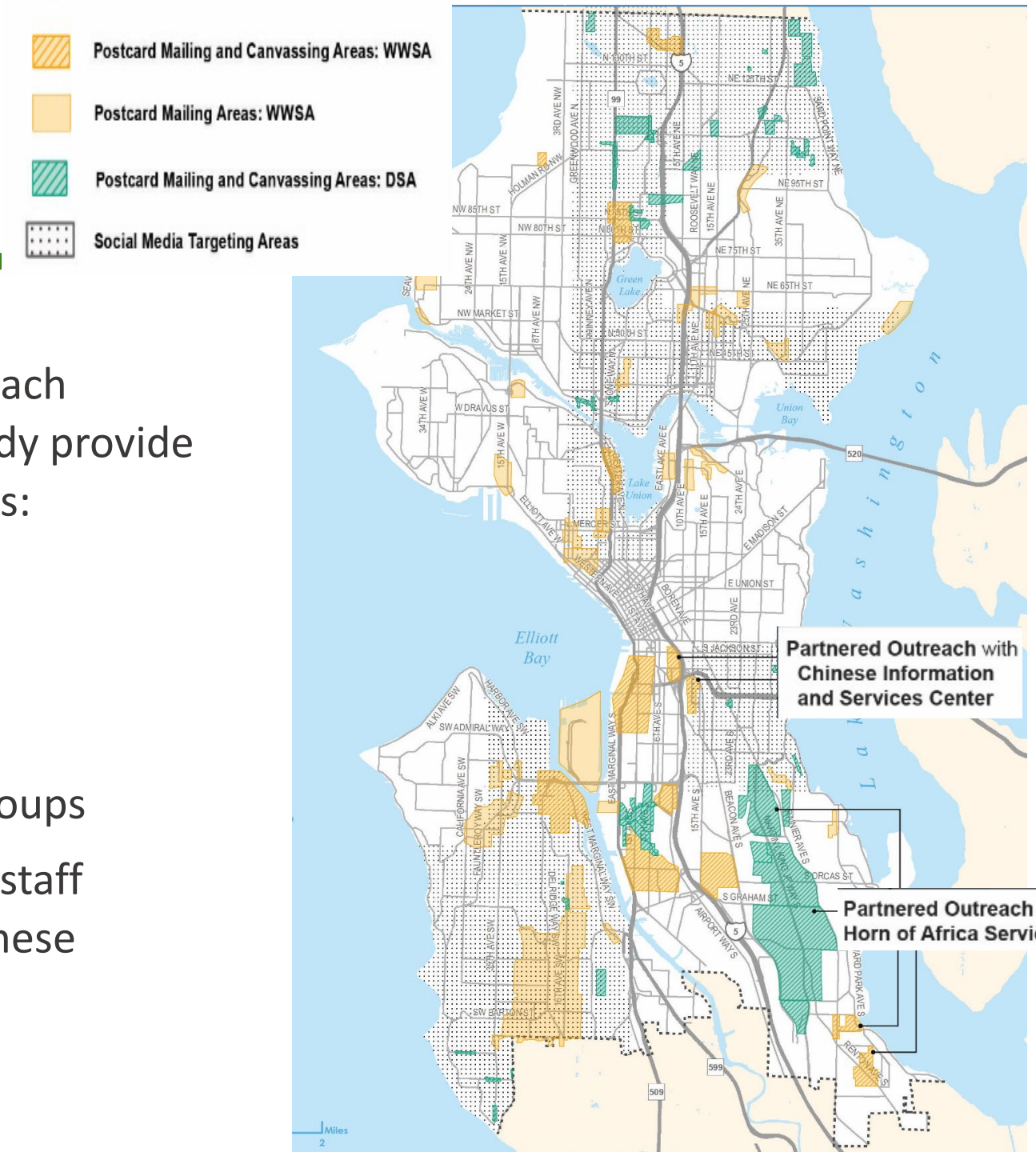
Using models to identify risks

Reported flooding inventory was supplemented with the results of modeling simulations



