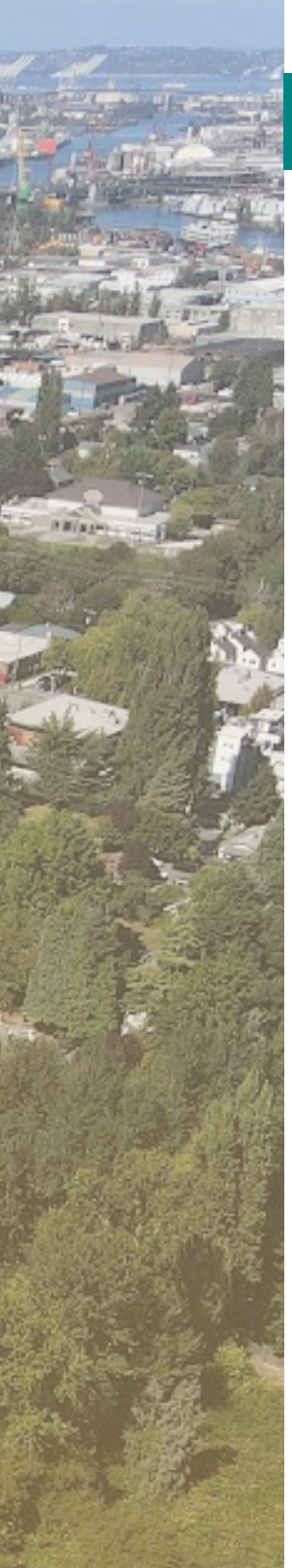
RECONNECT SOUTH PARK

Potential Futures Analysis Report

Seattle
Office of Planning &
Community Development

June 2026



Contents

The Reconnect South Park Potential Futures Analysis evaluates four approaches to reimagining and modernizing the SR 99 corridor between S Holden Street and Tukwila International Boulevard. The study was conducted by the City of Seattle and a technical consultant team in partnership with the community-based Reconnect South Park Coalition. The goals and measures used in this analysis were based on community-defined priorities and extensive Coalition-led engagement. *The Potential Futures Analysis Report presents a summary of the work to date, with additional analysis details and citations in the Potential Futures Analysis Technical Documentation.*

EXECUTIVE SUMMARY

Context

South Park is one of Seattle's most close-knit neighborhoods, known for its strong community leadership, small businesses, and environmental stewardship. Yet it also faces some of the region's highest cumulative environmental and health impacts.

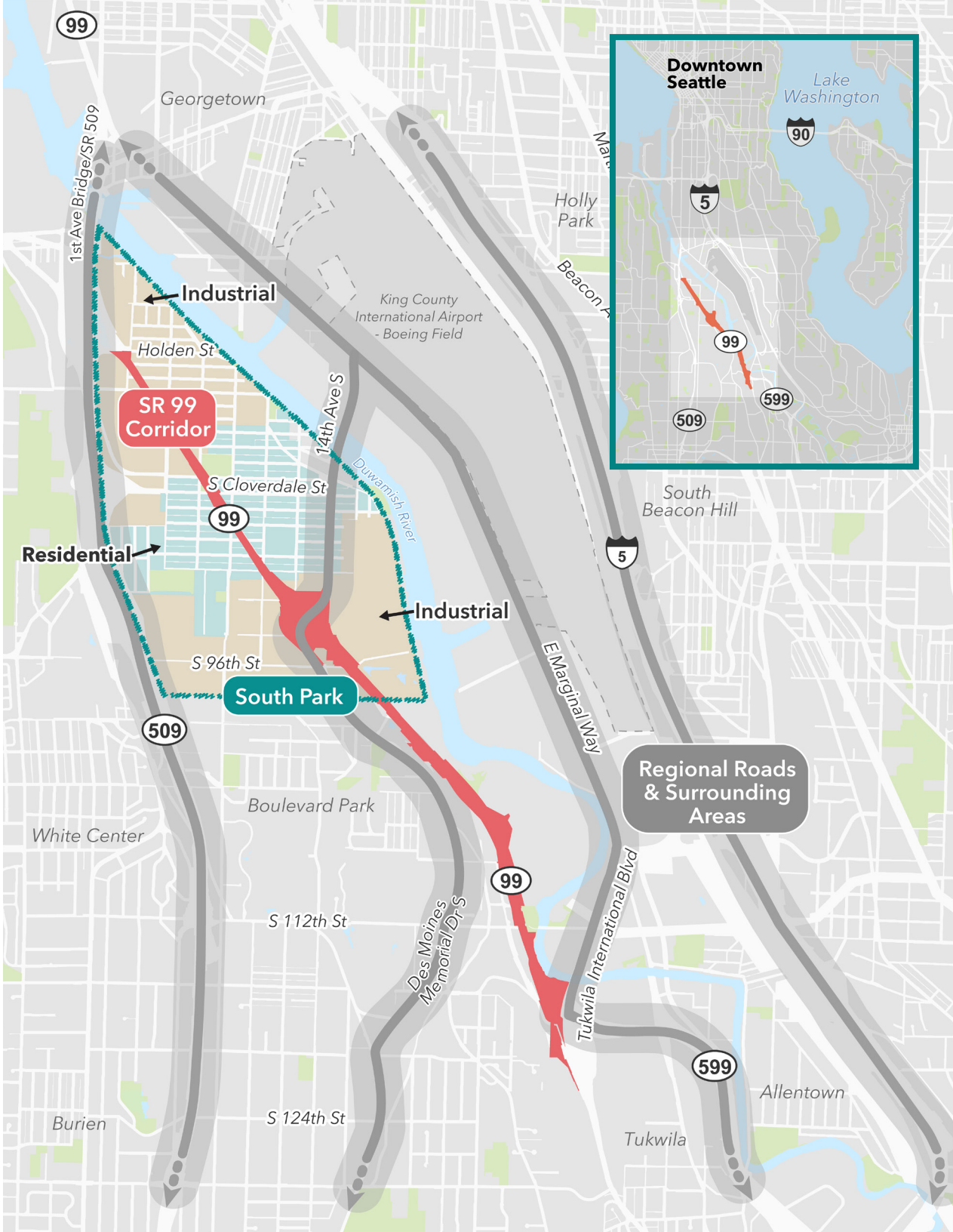
In 2021, residents began leading an effort to reimagine the SR 99 corridor through their neighborhood to support health, opportunity, and long-term well-being.

Built in the 1950s and 60s, SR 99 cuts diagonally through the community grid, creating 22 dead ends and concentrating traffic, noise, and diesel pollution beside homes, schools, and community spaces. These impacts contribute to South Park ranking in the 99th percentile for negative health outcomes within Seattle. Today, less than 10 percent of people driving on SR 99 start or end their trips in South Park; most are regional traffic just passing through. South of the neighborhood, SR 99 continues alongside the Duwamish River, running within 20 feet of the riverbank in places — directly affecting habitat for salmon and other species.

Within one mile, four other major highways and arterials already provide continuous north-south routes. This segment of SR 99 remains a limited-access highway occupying nearly 117 acres of public land, yet it carries traffic volumes similar to a busy city street. The Potential Futures Analysis evaluates how this corridor could be modernized to balance regional mobility with community health, safety, and long-term public value.

Purpose of the Analysis

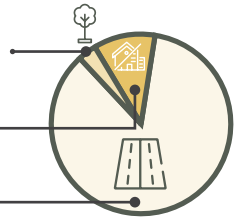
The Potential Futures Analysis compares four high-level scenarios for the SR 99 corridor using community-defined goals: health and well-being, affordability and economic opportunity, mobility and connectivity, healthy environment, and cost and feasibility. The foundation for the report framework was built on two years of structured community engagement that reached more than 3,000 residents, workers, and neighbors across 70 events, as well as community surveys, 94 small business interviews, youth design workshops, and a co-created Freight 101 with the Port of Seattle. This report does not recommend a preferred option or make any commitments. Its purpose is to give readers a clear understanding of how the four approaches compare by presenting them side by side and showing how each could shape future conditions along the corridor. The findings are intended to support informed discussion about the corridor's future. Any future changes to the corridor would require additional study, environmental review, and formal agency decision-making.



Reconnect South Park

The Four Potential Futures

The four Potential Futures assessed in this report take different approaches to the SR 99 Corridor between S Holden St and Tukwila International Boulevard/SR 599.

Scenario	Core Description	How Could Land Change?	How Could Vehicle Traffic Change?
REROUTE + RECLAIM	SR 99 has been removed through South Park and the land that it occupies today has been repurposed for things like parks, green space, and housing that is affordable to people in South Park. Streets that currently dead end at the highway are reconnected again as neighborhood streets, making it much easier to safely bike, walk, or drive around South Park.	**59** acres for environmental and shoreline restoration **41** acres for housing, parks, and industry **17** acres for streets 	About 2/3 less traffic in South Park. Limited changes in daily traffic on regional routes like I-5 and SR 509.
NARROWER BOULEVARD	SR 99 has been modified to function as a city street with sidewalks and one travel lane in each direction. New intersections and crossings connect people walking, biking, or driving to both sides of the neighborhood. With reduced roadway width, land from SR 99 is reclaimed for community uses adjacent to the new boulevard.	**48** acres for environmental and shoreline restoration **31** acres for housing, parks, and industry **38** acres for streets 	About 1/2 less traffic in South Park. Limited changes in daily traffic on regional routes like I-5 and SR 509.
WIDER BOULEVARD	SR 99 has been modified to function as a city street with sidewalks and two travel lanes in each direction. New intersections and crossings connect people walking, biking, or driving to both sides of the neighborhood. With less highway infrastructure, reclaimed land from SR 99 is repurposed for other community uses.	**44** acres for environmental and shoreline restoration **27** acres for housing, parks, and industry **46** acres for streets 	About 1/4 less traffic in South Park. Minimal changes in traffic elsewhere.
BRIDGES + TRAILS	SR 99 remains intact through this corridor. There are new bridges and trails for safe pedestrian and bicycle access across and along SR 99. Buffers like tree planting and sound walls are between SR 99 and surrounding homes and community uses. Some areas of land are reused for community uses, with a little bit for environmental restoration.	**4** acres for environmental and shoreline restoration **13** acres for parks and industry **100** acres for streets 	Minimal change in traffic in South Park and along regional routes.

Initial Findings

This analysis compares four Potential Futures against a future baseline. The baseline is a projection of what conditions would look like in 2050 if SR 99 stays exactly as it is, in a region that has grown larger and where planned transit and road improvements have been built. Using a baseline can create the impression that today's conditions are neutral; they are not. The existing corridor carries regional traffic and freight, but it also imposes ongoing costs to health, safety, and the environment — and as aging infrastructure, it will require future public investment regardless of the path chosen. Maintaining the current corridor would not be a cost-free choice, it is simply the starting point for comparison.

Within that frame, each Potential Future opens a different set of possibilities. In this preliminary comparison, **Reroute + Reclaim** shows strong performance across safety, health, environmental, and economic measures within the study area, alongside changes to existing travel patterns. The Boulevard options offer intermediate benefits with less change to regional transportation. **Bridges + Trails** improves local crossings and preserves existing regional traffic patterns, but generates fewer environmental, economic, and health benefits than the other scenarios. Further technical analysis would refine understanding of how each approach interacts with the broader regional network and communities outside of South Park.

Key findings include:

LAND AND PUBLIC SPACE

Depending on the scenario, between roughly 17 and 100 acres of land currently occupied by highway infrastructure could be repurposed for housing, parks, industry, small business space, and environmental restoration.

HEALTH AND ENVIRONMENT

Reroute + Reclaim and Narrower Boulevard show the greatest potential reductions in air and noise pollution exposure in South Park and along regional roadways anticipated to see changes in traffic and the highest potential for park and trail expansion.

MOBILITY AND SAFETY

All futures improve local connections and walking and biking conditions, though how they do it varies. Some do more to separate people from traffic, others do more to restore street connections and reduce dead ends. Wider Boulevard would reopen local streets but could put more people on foot closer to moving traffic.

REGIONAL TRAFFIC

Under any of the scenarios that change SR 99, traffic would spread across multiple existing routes, and the daily change on each route would be small compared to what it already carries. In other cities where highways have been removed or converted to boulevards, the traffic shifting to other roads has typically been less than models first suggest, because some travelers change their route, their timing, their mode of travel, or whether they make the trip at all. This analysis reports the modeled numbers without adjusting for that pattern. However, traffic congestion is already a significant challenge in Seattle, and future studies will be needed to better understand how changes could affect peak-period travel times, route reliability, and conditions on nearby corridors and in adjacent communities.

AFFORDABILITY AND ECONOMIC OPPORTUNITY

Redevelopment of reclaimed land could create significant opportunities for new homes, local and industrial businesses, supporting infrastructure, and jobs. At the same time, changes to the corridor could increase pressure on housing costs and existing businesses if not actively managed. Shaping these outcomes is a central focus of the next phase, with dedicated funding for technical analysis and a community-led process to develop and implement strategies that support long-term stability, access to opportunity, and shared benefit.

FEASIBILITY

This analysis affirms that multiple approaches to modernizing or reimagining SR 99 are feasible and could generate a variety of long-term benefits. Further study, environmental review, and formal agency decision-making would be required before any changes.

Evaluation Summary

The following figure provides a summary of all measures, including a composite evaluation for each goal area.

KEY				
Much Worse	Worse	Same	Better	Much Better

Category	Measure	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Health & Wellbeing	**Health & Wellbeing Composite**	+	+	•	•
	Air Pollution	+	+	+	•
	Noise Pollution	+	+	•	•
	Street Safety for Vulnerable Road Users	+	•	−	•
	Access to Parks and Public Spaces	++	+	+	+
	Public Health	++	+	+	•
Affordability & Economic Opportunity	**Affordability & Economic Opportunity Composite**	+	+	+	•
	Affordable Housing	++	++	•	•
	Neighborhood Stability	+	•	•	−
	Local Business Growth	+	+	+	•
	Job Opportunities	++	++	++	+
Mobility & Connectivity	**Mobility & Connectivity Composite**	+	+	+	•
	Regional Traffic	−	−	•	•
	Local Vehicular Traffic	+	+	•	•
	Neighborhood Reconnection	++	++	+	+
	Improved Walking and Biking Infrastructure	++	+	+	•
	Public Transit Connections	+	+	+	•
	Emergency and Disaster Response	++	++	++	•
Healthy Environment	**Healthy Environment Composite**	+	+	+	•
	Runoff Reduction and Water Quality Improvement	++	++	++	•
	Climate Resilience	++	++	++	•
	Trees and Environmental Restoration	++	++	++	•
	Ecosystems and Habitat Restoration	++	++	++	•
Cost & Feasibility	**Cost & Feasibility Composite**	•	•	−	•
	Net Public Value	+	+	•	−
	Construction Disruption	−	−−	−−	•
	Regulatory Feasibility	•	•	•	•

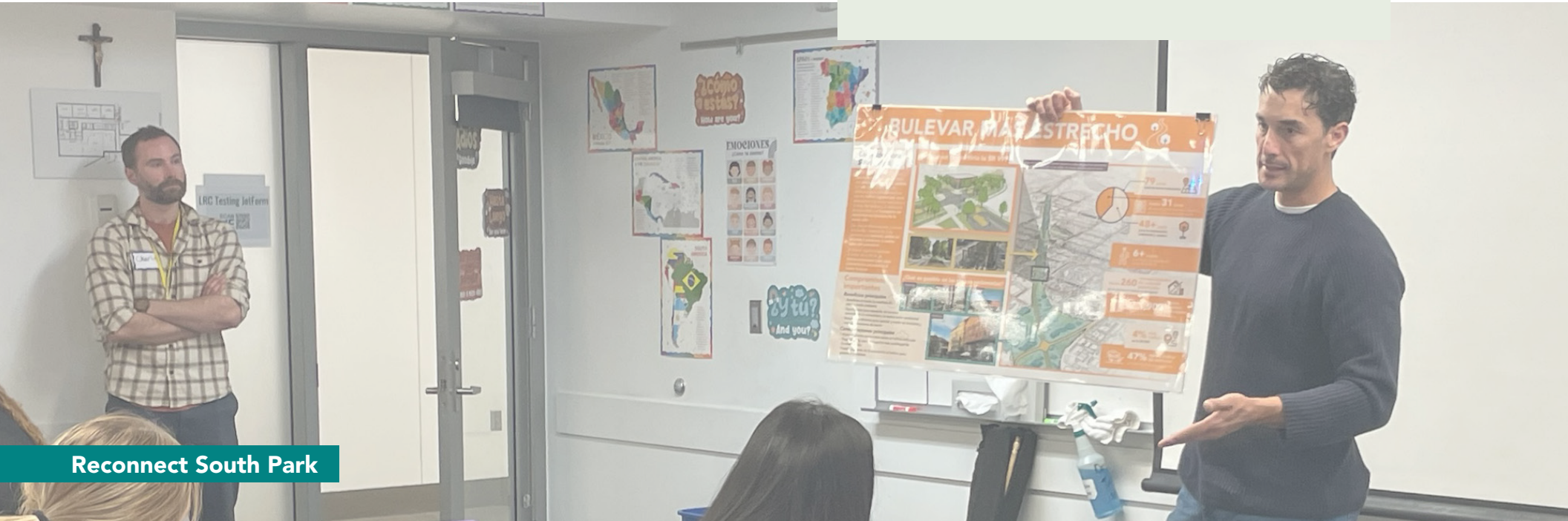
Limitations

This analysis establishes a consistent, technically grounded first comparison of how these futures could perform on community-defined goals. It provides a clear basis for evaluating the options, while additional work is needed to understand how they would function in practice. Key areas for further study include detailed design, environmental performance, market response, and how changes could affect peak-period travel, reliability, and nearby communities.

Future phases will refine these areas and test how the corridor performs as part of the broader system. That work will require close coordination with neighboring communities, community-based organizations, freight partners, and local, regional, state, and federal agencies to ensure corridor continuity and shared long-term benefit.

Next Steps

The findings of this analysis will inform a community-driven visioning process to be developed into a **Community Vision Plan**, accompanied by a **Community Investment Plan** focused on housing stability, small-business support, and long-term stewardship. Together, these efforts aim to modernize a mid-century corridor into a 21st-century public asset that advances health, safety, reliability, community well-being, and long-term regional value.



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INTRODUCTION

South Park is one of Seattle's most close-knit neighborhoods. Residents represent many cultures and languages, and that diversity is reflected in the neighborhood's small businesses, local gatherings, and community-led initiatives. The neighborhood is energized by volunteerism and a shared commitment to place. Many residents work through local groups to expand opportunities and improve conditions — particularly for young people. Many of South Park's key destinations — including the business district, community center, library, food bank, senior center, Marra Farm, and parks — exist today because of the dedication and collaboration of residents.

Prior to European settlement, the Duwamish People lived along the Duwamish River and the river served as an important food and transportation network. In later years, Italian and Japanese immigrant families established small farms on the fertile floodplain, supplying fresh produce to local markets. The construction of State Route (SR) 99 fundamentally altered the South Park neighborhood, dividing the two sides of the community and increasing exposure to air, noise, and water pollution.

South Park is located along the southern border of Seattle and is surrounded by industrial areas. The Duwamish River forms the eastern border of the neighborhood and SR 509 creates a border to the west. SR 99, the focus of this work, runs diagonally across the neighborhood's street grid and splits it in two. SR 99's diagonal alignment and lack of crossing points is tremendously disruptive to the neighborhood fabric and creates barriers to walking, biking, and accessibility.

What is Reconnect South Park?

Reconnect South Park is a community-driven initiative working to **reimagine the SR 99 corridor as a place that restores choices and opportunity** for the people of the Duwamish Valley. The initiative responds to decades of health, safety, and access challenges created by the highway, asking how this public land can better serve those who live and work in the region today.

This effort is a partnership between the City of Seattle ("the City") and the Reconnect South Park Coalition ("the Coalition"). The Coalition — a group of community leaders who have led this effort since 2022 — shapes priorities, guides engagement, and reviews technical work. The analysis in this document was developed by a technical consultant team working with City staff and the Coalition, and informed by agency partners and community engagement.

History of State Route 99

SR 99 through South Park was built in the mid-20th century, when highways across the country were designed to move traffic quickly through cities. Many were placed in lower-income neighborhoods, where land was cheaper and residents had less political influence. South Park was one of those places. The neighborhood was home to many working-class and immigrant families, and the highway was built through the heart of it.

At the time SR 99 was designed, the City planned to remove the Georgetown and South Park neighborhoods and replace them with industry. Residents fought back and eventually overturned the zoning change, but their attempts to prevent the construction of the highway were unsuccessful.

Current-day SR 99 was originally part of US 99, a federal highway. It was first routed along E. Marginal Way and later rerouted to its current location along W. Marginal Way. However, not long after US 99 was built, I-5 was constructed, presenting a higher-speed alternative to US 99 for regional vehicular travel. US 99 was decommissioned at that point and reclassified as a state route. Most other parts of the former US 99 now function as city streets, including SR 99/Aurora Ave N in North Seattle and Tukwila International Boulevard just south of South Park. The section through South Park, however, remains in its original mid-century form. SR 99 was built to cut through the neighborhood rather than serve the South Park community. It was constructed diagonally across South Park's neighborhood street grid and created 22 dead ends. The highway created a new north–south route for regional commuters and industry, and remains part of the freight system serving the Duwamish Manufacturing and Industrial Center and Port of Seattle facilities today. However, it also cut off neighborhood connections between homes, schools, and gathering places, and separated the river from its banks.

South Park before SR 99

South Park after SR 99

Purpose

Reconnect South Park is working to explore the future of SR 99 to improve transportation access, health, safety, and economic opportunity for the people who live and work in South Park and the region. This project is designed to support a safer, more connected neighborhood by exploring potential options for how people get around and the location of housing, businesses, and community facilities like parks and schools that provides long-term opportunity and stability for all. While the analysis presented in this report is grounded in South Park, potential impacts are evaluated at the geographic scale at which they occur (at the neighborhood-, corridor-, or regional-scale).

This Potential Futures Analysis Report outlines four potential futures for SR 99 through the South Park neighborhood and evaluates how each Potential Future supports a broad range of community-defined goals. This report does not recommend a preferred option or make any commitment. Its purpose is to give readers a clear understanding of how the four approaches compare by presenting them side by side and showing how each could shape future conditions along the corridor. The findings are intended to support informed discussion about the corridor's future. Any future changes to the corridor would require additional study, environmental review, and formal agency decision-making.

See Section 2 for detailed descriptions of each Potential Future.

Reroute + Reclaim

Wider Boulevard

Narrower Boulevard

Bridges + Trails

How We Got Here

Reconnect South Park began as a grassroots effort. In 2021, South Park residents and community advocates raised concerns about the health, safety, and environmental impacts of SR 99 and began building a shared vision for a different future for the corridor. That advocacy drew early support from the State of Washington to begin exploring potential changes, and from the U.S. Department of Transportation's Reconnecting Communities Pilot Program to examine multiple potential futures for SR 99 in South Park.

In 2022, the Reconnect South Park Coalition formed and partnered with the City of Seattle to lead this work together. The foundation for the report framework was built on the first two years of structured community engagement from late 2022 through 2024, led by the Reconnect South Park Coalition and reaching more than 3,000 residents, workers, and neighbors across 70 events.

Engagement was conducted in English and Spanish, with food, childcare, and stipends provided to support participation. Engagement extended beyond South Park to Georgetown, the broader Duwamish Valley, West Seattle, Burien, and Beacon Hill, and combined multiple community surveys, 94 small business interviews, documentary-style interviews capturing residents' lived experience of SR 99, cafecitos, open houses, scale models, University of Washington studio collaborations, youth design workshops, and a co-created Freight 101 with the Port of Seattle. These community priorities directly influenced what was studied in this report – see how on the following page!

What We've Heard...

People want **cleaner air, less traffic noise, and safer streets**. Families want to **walk and bike without feeling unsafe**. People want more **parks and community spaces** for play, exercise, and social activities.

Housing should **stay affordable for people who live here now**. Residents are worried about being **pushed out if costs go up**. People want any new land to be used in ways that **benefit the neighborhood**. Local businesses should be able to **grow and attract more customers**.

SR 99 divides the neighborhood and makes it hard to get around. People want **streets reconnected, safe routes for walking and biking, and better access to transit**. They also want to make sure **traffic changes do not harm nearby areas**.

People want South Park to be **greener, quieter, and cleaner**. People want more **trees, gardens, and parks, cleaner water, and better protection from flooding and extreme heat**. They also want to **restore spaces** for birds and wildlife.

Investments should give **long lasting benefits without wasting money**. Construction should cause **as little disruption as possible**. People want to **understand how money is spent and how decisions are made**.

What We've Studied...

Health and Wellbeing: We looked at how each option might change **air quality, noise levels, and street safety**. We also studied how much **new green space and public gathering space** could be created.

Affordability and Economic Opportunity: We measured **how much housing could be built** and how **affordable** it could be. We also looked at **displacement risk**, potential for **community oriented land use**, and impacts on **small businesses**.

Mobility and Connectivity: We looked at how each option **reconnects the street grid, improves walking and biking routes, and changes transit access**. We also studied **traffic patterns inside South Park and in nearby neighborhoods**.

Healthy Environment: We measured how each option could **reduce pollution, increase green space, improve climate resilience, and restore natural habitats**.

Cost and Feasibility: We compared the **cost of each option, how long construction might take, and how disruptive it could be**. We also looked at the balance between **project costs and expected benefits**.

Throughout the project, coordination occurred with WSDOT, the owner and operator of SR 99, and with regional partners through an Interagency Advisory Group, which included the Port of Seattle, King County, neighboring jurisdictions, and PSRC.

Goal Areas and Evaluation Approach

The five goal areas identified above – **Health and Wellbeing, Affordability and Economic Opportunity, Mobility and Connectivity, Healthy Environment, and Cost and Feasibility** – form the framework for this analysis. Together, they reflect the community's priorities for how the SR 99 corridor should function in the future.

Each Potential Future has been evaluated across 22 measures within the five goal areas. The measures combine quantitative data and qualitative findings to compare how each option performs relative to current conditions. The measures and evaluation are intended to inform conversations about the future of this corridor, not determine an outcome.

Analysis Area

The analysis areas used to assess the Potential Futures are shown in Figure 1 and described below.

SR 99 Corridor: the full right-of-way footprint from S Holden Street to Tukwila International Boulevard and SR 599. This analysis area includes the existing roadways, bridges, and right-of-way that form SR 99.

South Park Community: Residential South Park and Surrounding Industrial areas. This analysis area includes all of the land north of S 99th St, south and west of the Duwamish River, and east of SR 509.

Regional Roads & Surrounding Areas: the alternative routes that could see potential diversion of traffic from changes to SR 99 in South Park. This analysis area includes SR 99, SR 509, SR 599, Interstate 5 (I-5), East Marginal Way, Des Moines Drive S, 14th Avenue S, 1st Avenue South Bridge, and Tukwila International Boulevard. This analysis area also includes areas within 500 feet of these roads.