Focused outreach

- Direct door-to-door outreach by outreach community partners where they already provide services and have existing relationships:
- Postcard mailings
- Door-to-door canvassing
- Targeted social media advertising
- Outreach to business and industrial groups
- In-person outreach was conducted by staff fluent in Spanish, Korean, and Vietnamese



Results: Updated Flooding Inventory

Data Sources	Flooding Risk Areas
Outreach	74
Outreach + Simulated	18
Outreach + Reported	7
Outreach + Reported + Simulated	4
Simulated	272
Simulated + Reported	18
Reported	54

Equity in prioritization

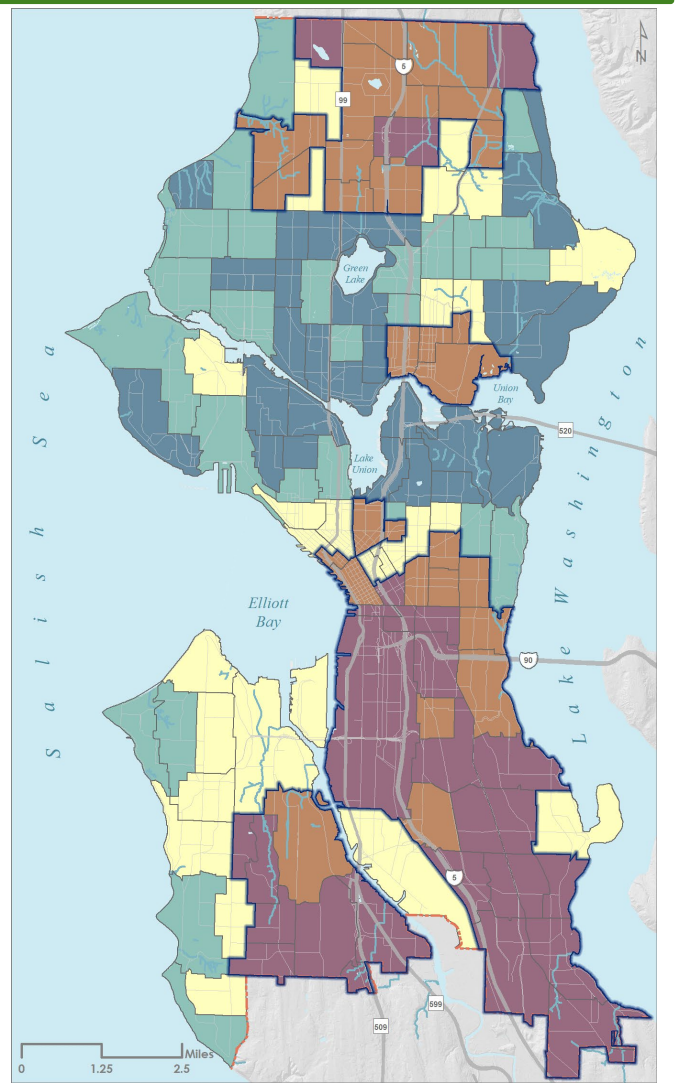
Risk score = (Sum of consequences * frequency) + **equity**

Consequence																				Frequency		Equity	
Type of property impact	**Score**	**Number of properties impacted**	**Score**	**Access to Property**	**Score**	**Type of roadway ROW impact**	**Score**	**Number of Street Areas in the ROW Impacted**	**Score**	**Flooding Location: Critical Facility**	**Score**	**Flooding Location: Street Type**	**Score**	**Flooding Location: Bicycle Route**	**Score**	**Flooding Location: High-Use Area**	**Score**	**Future Impact**	**Score**	**Flooding Frequency**	**Score**	**Equity**	**Score**
Living or commercial space(s)	0.85	More than 5	0.55	Access impacted	0.15	Full travel lane	0.85	More than 2	0.7	Critical facility impacted	0.6	Arterial	0.6	City-identified bicycle route impacted	0.3	High-use area impact	0.3	Large difference from existing conditions	0.1	4+ times a year	5	High disadvantage and priority	5
Crawlspaces, cars, garages, retaining walls, etc.	0.5	2-4	0.5			Partial travel lane	0.75	2	0.5											1-3 times a year, up to the 2-year event	5	Med-high	4
Driveways, yards, or parking areas	0.25	1	0.25			Non-travel lane	0.25	1	0.25											@ the 2-year+ event	5	Med	3
																				@ the 5-year+ event	4	Med-low	2
																				@ the 10-year+ event	3	Low	1
																				@ the 25-year+ event	2		
																				@ the 50-year+ event	1		