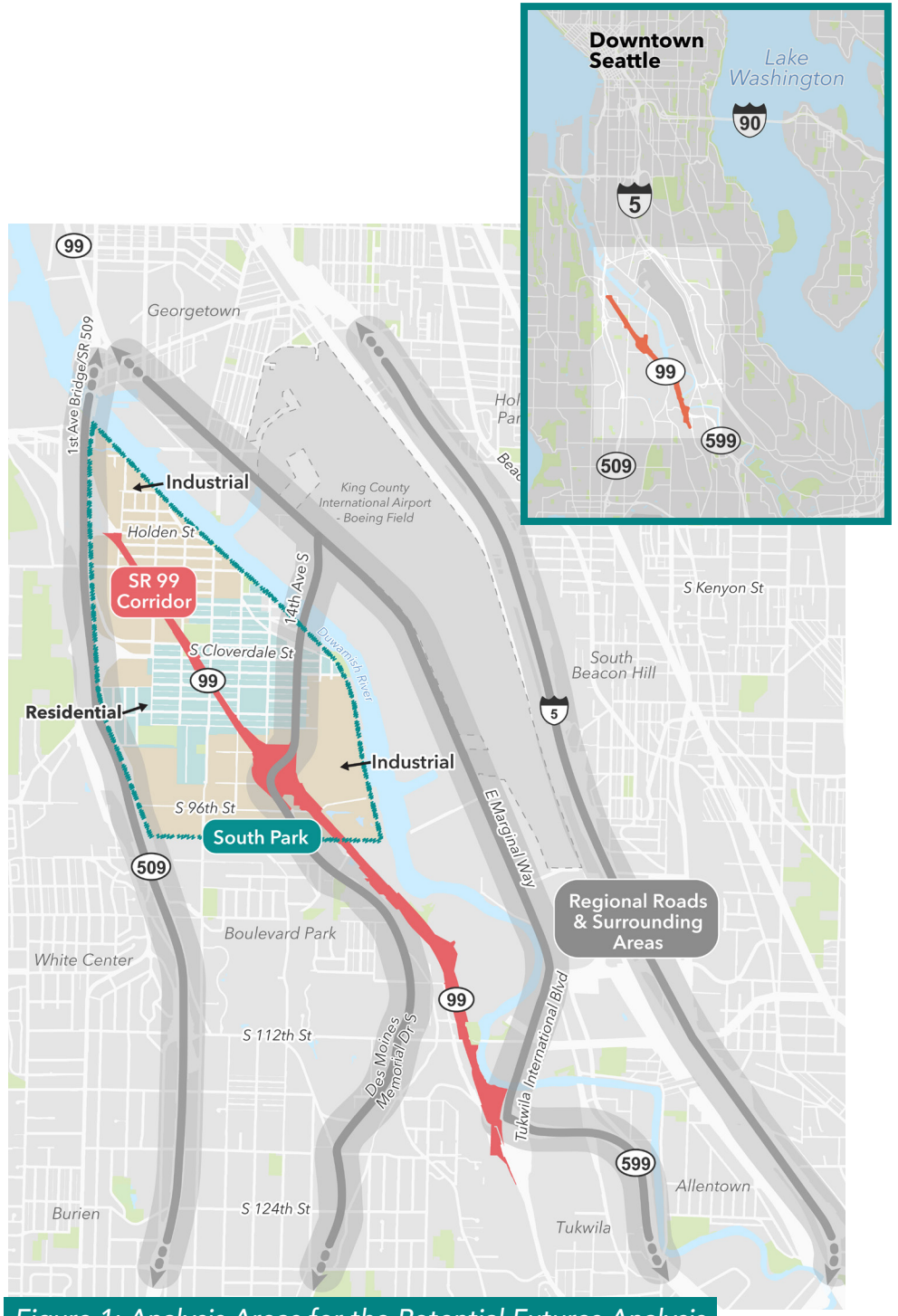


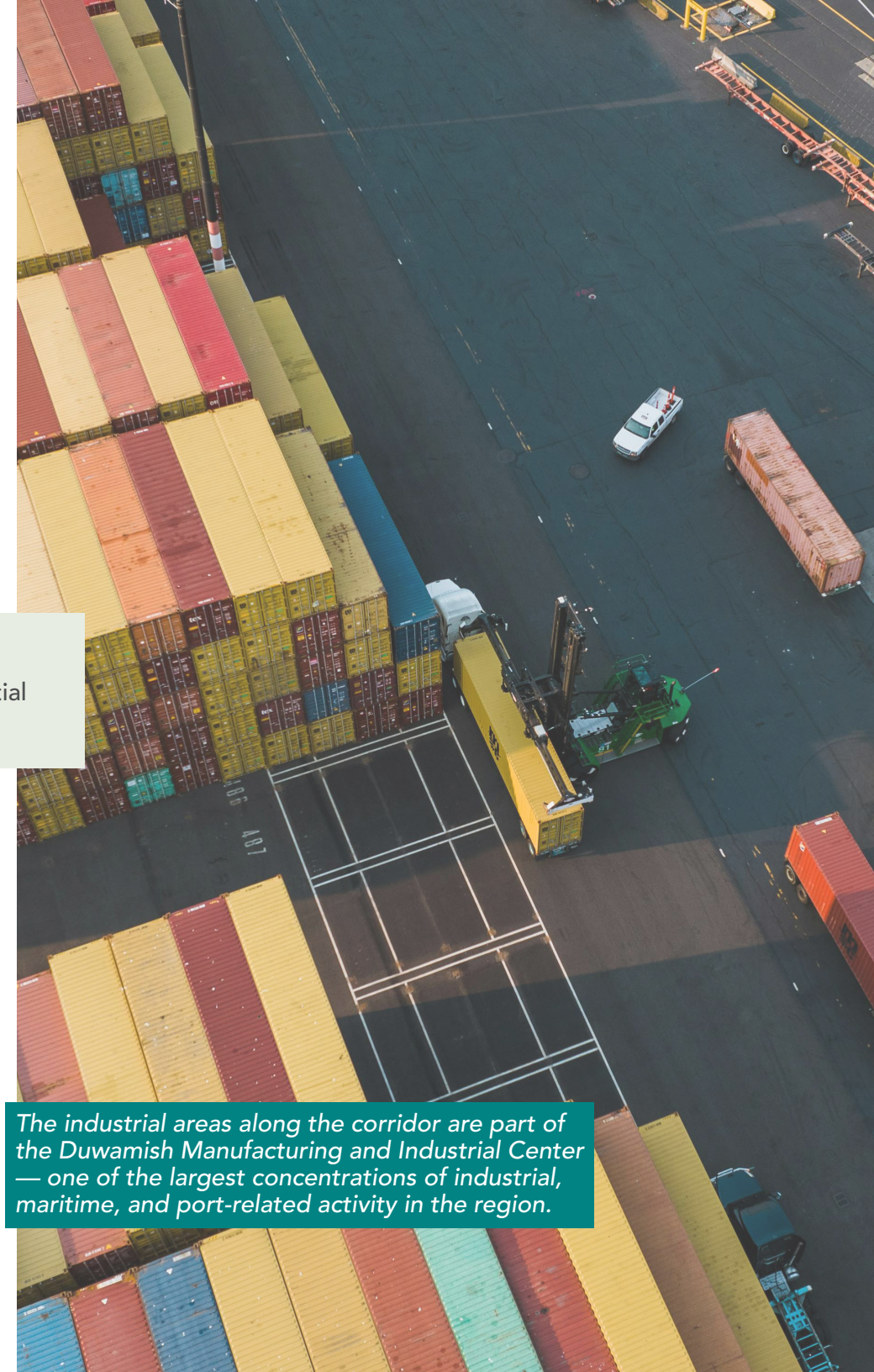
Figure 1: Analysis Areas for the Potential Futures Analysis

All 22 evaluation measures were analyzed within the **SR 99 Corridor**. Some evaluation measures also expanded to the **South Park Community** and **Regional Roads & Surrounding Areas** and those are noted where applicable. Physical changes to streets were developed at a concept level for the **SR 99 Corridor** and connections within the adjacent city block only. In some cases, the surrounding context (including connections to businesses, parks, and community uses or the location of habitats) was also considered in the evaluation. For example, the Ecosystem and Habitat Restoration measure considers how each Potential Future could restore and reconnect habitats adjacent to the SR 99 Corridor through changes within the corridor.

Residential and commercial areas beyond the Regional Roads & Surrounding Areas Analysis Area have not been assessed and may require detailed assessment as part of future phases of analysis. Measures that were analyzed beyond the SR 99 Corridor are noted in Section 3.

Together, these areas form the basis for evaluating local neighborhood conditions, potential effects within the South Park community, and potential effects along regional roads in this report.

Although the study began in South Park—where the highway most directly intersects with a residential area—SR 99 does not end at the neighborhood boundary. The limits of SR 99 Corridor analysis area were identified based on logical connections of the regional roadway network. The north end is where SR 99 connects to SR 509. North of SR 509 there are no segments of the Regional Roads & Surrounding Areas analysis area that would make a logical connection point for the SR 99 Corridor analysis area. At the south end, the SR 99 Corridor analysis area ends where SR 99 connects to SR 599 at Tukwila International Boulevard, creating a cohesive area to analyze potential roadway changes. While the SR 99 Corridor analysis area does include areas outside of the City of Seattle, no commitments or jurisdiction changes are assumed at this stage. Future analysis may also refine the analysis areas.



The industrial areas along the corridor are part of the Duwamish Manufacturing and Industrial Center — one of the largest concentrations of industrial, maritime, and port-related activity in the region.

From Analysis to Vision

This Potential Futures Analysis provides the foundation for the next stage of community and technical collaboration. The findings are intended to help the Reconnect South Park Coalition guide informed conversations among residents, businesses, workers, and neighboring communities—bringing together those affected by the current highway and those who could be affected by future changes.

Because of the complexity and transformative potential of Reconnect South Park, the planning process is longer and more phased than a typical project may be. Given the scale of coordination, environmental review, and funding required, construction on any corridor change is likely at least a decade away — what happens here could reshape the Duwamish Valley for generations. Early stages are focused on shared learning, community vision-setting, and initial analysis, while formal decisions and detailed design would occur later through agency-led processes. Figure 2 is an illustration of the process and where the Potential Futures Analysis fits within the definition and development of potential changes to SR 99.

COMMUNITY CENTERED EXPLORATION
Exploratory, community-driven, and non-binding

- Extensive community engagement
- Historical research and review of prior plans
- Fatal-flaws and feasibility screening
- **Potential Futures Analysis**
- Identification of community preferences
- Community Vision Plan development
- Community investment planning

PREPARATION AND REFINEMENT
Refining ideas and getting ready for formal agency review

- Continued technical exploration and community engagement
- Planning and Environmental Linkages study to formally screen alternatives
- Partnership-building across jurisdictions, agencies, and organizations
- Funding, governance, and implementation strategy development
- Route classification and jurisdictional coordination (as needed)

FORMAL DECISION-MAKING AND DELIVERY
Agency-led processes that result in binding decisions

- Environmental review (NEPA / SEPA)
- Selection of a final alternative
- Final design, funding, and construction
- Community Engagement

Figure 2: Reconnect South Park Process Phases

Through this process, the Coalition will continue building local capacity and ensuring that community members have a clear role in shaping what comes next. This document does not recommend a preferred option or make any commitment. Any future changes to the corridor would require additional study, environmental review, and formal agency decision-making.

Moving forward, the Coalition will lead a broad collaboration—with residents, agencies, industry, neighboring communities, and technical experts—to further develop and refine the range of potential futures. Building on this analysis, a future Community Vision Plan will describe priorities and preferences to make the corridor safer, more accessible, and more reliable for everyone. The Community Vision Plan will serve as a roadmap for future studies and investments that modernize SR 99, restore community connections, and create lasting public value.

2

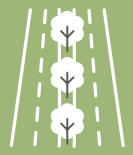
POTENTIAL FUTURES OVERVIEW

The Potential Futures are high-level possibilities for the future of SR 99 in South Park. The Potential Futures have been defined based on community-defined vision and goals.

Four Potential Futures are analyzed in this report:

Reroute + Reclaim: *SR 99 is removed*

Narrower Boulevard: *SR 99 is replaced with a 2-lane street*



Wider Boulevard: *SR 99 is replaced with a 4-lane street*

Bridges + Trails: *SR 99 stays with new connections*

CURRENT CONDITIONS

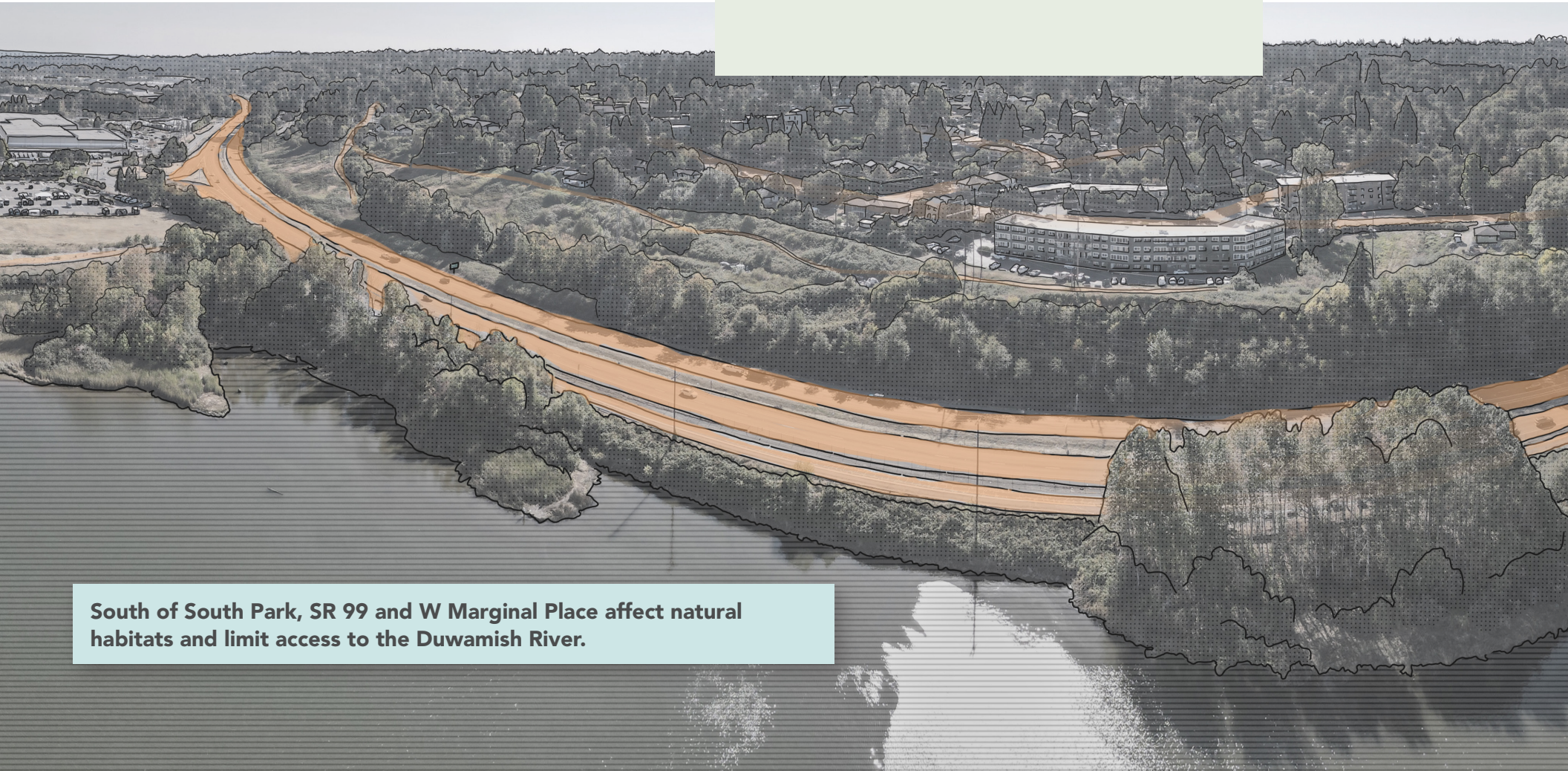
Through residential South Park, SR 99 cuts diagonally across the neighborhood and creates 22 dead-end streets. There are only two ways to cross the highway in three miles: a narrow underpass at S Cloverdale Street with no bike facilities, and a pedestrian bridge at S Henderson Street that's very narrow and too steep for a wheelchair user or most bicyclists. The Cloverdale crossing is also seismically vulnerable. Homes, Concord Elementary, the library, and the community center all sit close to the highway.

The existing bridge at S Henderson St is one of the only crossings of SR 99 today.

This diagram shows the existing bridge at S Henderson Street and how the SR 99 right-of-way currently disconnects the neighborhood street grid in South Park.

SR 99 is a 4-lane divided highway that runs about three miles through the study area, from S Holden St in the north to where it meets SR 599 at Tukwila International Boulevard in the south. The corridor passes through industrial land at both ends of residential South Park, then continues south adjacent to the Duwamish River. The industrial areas along the corridor are part of the Duwamish Manufacturing and Industrial Center — one of the largest concentrations of industrial, maritime, and port-related activity in the region.

In the southern part of the corridor, the highway runs immediately alongside the Duwamish River — in some places within 20 feet of the river bank, with no green buffer. Large warehouse and distribution facilities sit between the highway and the river. Runoff from the highway drains straight into the river, which is an important habitat for salmon and other species.



South of South Park, SR 99 and W Marginal Place affect natural habitats and limit access to the Duwamish River.

REROUTE + RECLAIM

In this potential future, SR 99 would be removed from S Holden St to SR 599 and the land that it occupies today would be repurposed for things like parks, green space, and housing that is affordable to people in South Park.

Regional through-traffic would shift to other routes such as I-5 and SR 509. Streets that currently dead end at the highway, such as 8th Avenue S, S Donovan Street, and S Henderson Street would be reconnected again as neighborhood streets, making it much easier to safely bike, walk, or drive around South Park.

This view shows what S Henderson St at the SR 99 right-of-way could look like, with new homes, businesses, parks, and trails.

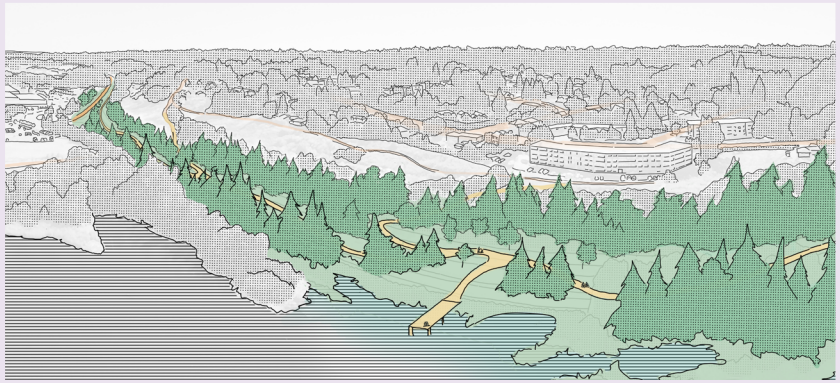
This diagram shows how streets could be reconnected in yellow, new walking and biking connections with dashed arrows, and reclaimed land for a mix of homes, businesses, and parks in green.

Reconnect South Park

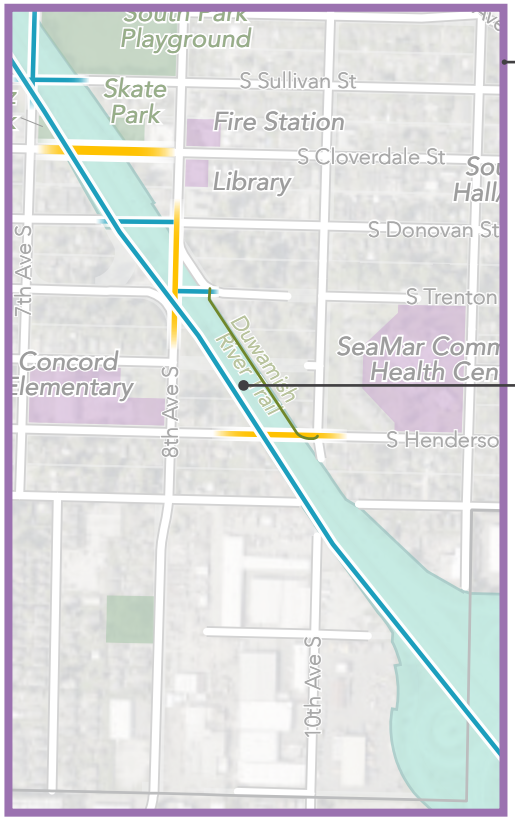
Key Features of Reroute + Reclaim

Reconnected streets and new trails would tie both sides of South Park back together.

New trail connection along former SR 99 right-of-way would connect to community destinations and regional trails.



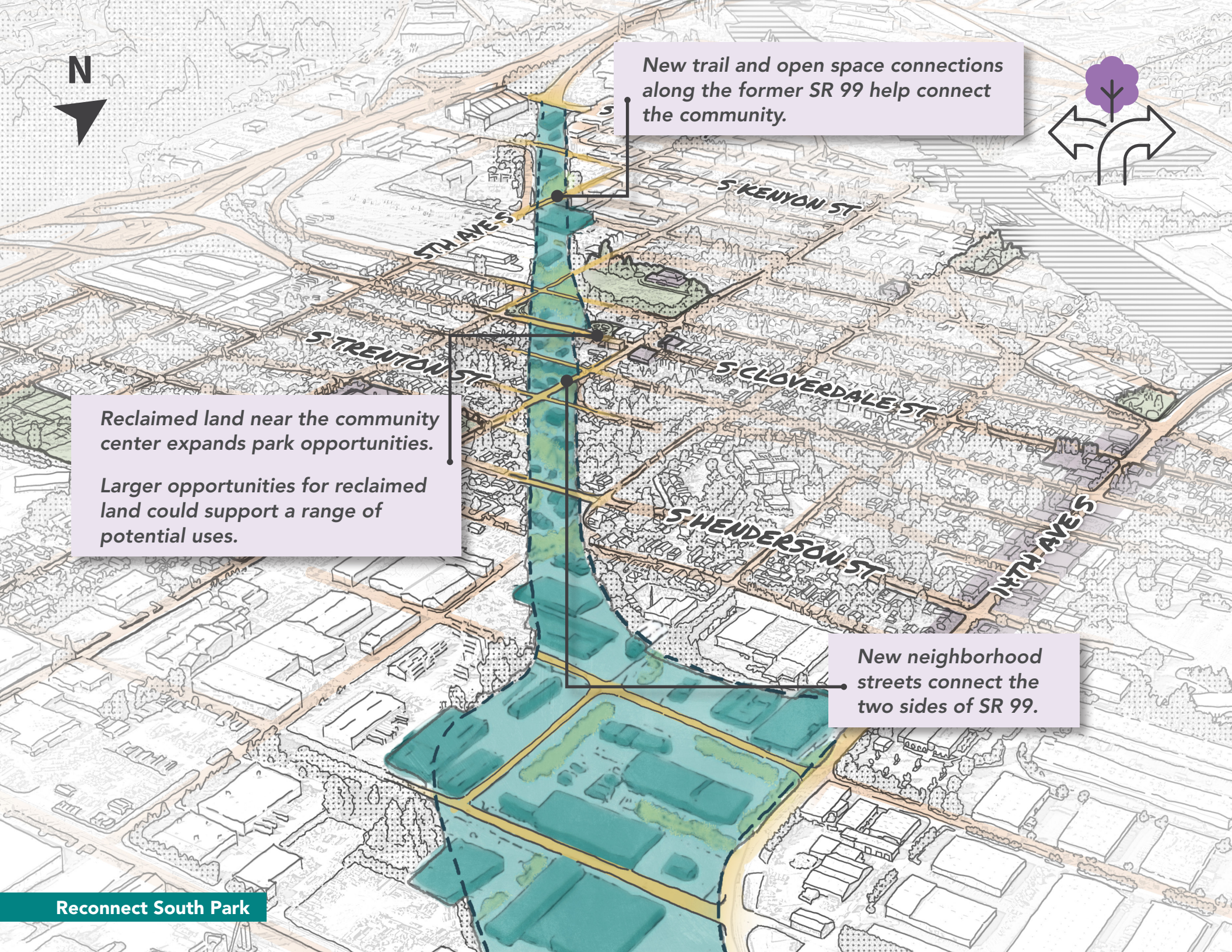
New open space and habitat connections to the Duwamish River would also reduce runoff and pollution into the river.



Reclaimed land would create opportunities for new parks, homes, and businesses at the heart of South Park.

N

- SR 99 traffic
- Potential land available
- Potential street connection
- Potential roundabout
- Potential bike/pedestrian connection
- Multi-use trail


N
New trail and open space connections along the former SR 99 help connect the community.
S KENYON ST
S HAVANA ST
S TRENTON ST
S CLOVERDALE ST
S HENDERSON ST
S 144TH ST
Reclaimed land near the community center expands park opportunities.
Larger opportunities for reclaimed land could support a range of potential uses.
New neighborhood streets connect the two sides of SR 99.
Reconnect South Park

What is Possible on Reclaimed Land

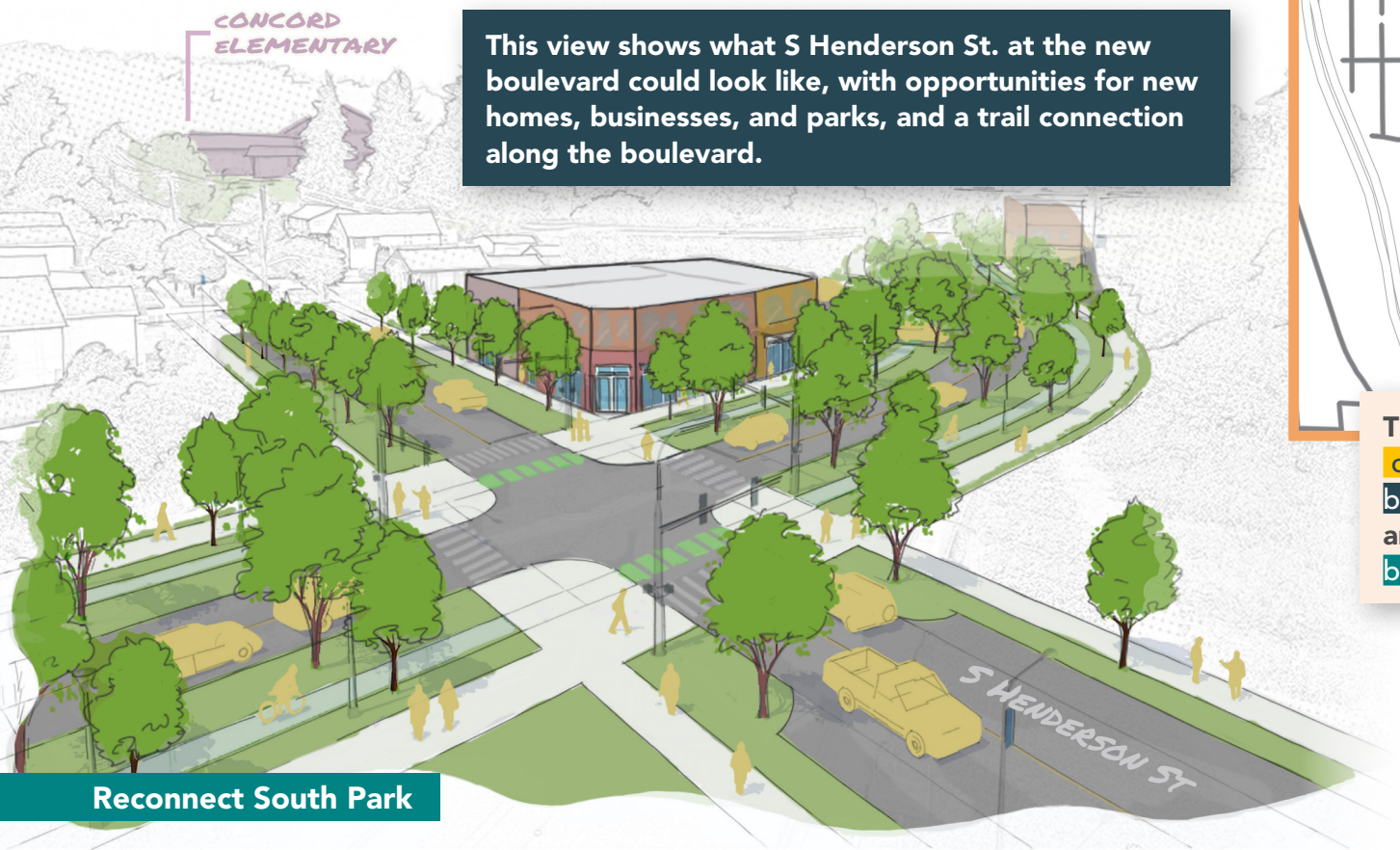
These photos show some ideas for what could be possible on reclaimed land and what new streets could look like.

NARROWER BOULEVARD

In this potential future, SR 99 would be modified to function as a city street with sidewalks and one travel lane in each direction. The street would still carry vehicles, but regional traffic would be encouraged to use other routes due to slower speeds along the boulevard and reduced capacity, and freight would be rerouted from the new street.

New intersections and crossings within South Park would connect people walking, biking, or driving to both sides of the neighborhood.

By significantly narrowing the width of SR 99, land would be reclaimed for community uses adjacent to the new boulevard.



This view shows what S Henderson St. at the new boulevard could look like, with opportunities for new homes, businesses, and parks, and a trail connection along the boulevard.

Reconnect South Park

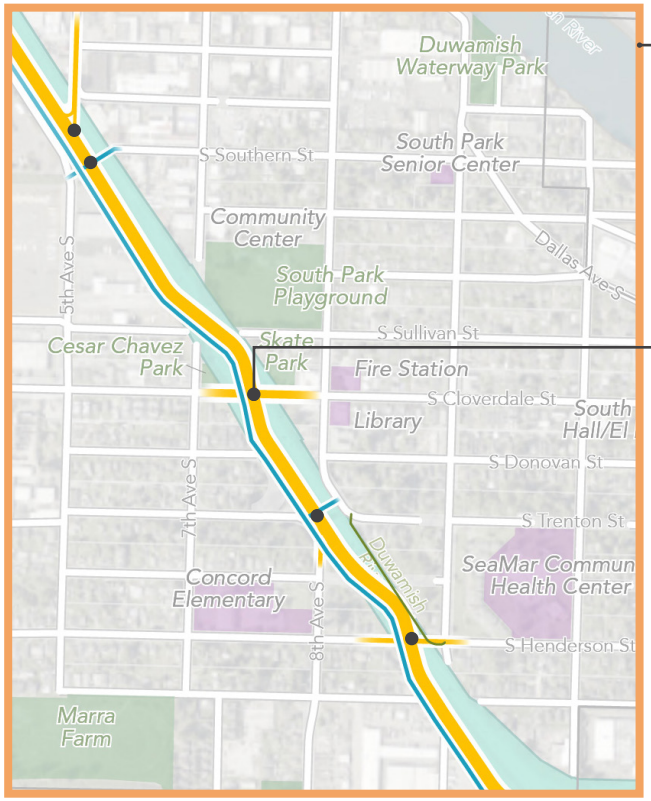
This diagram shows how streets could connect in yellow, new walking and biking connections with dashed arrows, and reclaimed land for a mix of homes, businesses, and parks in green.