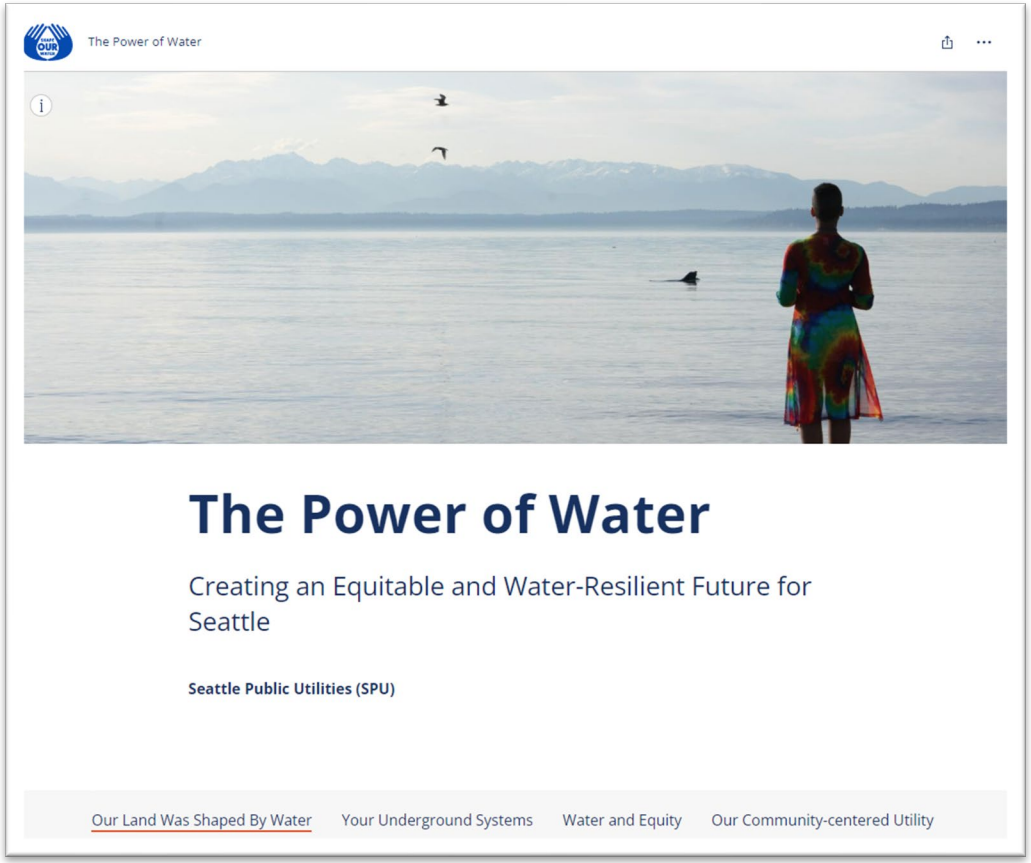
Similar approach, different challenges

In addition to prioritization of flooding, RSE index was also used to prioritize:

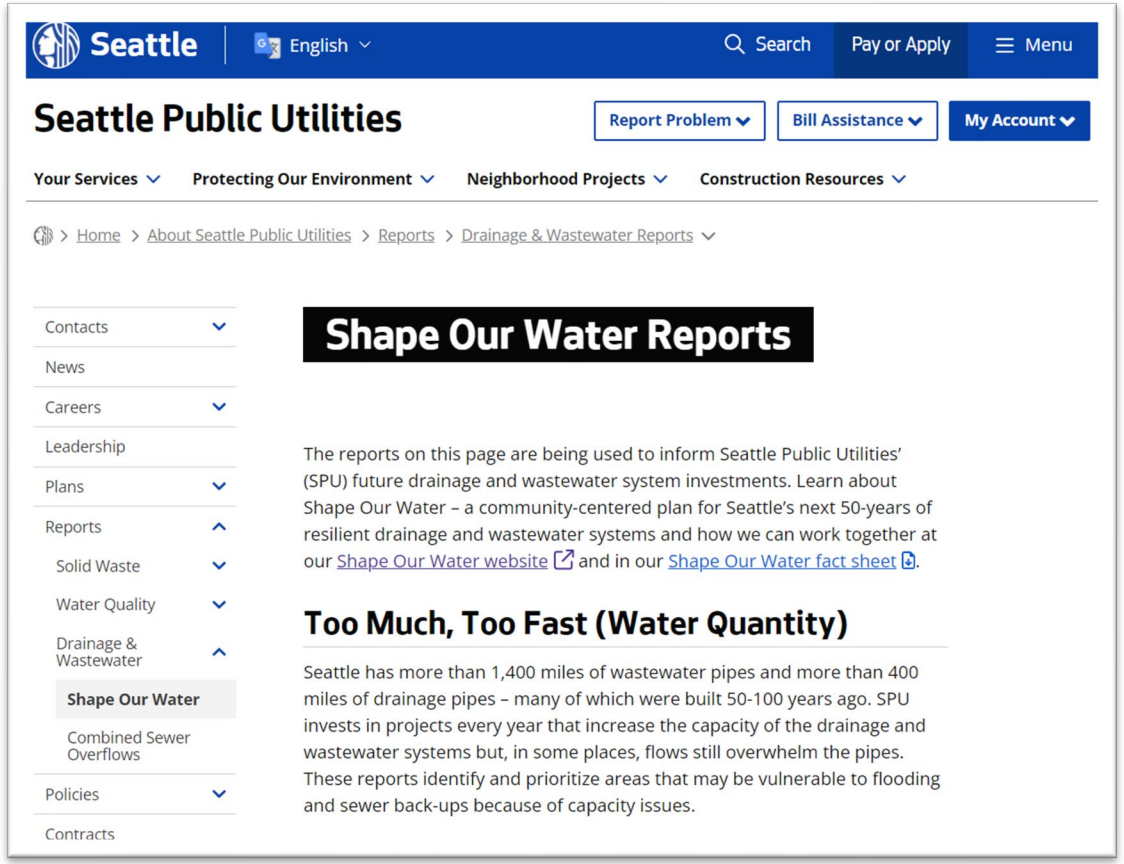
- sewer overflows
- creek flooding
- extreme storm flooding
- sea level rise flooding
- wastewater system condition (rehab)
- drainage system condition (rehab)
- wastewater system seismic risk
- drainage system seismic risk



Where to learn more…



www.ShapeOurWater.org/StoryMap



www.seattle.gov/utilities/about/reports/drainage-and-wastewater/shape-our-water-reports

Racial and Social Equity

Although redlining was outlawed in 1968 by the Fair Housing Act, the racist structures from the past continue to impact Seattle residents. The areas of the city with the highest disadvantage today largely overlap with areas that were redlined in the past.

This shows Seattle's **Racial and Social Equity Composite Index** and outlines areas of highest disadvantage in blue. This Index combines **Socioeconomic Disadvantage; Race, English Language Learners, and Origins;** and **Health Disadvantage** information.