Key Features of Narrower Boulevard

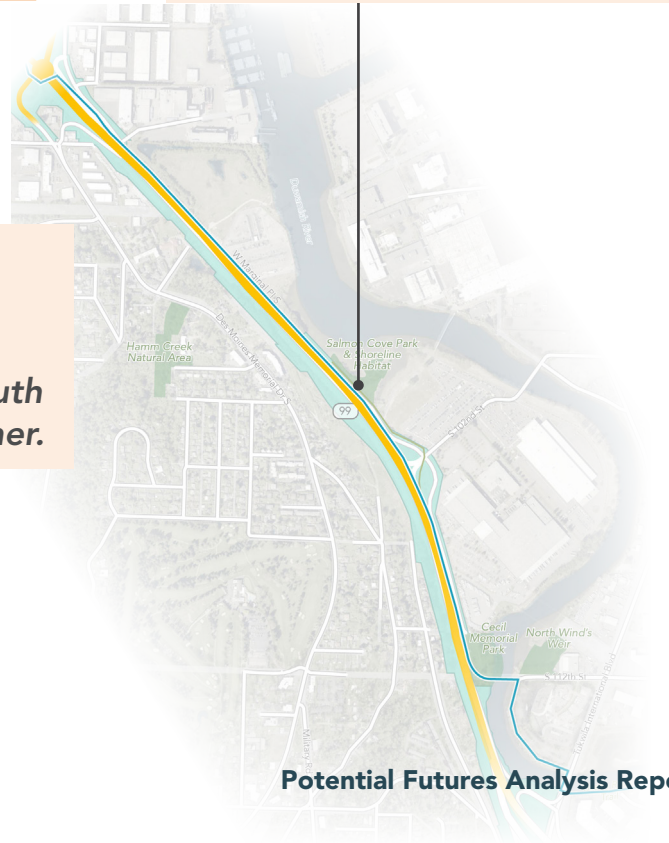
Space along the new boulevard for homes, businesses, and parks.

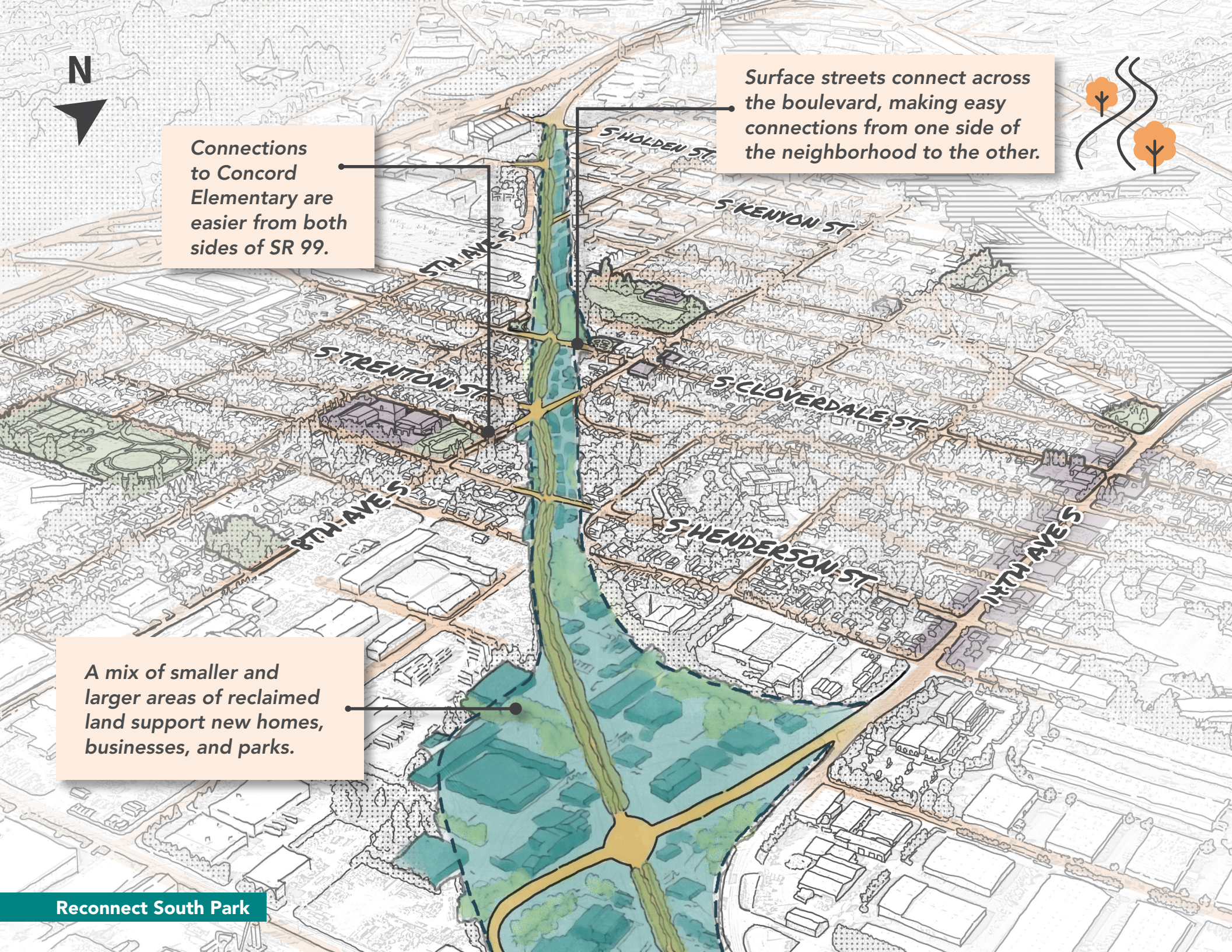
New trail connection along former SR 99 right-of-way would connect to community destinations and regional trails.

New open space and habitat connections to the Duwamish River would also reduce runoff and pollution into the river.



Reconnected streets and new trails would tie both sides of South Park back together.





Reconnect South Park

What is Possible on Narrower Boulevard

These photos show some ideas for what could be possible on reclaimed land and what new streets could look like.

WIDER BOULEVARD

In this potential future, SR 99 would be modified to function as a city street with sidewalks and two travel lanes in each direction. The street would still carry vehicles and freight, but some regional traffic may be encouraged to use other routes due to slower speeds along the boulevard.

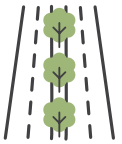
New intersections and crossings within South Park would connect people walking, biking, or driving to both sides of the community. With less highway infrastructure, reclaimed land from SR 99 would be repurposed for other community uses.

This view shows what S Henderson St. at a 4-lane boulevard would look like, with some opportunity for new homes, businesses, and parks, as well as a trail along the boulevard.

This diagram shows how streets could connect in yellow, new walking and biking connections with dashed arrows, and reclaimed land for a mix of homes, businesses, and parks in green.

Reconnect South Park

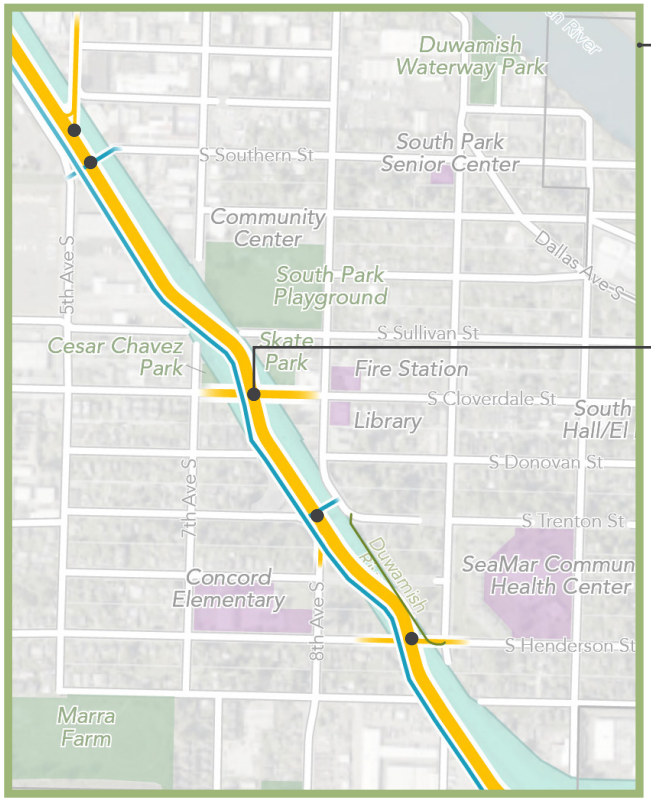
Key Features of Wider Boulevard



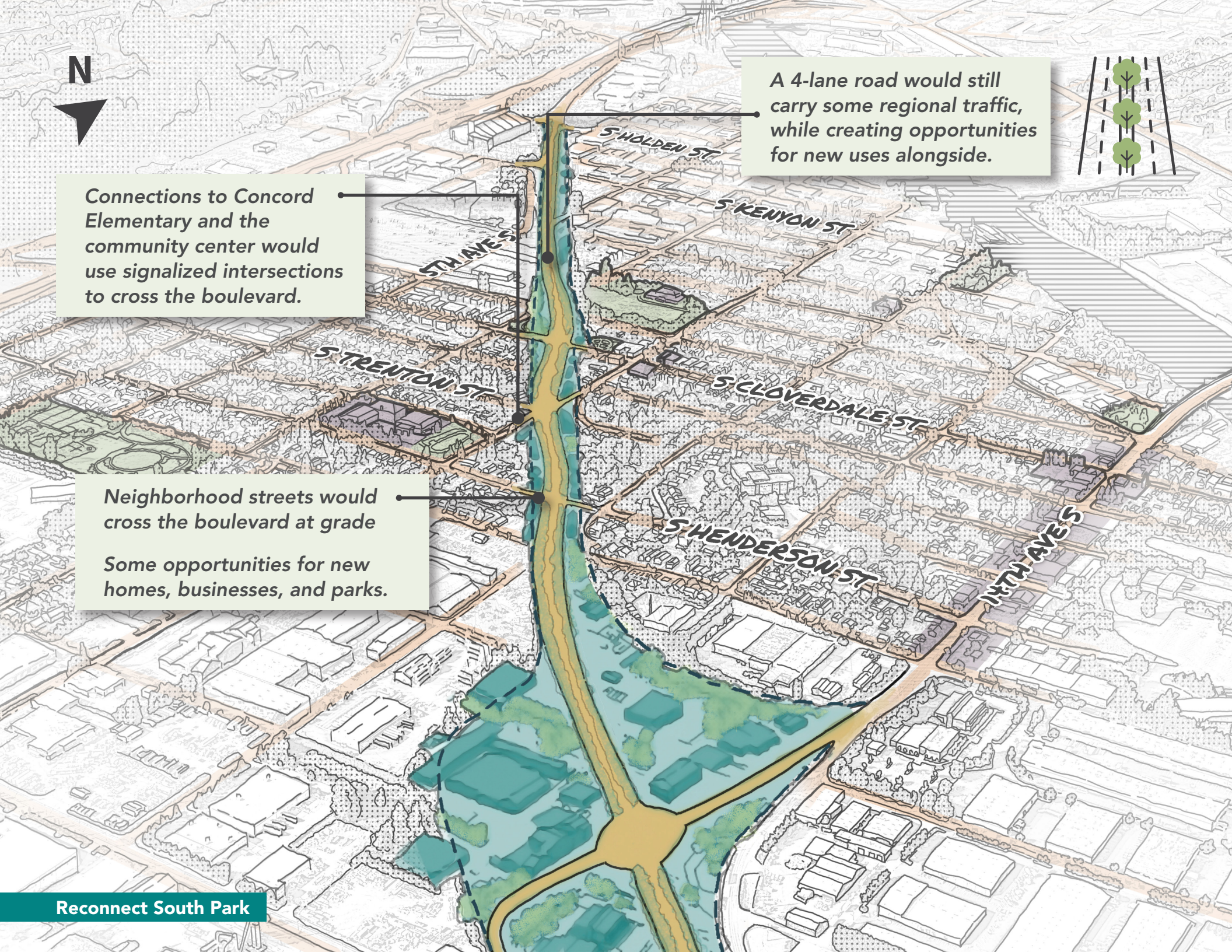
Space along the new boulevard for homes, businesses, and parks.

New trail connection along former SR 99 right-of-way would connect to community destinations and regional trails.

New open space and habitat connections to the Duwamish River would also reduce runoff and pollution into the river.



Reconnected streets and new trails would tie both sides of South Park back together.



Reconnect South Park

What is Possible on Wider Boulevard

These photos show some ideas for what could be possible on reclaimed land and what new streets could look like.

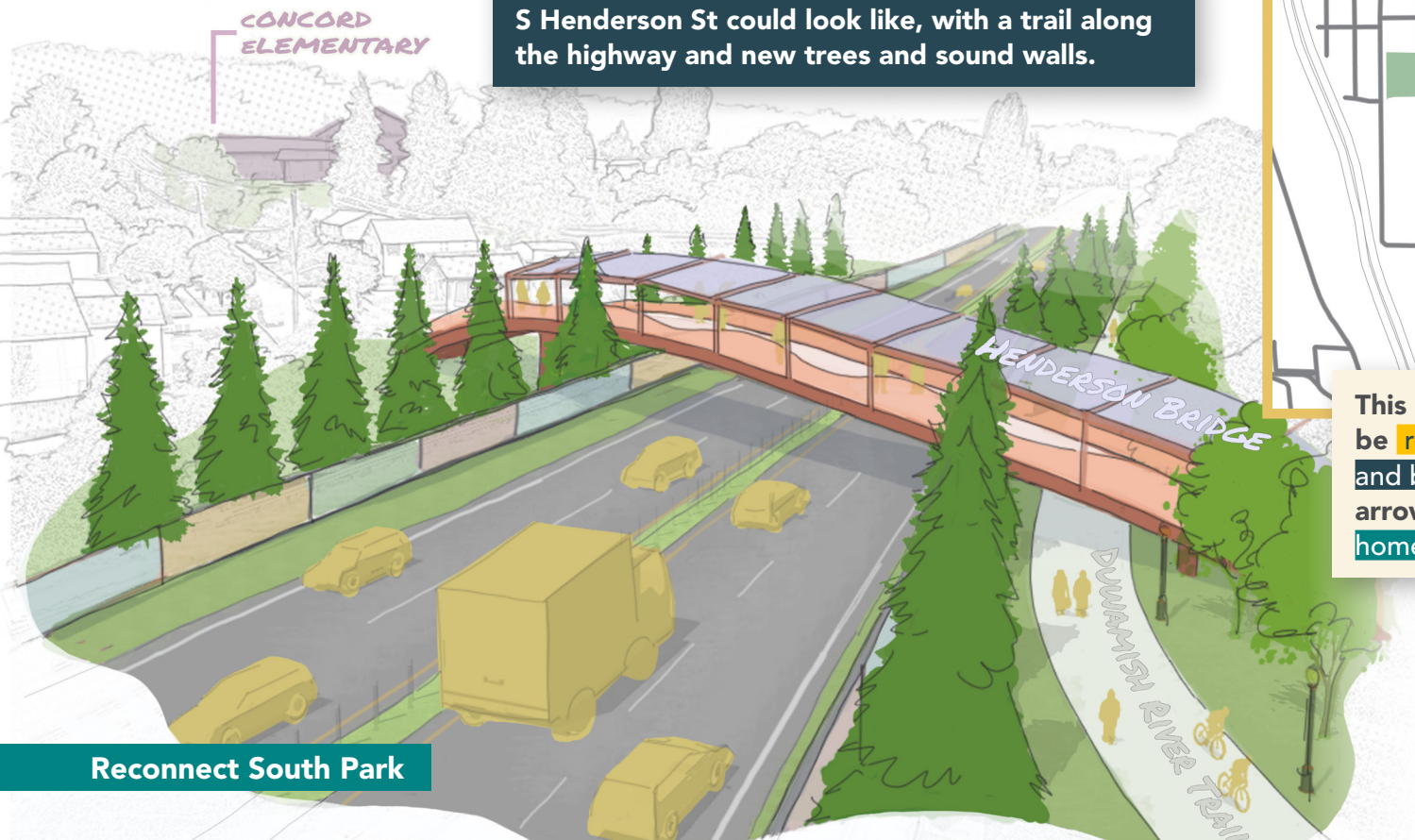
BRIDGES + TRAILS

In this potential future, SR 99 would remain intact from S Holden St to SR 599. There would be new bridges and trails for safe pedestrian and bicycle access across and along SR 99.