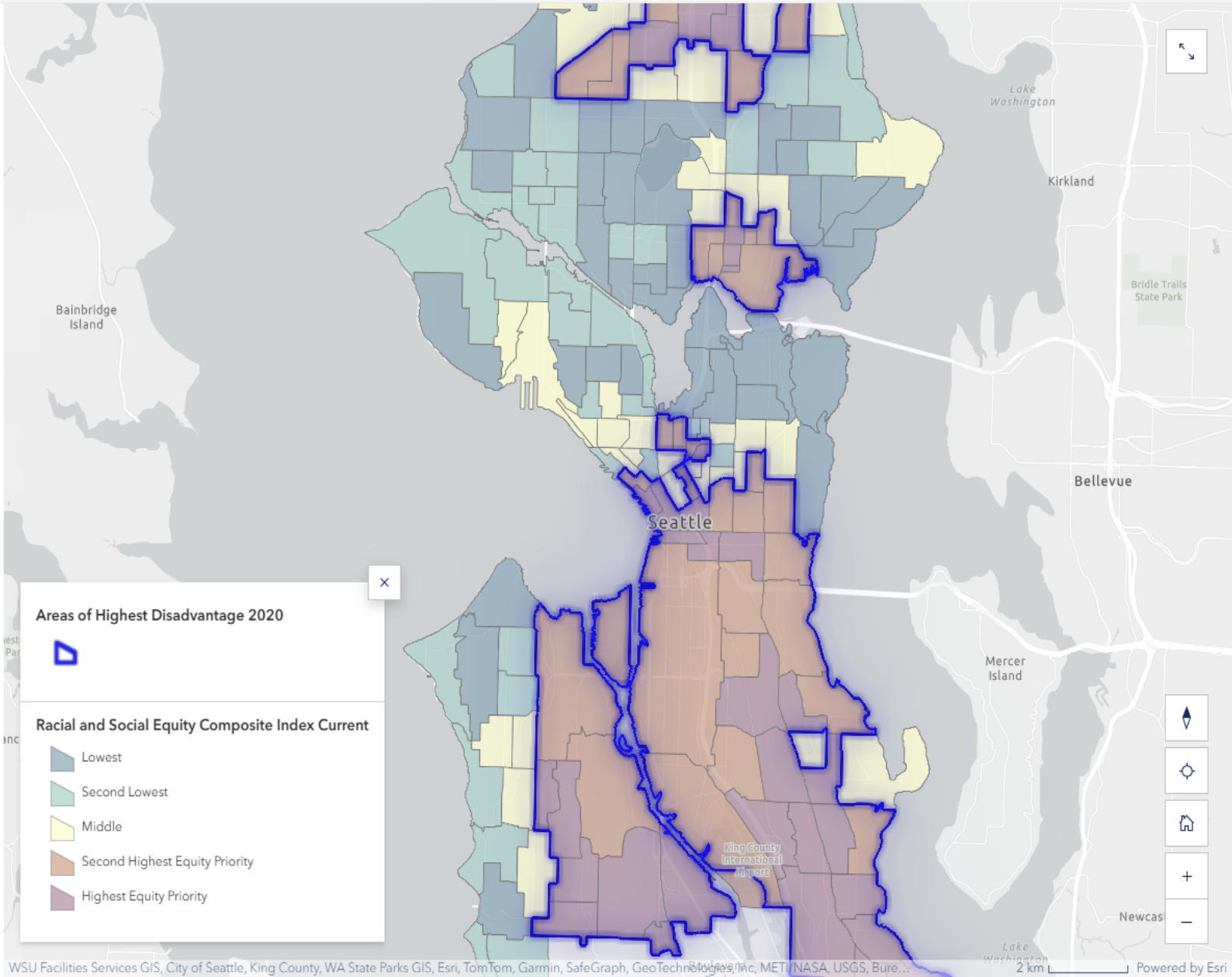
Socioeconomic Disadvantage: Includes income below 200 percent of the poverty level and educational attainment less than a bachelor's degree.

See Socioeconomic Disadvantage

Race, English Language Learners, and Origins: Includes Persons of color, English language learners, and foreign born.

See Race, Language, and Origins

Health Disadvantage: Includes physical activity, diagnosed diabetes, obesity, mental health, asthma, life expectancy at birth, and disability



sewer overflows.

See Combined Sewer Overflow Risk

The initial view shows the Combined Sewer Overflow risk, which shows basins that exceed the CSO performance standard of no more than one overflow per outfall per year over a twenty-year moving average.