Buffers like tree planting and sound walls would be between SR 99 and surrounding homes and community uses.

A limited amount of reclaimed land may be available for redevelopment in industrially-zoned areas.

This view shows what a new bridge over SR 99 at S Henderson St could look like, with a trail along the highway and new trees and sound walls.



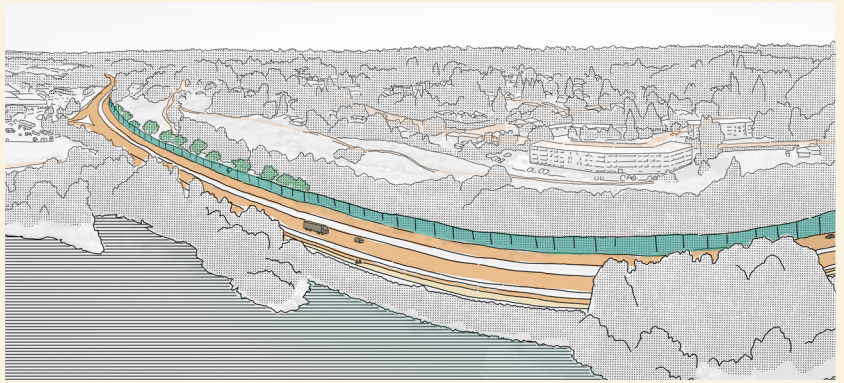
Reconnect South Park

This diagram shows how streets could be reconnected in yellow, new walking and biking connections with dashed arrows, and reclaimed land for a mix of homes, businesses, and parks in green.

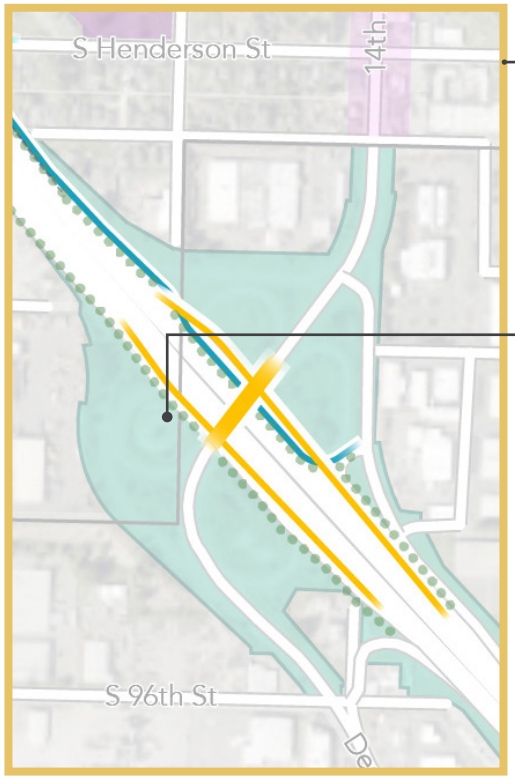
Key Features of Bridges + Trails

Improved existing connections and a new bridge across SR 99 provide some opportunities for improved connections.

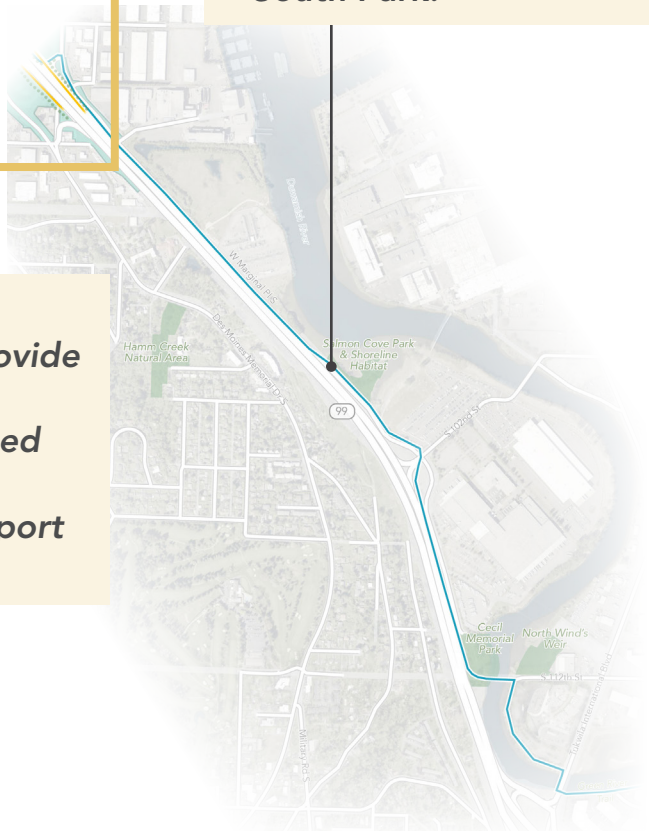
A trail would connect along SR 99 to link with regional trails.

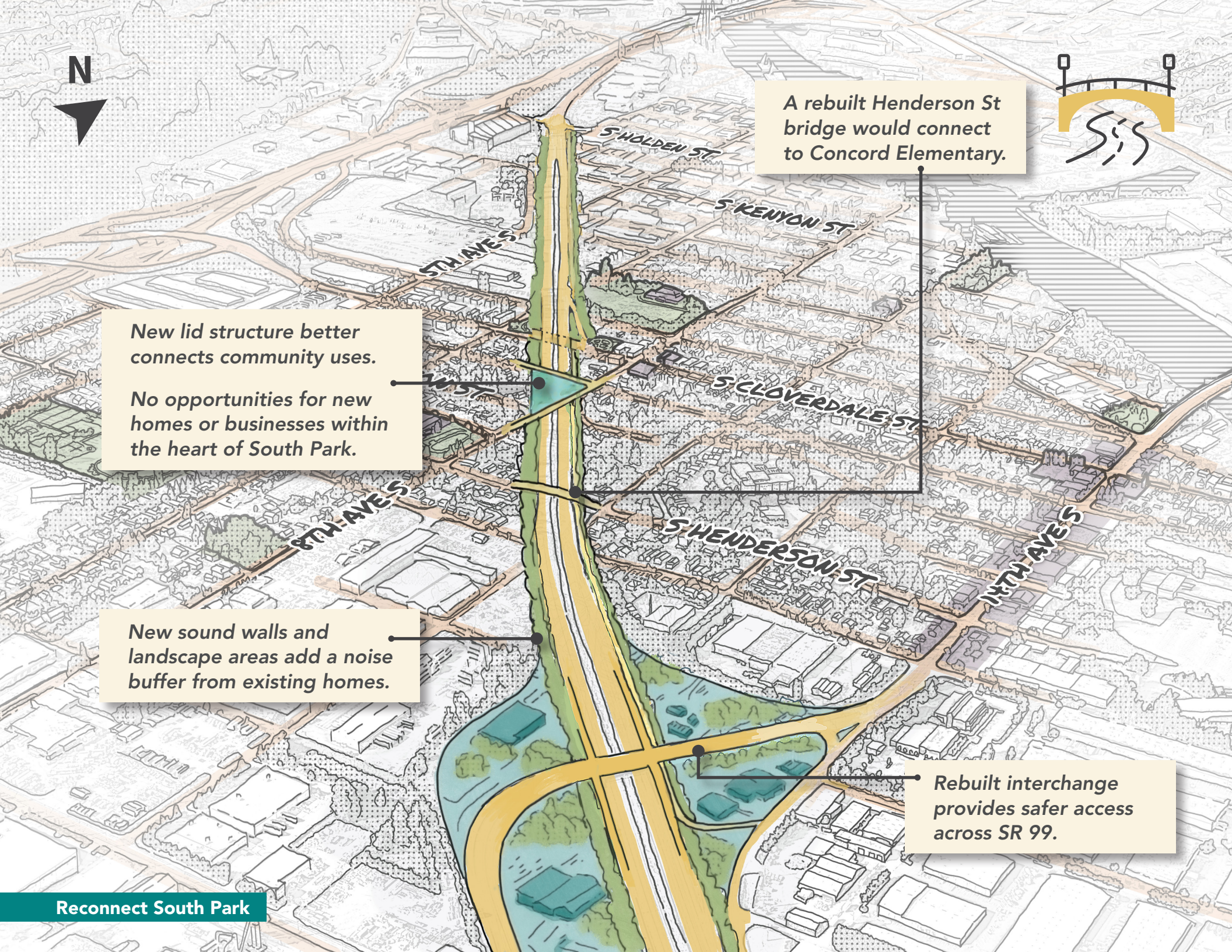


Limited changes to SR 99 south of South Park.



A rebuilt "cloverleaf" interchange would provide better connections across SR 99 and limited opportunities for reclaimed land to support new businesses.





Reconnect South Park

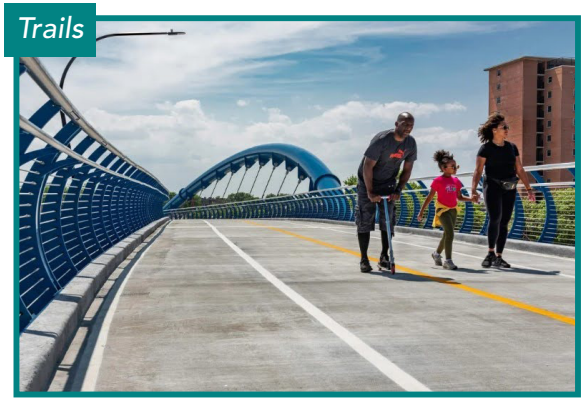
What is Possible on Bridges + Trails

New walking and biking bridges over SR 99

These photos show some ideas for what could be possible on reclaimed land and what new streets could look like.

Parks and Greenspace

Trails



POTENTIAL FUTURE COMPARISONS

Reconnect South Park

Each Potential Future presents an opportunity to modernize the SR 99 corridor, reconnect the fractured neighborhood, and improve mobility, safety, public health, the environment, and economic opportunities.

This summary comparison illustrates how each Potential Future has been evaluated. More detail on the benefits and impacts for each measure under the four Potential Futures is provided in the Potential Futures Analysis section and the Technical Documentation.

Community Considerations

In comparing between the different Potential Futures, there are many trade-offs to consider. Each Potential Future would have effects both locally within South Park and across the regional transportation network and environment.

Reroute + Reclaim would transform the layout of South Park, reconnect people and community resources currently separated by SR 99. It would create roughly 100 acres of reclaimed land, opening opportunities for new parks, housing, and businesses. This option would shift traffic patterns, including truck traffic, with substantially less traffic within South Park. Traffic would likely shift to other routes, but other routes would likely not see a large increase in total vehicles over the course of a day.

Narrower Boulevard would reconnect neighborhood streets and expand options for walking and biking. It would carry some traffic through the neighborhood, but with fewer vehicles and lower speeds than the Wider Boulevard, resulting in reduced noise and pollution in the community. It would also free up 79 acres for environmental restoration, housing, parks, and businesses. However, it would also shift some traffic and modestly increase the share of trucks on other roads.

Wider Boulevard would maintain much of the regional traffic flow through the corridor while reconnecting neighborhood streets with new intersections and adding sidewalks, bike lanes, and potential transit improvements. It would offer about 71 acres of reclaimed land but could increase exposure to traffic traveling at arterial speeds and create new safety concerns for people walking and biking along or across the corridor.

Bridges + Trails would improve pedestrian and bicycle mobility and lessen some of the current impacts from SR 99 without having to impact existing traffic patterns. New and improved crossings would keep people walking and biking separated from traffic, but bridges carry inherent seismic vulnerabilities and can create accessibility and visibility challenges that at-grade connections would not. This option would free up 17 acres of industrial land that could be repurposed for other uses. It would create smaller improvements to health and well-being.

Everyone who reads this Potential Futures Analysis will bring their own experiences and perspectives and may see the results in different ways. Community conversations may also reveal new questions, priorities, or opportunities that have not yet been explored. As you review the findings, consider not only how each Potential Future might affect your daily life, but also how it could shape opportunities for your neighbors and for future generations who will live, work, and travel through this corridor.

Continue reading to explore how each Potential Future could affect people, places, and daily life in South Park.

	Reroute + Reclaim	Narrower Boulevard
How much land could be reclaimed?	**100** acres of reclaimed land **41** acres for housing, industry, parks, and infrastructure + **59** acres for environmental and shoreline restoration	**79** acres of reclaimed land **31** acres for housing, industry, parks, and infrastructure + **48** acres for environmental and shoreline restoration
How many more housing units could be built? **one house equals 50 potential new housing units*	Up to **400** new housing units	Up to **260** new housing units
How many jobs could be created? **one worker equals 200 potential new jobs*	Up to **2,700** new jobs	Up to **1,900** new jobs
How would local traffic be affected?	**64%** less traffic in South Park *(including SR 99)*	**47%** less traffic in South Park *(including SR 99)*

Wider Boulevard

71 acres
of reclaimed land

27 acres
for housing, industry, parks, and infrastructure

+

44 acres
for environmental and shoreline restoration

Up to **210** new housing units

Up to **1,700** new jobs

25% less traffic
in South Park *(including SR 99)*

Bridges + Trails

17 acres
of reclaimed land

13 acres
for industry, parks, and infrastructure

+

4 acres
for environmental and shoreline restoration

0 new housing units

Up to **800** new jobs

1% less traffic
in South Park *(including SR 99)*

In South Park Today

35 acres
of parks and public space

~1,500
housing units

6,400+
jobs

~250,000
daily Vehicle Miles of Travel
(VMT) in 2050

If you are a…	REROUTE + RECLAIM would…	NARROWER BOULEVARD would…	WIDER BOULEVARD would…	BRIDGES + TRAILS would…
… kid getting to school or walking around the neighborhood…	… give you calm streets to walk or bike around on, without any busy roads to cross.	… give you more ways to get around, but you would still have to cross a 2-lane street.	… give you more ways to get around, but you would have to cross a busy 4-lane street with more exposure to traffic .	… give you nicer, safer way to get across and along SR 99, though they would still be noisy.
… business owner dependent on getting trucks in and out of the industrial area…	… require regional truck trips to use other routes, while improving local access within South Park.	… similarly shift some routing and improve local access within South Park.	…keep truck routing similar to today but add more intersections to navigate compared to current conditions.	… leave conditions similar to today.
… South Park resident with mobility challenges who uses transit…	… make it easy to get around South Park and to and from transit stops with the potential for more service.	… have more accessible routes to and from transit stops with the potential for more service.	… have more accessible routes to and from transit stops with the potential for more service.	… make new ADA-compliant crossings of SR-99, without changes in transit service.
… person interested in addressing environmental degradation and pollution in South Park…	… reclaim 59-100 acres of land for environmental restoration and reduce pollution from traffic	… reclaim 48-79 acres of land and reduce traffic-related pollution	… reclaim 44-71 acres of land and slightly reduce traffic pollution	… have small opportunities to address environmental issues but equal pollution from cars and trucks.
… person concerned about community stability and affordable housing…	… reclaim the most land that could be used for housing affordable to people in South Park.	… reclaim land that could be used for affordable housing along a quieter boulevard.	… reclaim a limited amount of land that could be used for affordable housing along a busy boulevard.	… no significant change.
	… all Potential Futures would need supportive policies and funding to ensure neighborhood improvements do not increase housing costs or reduce neighborhood stability.			