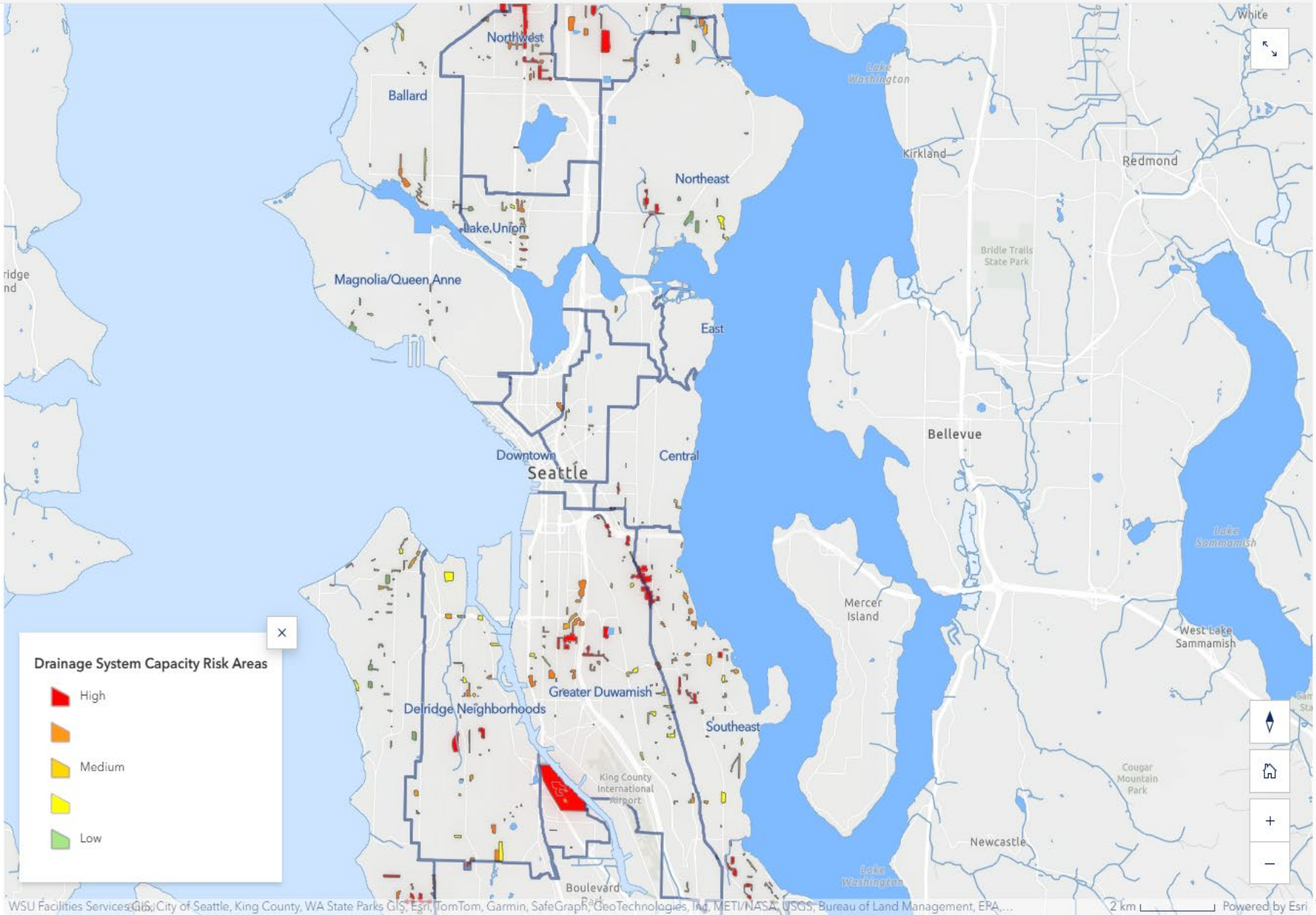
See Drainage System Flooding Risk

These are areas at risk of flooding because large storms could overwhelm the drainage pipes.

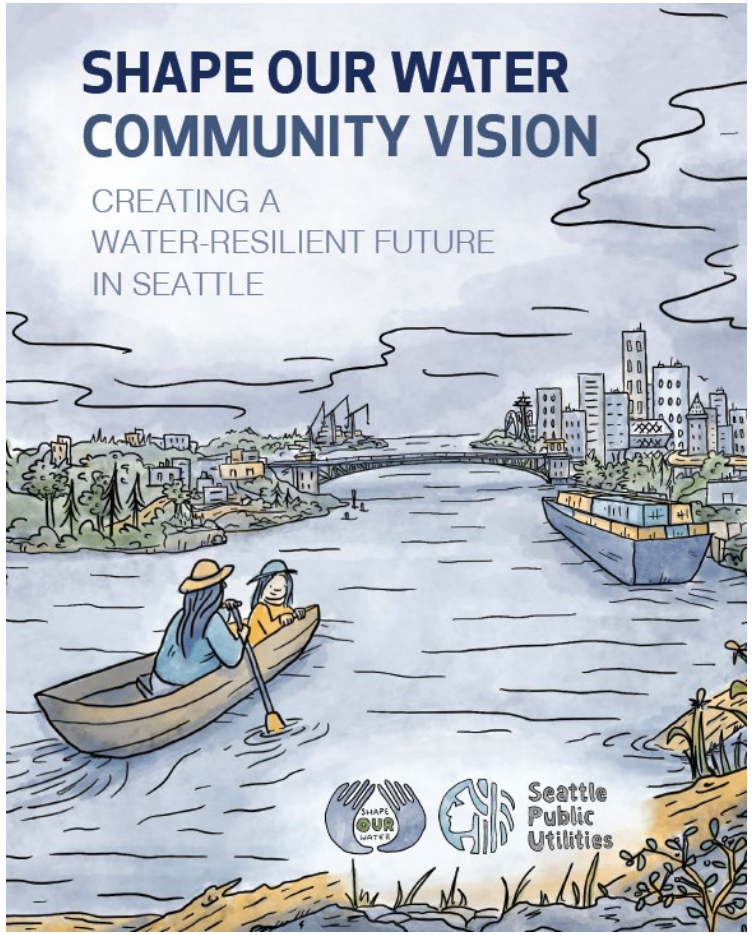
See Wastewater System Capacity Risk

These are areas at risk of sewer back-ups or overflows because large storms could overwhelm the wastewater pipes.

Learn more about the analysis that was performed for Shape Our Water **here**. These maps were created using models and are intended to inform citywide, long-range planning. They should not be used to make site-specific or development-related decisions.