If you are a…	REROUTE + RECLAIM would…	NARROWER BOULEVARD would…	WIDER BOULEVARD would…	BRIDGES + TRAILS would…
… small business owner that serves the South Park community…	… make safer, more walkable streets — improving local access, encouraging foot traffic, and creating a more welcoming environment for customers.	… similarly improve foot traffic, walkability, and the street environment.	… have some improvements in access to local businesses, however freight traffic would still be present.	… make some new walking and biking connections within South Park to connect residents with businesses across SR 99.
… person who is used to driving through South Park to get across the region…	… make your trip use different roads, like I-5 or SR 509.	… probably encourage you to take other routes, but still allow you to travel through South Park.	… still allow you to traverse South Park, though it might take slightly longer.	… not change your trip much at all.
… child with asthma and live in South Park or surrounding communities…	… substantially reduce air pollution from vehicles near community hubs across South Park and surrounding communities.	… reduce air pollution from vehicles near community hubs across South Park and surrounding communities.	… slightly reduce air pollution from vehicles near community hubs across and around South Park and surrounding communities.	… have little effect on air pollution exposure from vehicles.
… salmon in the Duwamish River…	… substantially reduce the deadly pollution from tire dust flowing into the river via smaller streams and creeks, and create transformational opportunities for habitat improvements on the shoreline.	… create very significant opportunities for runoff reduction and habitat restoration.	… have moderate improvements to runoff and the potential for habitat restoration.	… not change current effects on pollutants or improve habitat.

Each of these perspectives – and more – are important to reflect and consider in identifying a community-driven vision and for refining and exploring further the ways to modernize the SR 99 corridor.

3

POTENTIAL FUTURES ANALYSIS

Understanding the Baseline: No Change Is Not Neutral

To compare Potential Futures consistently, this study uses a future baseline—a projection of what conditions in South Park and the surrounding region could look like around 2050 if no major changes were made to SR 99. The baseline provides a common reference point so that results can be measured in relative terms across different scenarios and evaluation measures. Without a shared baseline, there would be no standard or objective way to compare outcomes.

Using a baseline and evaluating scenarios as "better" or "worse" can create the impression that today's conditions are neutral. In reality, the existing corridor already carries many ongoing costs—to health and safety, to the environment, and to public resources needed to maintain aging infrastructure. **Doing nothing would not be cost- or risk-free**; it is simply the starting point for analysis.

Disclaimer

This **Potential Futures Analysis** is designed to inform discussions and not determine an outcome. Additional studies would be required to evaluate the impacts of potential futures on other communities outside of South Park.

How To Read The Potential Futures Analysis

This section presents a high-level overview of how each Potential Future may perform. It is supported by the **Potential Futures Analysis Technical Documentation**, which includes more detailed methods, sources used, rating and evaluation thresholds, data, and results. All of the results of the Potential Futures Analysis are an initial way to compare each Potential Future to a future baseline.

This analysis is a high-level, planning-stage comparison. The findings reflect the data and assumptions available at this stage. More detailed study could refine corridor concepts, study areas, and analytical methods, which may in turn adjust the results.

KEY				
Much Worse	Worse	Same	Better	Much Better
The Potential Future would have noticeably or substantially more negative effects than future baseline conditions.	**The Potential Future would have negative effects when compared to future baseline conditions.**	**The Potential Future would be comparable to future baseline conditions.**	**The Potential Future would have benefits compared to future baseline conditions.**	**The Potential Future would have noticeable or substantial benefits compared to future baseline conditions.**

All measures were evaluated on a 5-point scale from "Much Worse" to "Much Better" compared to a future baseline condition. Future baseline conditions have been set as the midpoint for every evaluation. **Each measure was evaluated within the SR 99 Corridor analysis area (described in Section 1) unless otherwise noted to expand to the South Park Community or Regional Roads & Surrounding Areas.**

Consistent information is presented for each measure including:

PUBLIC TRANSIT CONNECTIONS

CURRENT CONDITIONS

No buses currently run on SR 99 through South Park. Metro Routes 60 and 132 operate in the area but are hard to reach from some parts of the neighborhood. Transit trips to downtown Seattle take 30 to 60 minutes, compared with 20 minutes or less by car.

The nearest light-rail stations—Rainier Beach and Tukwila International Boulevard—are about 5 miles away. Sound Transit plans a new station on E Marginal Way in Tukwila, which could be reached via the Green River Trail or new future bus routes.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim would make transit stops easier to reach, with new, direct walking routes and safer, more comfortable crossings. Removing the highway barrier could also allow more direct bus routes and new stops through the neighborhood.

Narrower Boulevard would also make transit stops easier to reach, with at-grade crossings and comfortable pedestrian access. The new boulevard could support more direct bus routes and additional stops.

Wider Boulevard would similarly improve access to transit stops and allow for potential new or adjusted bus routes along or across the boulevard.

Bridges + Trails would make little change to current access or service opportunities, as existing crossings and bus routes would stay mostly the same.

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would transit stops be easier to reach?	+ Direct, comfortable pedestrian access routes with comfortable and safe transit stops	+ Direct, comfortable pedestrian access routes with comfortable and safe transit stops	+ Direct, comfortable pedestrian access routes with comfortable and safe transit stops	• Similar to baseline
Would transit connections be better?	+ Potential for more direct routes, due to removal of the highway barrier, and more stops or service	+ Potential for more direct routes, across or along the new boulevard, and more stops or service	+ Potential for more direct routes, across or along the new boulevard, and more stops or service	• Similar to baseline
COMPOSITE EVALUATION	+ BETTER	+ BETTER	+ BETTER	• SAME

For additional context and more detail, see this measure's **Technical Documentation**.

Current Conditions: Brief description of the current and future baseline conditions, with an emphasis on South Park

How Each Future Performs: Brief narrative for each Potential Future

Evaluation Table: A graphic depiction of how a composite measure was developed for each measure. An average of each submeasure was used to develop the composite evaluation.

Potential Futures Analysis Contents

HEALTH & WELLBEING

The Duwamish River Valley, where South Park lies, was historically a lush and fertile floodplain. Since industrialization, the land, air, and water in the valley have become heavily polluted. Today, South Park experiences some of the highest concentrations of pollution in Washington State. Highways, airports, and industrial uses sit directly alongside homes, schools, and parks, creating daily exposure to pollutants and safety risks. These combined impacts contribute to higher rates of asthma, heart and respiratory disease, and stress-related health issues.

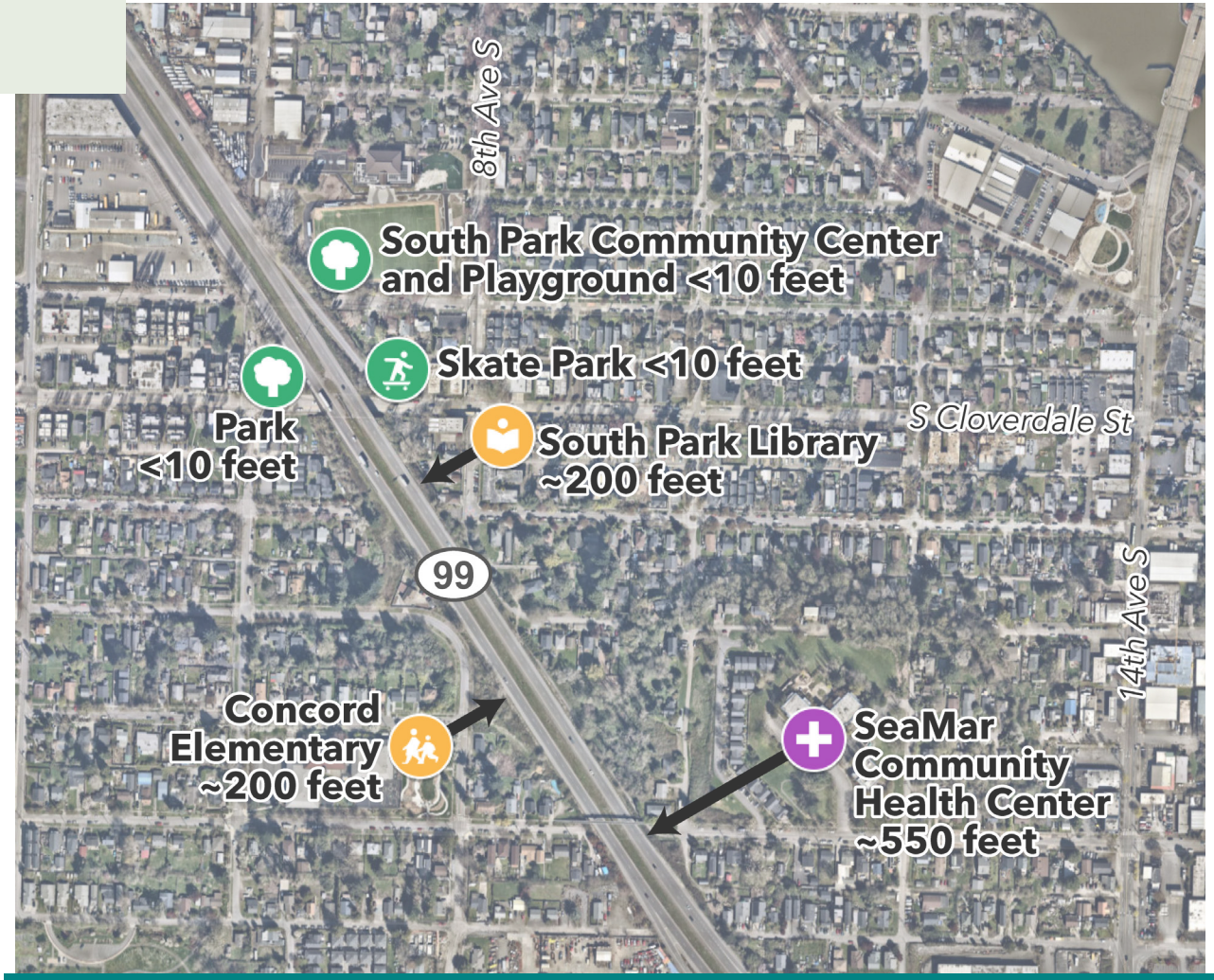
People in South Park have consistently said they want cleaner air, quieter streets, and safer places to walk, bike, and gather. They also want more trees and open spaces that support physical and mental health. The measures in this section examine how changes to SR 99 could improve these health-related conditions across South Park and adjacent communities along regional roadways.

Community health includes physical health, mental health, and environmental health.

In South Park, key community hubs like the elementary school sit just yards from the heavy truck traffic and diesel exhaust on SR 99.

While South Park is affected by many sources of pollution, diesel emissions remain one of the most harmful, contributing to elevated rates of asthma and other respiratory and cardiovascular illnesses among residents. The highway also contributes significantly to noise pollution. Considered the second largest environmental cause of health problems after air pollution, noise pollution causes long-term effects including sleep disturbance, cardiovascular disease, and learning difficulties in children.

Reducing exposure to harmful air and noise pollution is only one part of improving community health. Reconnecting streets, adding safe crossings, and expanding access to parks and public spaces would also support physical activity, mental well-being, and social connection. Each Potential Future considers how reconfiguring SR 99 could help South Park and nearby neighborhoods become healthier places to live and work—where cleaner air, safer streets, and access to nature contribute to a stronger, more resilient communities across the region.



Studies have shown that concentrations of air pollutants are highest within 500 feet of freeways. Children and older adults are more affected by air pollution, particularly those from diesel engines. In South Park, key community gathering places are within close distances of SR 99.

AIR POLLUTION

CURRENT CONDITIONS

The analysis area for this measure was Regional Roads & Surrounding Areas (not just South Park — including homes and community hubs alongside I-5, SR 509, and other regional routes.)

South Park has very high levels of air pollution, which contribute to serious health problems—especially for children, older adults, and people with respiratory or heart conditions. Most places where youth spend time, such as Concord Elementary, the library, and the South Park Community Center, sit directly beside the highway, where vehicle emissions are most concentrated. While impacts are greatest closest to the roadway, nearly all of South Park falls within 1,500 ft from SR 99, a buffer distance that is expected to experience elevated levels of air toxicity. Much of the neighborhood also experiences overlapping effects from SR 509. Living or spending time near a high-traffic corridor—especially where diesel emissions from truck traffic are present—is directly linked to higher risks of asthma, heart and lung disease, and other long-term health effects, including increased cancer risk. In addition, South Park and nearby communities across the Duwamish Valley are also affected by pollution from industry, air traffic, rail, marine ports, and other major roadways such as I-5.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim and **Narrower Boulevard** are projected to substantially reduce traffic-related air pollution near community hubs across the Regional Roads & Surrounding Areas analysis area. Residential exposure throughout this analysis area would likely remain similar overall, however there would be local improvements within South Park.

Wider Boulevard is not likely to change air pollution near residential areas within the Regional Roads & Surrounding Areas analysis area, but there may be localized changes at new intersections, with higher concentrations of air pollutants due to frequent stopping and starting. Air pollution would decrease somewhat near community hubs in the Regional Roads & Surrounding Areas analysis area.

Bridges + Trails would expose residents and community members to similar levels of air pollution to current conditions.

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would more people be exposed to air pollution where they live?	• Similar to baseline	• Similar to baseline	• Similar to baseline	• Similar to baseline
Would places where communities gather be more or less exposed to air pollution?	⊕ Potentially large decrease, with greater reductions along SR 99 corridor	⊕ Potentially large decrease	+ Moderate decrease	• Similar to baseline
COMPOSITE EVALUATION	+ BETTER	+ BETTER	+ BETTER	• SAME

Note: anticipated changes in levels of air pollution based on preliminary analysis of anticipated changes in average daily traffic and its proximity to residential land and community hubs. For additional context and more detail, see this measure's* **Technical Documentation.