Community Vision



www.shapeourwater.org/community-vision

SHAPE OUR WATER GOALS

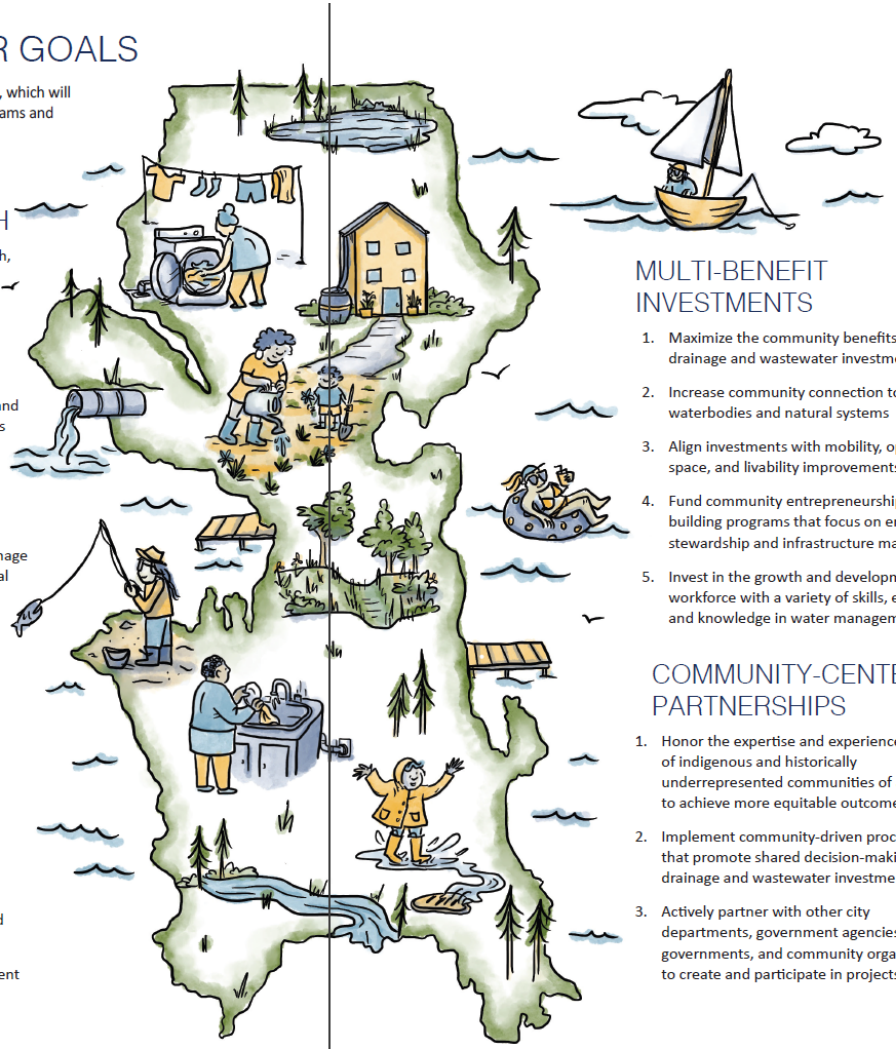
Community feedback inspired the following goals, which will guide SPU's next 50 years of transformative programs and investments in water infrastructure.

COMMUNITY AND ENVIRONMENTAL HEALTH

1. Protect water quality, improve aquatic health, and solve problems at the source to benefit all life that relies on our local waterbodies
2. Reduce impacts from flooding and sewer backups - especially in neighborhoods that have experienced historic disinvestment
3. Provide accessible and affordable drainage and wastewater services to community members regardless of economic or housing status
4. Treat all water as an essential resource and ensure it is managed in a sustainable and integrated way
5. Broaden the public health outcomes of drainage and wastewater investments to include social and environmental health considerations

RESILIENCE

1. Invest in drainage and wastewater infrastructure that can adapt to future environmental challenges and build system resiliency - especially in areas most vulnerable to environmental hazards
2. Maintain and adaptively manage Seattle's existing drainage and wastewater systems and resources to continuously provide essential public services
3. Increase Seattle's seismic and climate preparedness by aligning future projects and programs with city and regional partners
4. Support sustainable land use and development that improves urban water management



MULTI-BENEFIT INVESTMENTS

1. Maximize the community benefits of drainage and wastewater investments
2. Increase community connection to our waterbodies and natural systems
3. Align investments with mobility, open space, and livability improvements
4. Fund community entrepreneurship and wealth building programs that focus on environmental stewardship and infrastructure management
5. Invest in the growth and development of a local workforce with a variety of skills, experiences, and knowledge in water management

COMMUNITY-CENTERED PARTNERSHIPS

1. Honor the expertise and experiences of indigenous and historically underrepresented communities of all ages to achieve more equitable outcomes
2. Implement community-driven processes that promote shared decision-making in drainage and wastewater investments
3. Actively partner with other city departments, government agencies, tribal governments, and community organizations to create and participate in projects

What's Next?


SHAPE OUR WATER PLANNING STEPS
Brainstorm solutions
Identify potential solutions for our current and future challenges
Develop alternatives
Group solutions into distinct program, policy, and project alternatives
Evaluate alternatives
Evaluate and compare alternatives relative to the Shape Our Water goals
Preferred alternative
Combine the highest value solutions into a single, preferred alternative
Implementation plan
Create a plan for short-term (6 years) and long-term (50 years) actions

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