NOISE POLLUTION

CURRENT CONDITIONS

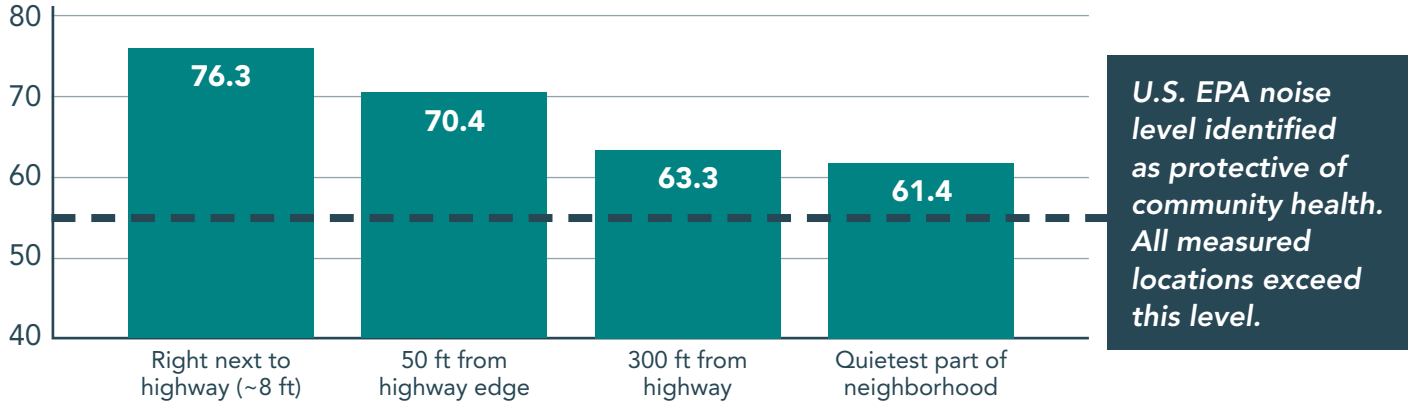
The analysis area for this measure was Regional Roads & Surrounding Areas (not just South Park — including homes and community hubs alongside I-5, SR 509, and other regional routes.)

Noise is a constant presence in South Park. Along SR 99, it's loud enough to interrupt indoor conversations and keep people awake at night. Even away from the highway, aircraft and industrial activity raise background noise above recommended community thresholds. Homes, schools, and parks close to SR 99 experience the highest exposure, with no sound barriers to lessen the effects. Concord Elementary School is less than 200 ft from SR 99, and chronic exposure to traffic and aircraft noise at schools is associated with slower reading development, reduced long-term memory, and lower standardized test performance in children. For all populations, long-term exposure to high noise levels increases risks of heart disease, high blood pressure, mental distress, and sleep disturbance.

Noise measurements taken midday at four locations across South Park, from directly beside SR 99 to the neighborhood's quietest block. Every location exceeds the EPA's 55 dBA community noise recommendation.

Note: Measurements taken with a smartphone sound-level app at four locations for planning-context purposes. Not intended as a professional acoustical survey; further study would be required for regulatory analysis.

Midday noise levels by distance from SR 99, Leq (dBA), smartphone measurements



HOW EACH FUTURE PERFORMS

Reroute + Reclaim and **Narrower Boulevard** would reduce noise pollution along SR 99. Some traffic noise would shift to other roadways, but there would likely be an overall decrease in noise near community hubs within the Regional Roads & Surrounding Areas analysis area and slightly lower exposure in residential areas.

Wider Boulevard would create slower speeds and some noise reductions along SR 99, but noise levels in South Park and within the Regional Roads & Surrounding Areas analysis area would be relatively similar to today.

Bridges + Trails would include new sound walls and landscaping to buffer noise; however, overall traffic volumes, speeds, and noise levels along SR 99 and regional roads would remain similar to today.

NOISE POLLUTION *CONT.*

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would traffic noise get better or worse where communities gather?	+ Moderate decrease, with greater reductions along SR 99 corridor	+ Moderate decrease	• Similar to baseline	• Similar to baseline
Would traffic noise get better or worse where people live?	• Similar to baseline	• Similar to baseline	• Similar to baseline	• Similar to baseline
COMPOSITE EVALUATION	+ **BETTER**	+ **BETTER**	• **SAME**	• **SAME**

Note: anticipated levels of noise pollution based on preliminary analysis of anticipated average daily traffic, traffic speeds, and proximity to residential land and community hubs. For additional context and more detail, see this measure's* **Technical Documentation.

STREET SAFETY FOR VULNERABLE ROAD USERS

CURRENT CONDITIONS

SR 99 divides South Park, creating long detours and limited safe crossings for people walking, biking, or rolling. Several serious and fatal collisions have occurred in recent years, concentrated along 14th Avenue S, S Cloverdale St, the 1st Avenue S Bridge, and the intersection of SR 99 and S Holden Street. Existing crossings of SR 99—a narrow underpass and a steep pedestrian bridge—are not ADA-compliant and are difficult to navigate, especially for people with limited mobility.

HOW EACH FUTURE PERFORMS

All Potential Futures were evaluated using a method to predict future collisions in South Park based on projected vehicle volumes and speeds. Speed is the single biggest predictor of whether someone outside a vehicle survives a crash. However, many factors contribute to collisions and these results should be understood as a consistent way to understand all of the options. Where scenarios divert traffic to other roads, increased volumes on those routes could elevate collision risk. This analysis focused within South Park, and future studies will need to assess effects elsewhere.

Reroute + Reclaim would eliminate high-speed highway traffic within the center of South Park and reconnect neighborhood streets. The new north–south path along the former SR 99 would improve access and safety for all modes.

Narrower Boulevard and **Wider Boulevard** would add signalized crossings and a linear trail. These designs would restore access but could increase interactions between vehicles and people walking or biking and lead to more collisions. **Wider Boulevard**, because of higher volumes of regional traffic interacting with pedestrians, bicyclists, and local traffic, is projected to have an increase in injury and fatal collisions.

Bridges + Trails would maintain current traffic conditions while adding a separated trail and accessible ramps over SR 99. This option would keep high speed traffic separated from other modes and result in a potential decrease in serious injury and fatal collisions.

Existing crossings of SR 99 put people in close proximity to fast-moving traffic and heavy vehicles.

STREET SAFETY FOR VULNERABLE ROAD USERS *CONT.*

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Are people less likely to get into a serious or fatal collision in South Park?	+ Potential improvement from baseline	− Potential worsening from baseline	⛔ Potential substantial worsening from baseline	+ Potential improvement from baseline
Would it be safer for a person walking or rolling around South Park?	• Similar to baseline	− Potential increase in collisions from baseline	⛔ Potential substantial increase in collisions from baseline	• Similar to baseline
Would getting around be safer and more comfortable for people with limited mobility?	+ All new crossings at street-level across small local streets rather than needing bridges or underpasses	+ All new crossings at street-level; some crossings with signals	+ All new crossings at street-level; some crossings with signals across a wide road with freight traffic	• New crossings may have lighting and safety improvements, but ramps still needed to cross SR 99
COMPOSITE EVALUATION	+ **BETTER**	• **SAME**	− **WORSE**	• **SAME**

Note: During this phase of assessment, there has not been an effort to assess the potential for increased collisions in areas outside of South Park that could result from vehicle traffic diverted from SR 99. For additional context and more detail, see this measure's* **Technical Documentation.

ACCESS TO PARKS AND PUBLIC SPACE

CURRENT CONDITIONS

Many parks and open spaces in South Park are located directly adjacent to SR 99; the presence of the highway makes it difficult to reach parks on opposite sides. Existing parks such as Duwamish Waterway Park and Marra-Desimone Park are valuable community assets but remain disconnected from each other and from nearby residential areas due to the current roadway arrangement. Since many existing public green spaces sit next to SR 99, noise and air pollution reduce comfort and health benefits for community members. Because of these gaps, the City of Seattle identifies South Park as a top priority for future public space investment.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim would create extensive opportunity for new parks and public spaces—up to 100 acres of land, including about 59 acres along the Duwamish River. (For reference, Jefferson Park in Beacon Hill is 52 acres not including the golf areas.) There could be a large central green space in South Park and opportunities to connect smaller existing parks, such as River City Skate Park, into a more usable, continuous open space network with a variety of uses.

Narrower Boulevard and **Wider Boulevard** would also expand access to parks and public spaces. Each would provide new or improved green areas along the boulevard and around intersections, creating a more connected open space system across South Park. Both would offer meaningful opportunities for new recreation and gathering spaces.

Bridges + Trails would make some improvements, including landscaped areas and planted buffers. Rebuilt overpasses would somewhat improve access between existing parks and open spaces. This option would also free up some industrial land that could be used for passive green space.

Access to high quality parks is an important part of building and sustaining community.

ACCESS TO PARKS AND PUBLIC SPACE *CONT.*

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would it be easier to get to parks and open spaces?	⊕ Adds 6+ new crossings between west and east side parks	+ Adds 2+ new crossings between west and east side parks	⊕ Adds 2+ new crossings between west and east side parks	+ New and improved crossings between west and east side parks
Would there be space for new parks and open spaces?	⊕ 59-100 acres of reclaimed land for parks or public spaces	⊕ 48-79 acres of reclaimed land for parks or public spaces	⊕ 44-71 acres of reclaimed land for parks or public spaces	+ 4-17 acres of reclaimed land for passive green space
Would areas in and around parks and public spaces become more inviting and functional?	⊕ Opportunity for large, central green space connected to community hubs, as well as opportunity for smaller spaces connected to local businesses	+ Opportunity for large greenspace adjacent to quieter boulevard. New intersections have some potential for business and community development.	+ Opportunity for large greenspace adjacent to busier boulevard. New intersections have some potential for business and community development.	• Limited opportunity to introduce new business and community development
COMPOSITE EVALUATION	⊕ **MUCH BETTER**	+ **BETTER**	+ **BETTER**	+ **BETTER**

Note: Each Potential Future has many possible configurations of new connections. The conceptual designs analyzed for this report provide a consistent approach to balancing the number of new connections with the potential for unintended results of changes, such as increased cut-through traffic. Future phases of study and design may result in changes to the number and location of new connections. For additional context and more detail, see this measure's* **Technical Documentation.

PUBLIC HEALTH

CURRENT CONDITIONS

South Park ranks among the areas of highest health risk in Seattle and the state. The neighborhood is in the 99th percentile for negative health outcomes within Seattle including asthma, diabetes, obesity, poor mental health, and low life expectancy. The State also recognizes South Park as having among the worst combined environmental health risks* from factors such as proximity to heavy traffic, industrial facilities, and hazardous waste sites.

Diesel truck traffic, industrial activity, and major transportation corridors expose residents to high levels of pollution. Children—who make up about 30% of South Park's population—and older adults are especially vulnerable to these conditions. The combined effects of air and noise pollution, unsafe walking environments, and limited access to parks and recreation contribute to the area's poor health outcomes.

The analysis area for this measure includes the analysis areas for each component measure.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim would provide significant benefits across public health-related measures.

Narrower Boulevard and **Wider Boulevard** would provide benefits across most public health-related measures, with **Narrower Boulevard** performing better than **Wider Boulevard** on several measures. While providing many benefits overall, they may introduce new safety risks at the boulevard intersections.

Bridges + Trails would provide modest changes relative to existing conditions.

Community features like parks, pollution, transportation systems, and affordability can benefit or impact public health in direct and indirect ways

PUBLIC HEALTH *CONT.*

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would traffic-related air pollution be reduced?*	+	+	+	•
Would traffic noise get better?*	+	+	•	•
Would traffic collisions happen less often and be less severe?	+	•	−	•
Would it be easier to get to new and existing parks and open spaces?	⊕	+	+	+
Would it be easier to get around by walking or bicycling?	⊕	+	+	•
Would it be easier to get around by public transit?	+	+	+	•
Would waterways be cleaner?	⊕	⊕	⊕	•
Would the local area respond better to heat and floods?	⊕	⊕	⊕	•
Would there be more trees, vegetation, and green spaces?	⊕	⊕	⊕	•
Would important wildlife habitats be larger and more connected?	⊕	⊕	⊕	•
Would there be more, high-quality affordable housing, and stable, well-paying jobs?	⊕	+	+	•
COMPOSITE EVALUATION	⊕ **MUCH BETTER**	+ **BETTER**	+ **BETTER**	• **SAME**

Note that these measures used the Regional Roads & Surrounding Areas analysis area. For additional context and more detail, see this measure's* **Technical Documentation.

AFFORDABILITY & ECONOMIC OPPORTUNITY

South Park is a resilient, vibrant, and active community that also faces some of the region's steepest affordability and opportunity gaps. Rising housing costs and a lack of well-paying jobs create economic challenges for South Park residents. Opportunity is harder to come by for South Park residents – there is low access to transit, libraries, fresh produce, community centers, and parks. Median rent and home values are lower than the Seattle average; however, per capita income is also 31% less than the Seattle average. 53% of renters and 20% of homeowners spend more than 30% of their income on housing costs. Rising housing costs have reduced residential stability for long-term residents, with many having left the neighborhood and more at risk as rents and property taxes continue to climb.

South Park's industrial and commercial areas support several thousand jobs in manufacturing, transportation, construction, food service, and local retail. Many are small, locally owned businesses that serve the regional industrial economy and nearby neighborhoods. Rising land and lease costs, redevelopment activity, and aging infrastructure make it difficult for these firms to stay and grow. Industrial businesses need modern utilities and reliable access for freight, while small retailers depend on safe streets, steady foot traffic, and affordable commercial space.

In response to these conditions, community-led efforts have begun to support local economic development, assist residents with stable housing, and expand local economic opportunity. These efforts reflect the neighborhood's commitment to community engagement in planning for South Park's future prosperity.

Planning for Affordability

Major public investments can strengthen neighborhoods—but they can also make them less affordable if not planned carefully. Improving infrastructure and access in South Park could increase demand for housing and property, putting added pressure on residents and small businesses who are already at risk of facing housing cost pressures.

While the Potential Futures show how the SR 99 corridor could change physically, none of the scenarios alone would make housing or commercial space more affordable. Achieving that outcome will require sustained coordination—through policies, partnerships, and funding that keep people and businesses in place as change occurs.

To address this, the City and the Reconnect South Park Coalition are **investing early and significantly in affordability and stability planning**. This work will identify community-informed strategies and challenges at the outset, so they can guide decisions throughout future phases of corridor modernization and investment.

The effort focuses on practical approaches to:

- Preserve and expand affordable housing;
- Support small businesses and local employment;
- Strengthen community stewardship of land and assets; and
- Align public investment with long-term neighborhood and economic stability.

By embedding these considerations early, the project aims to ensure that modernizing the SR 99 corridor improves daily life in South Park while protecting the residents, businesses, and industries that make the community work.

Engaging with South Park residents and business owners around their needs for affordability can center the experience and priorities of the South Park community.

What can be done about affordability and stability?

Planning for affordability and community stability as a core part of Reconnect South Park will require policy tools and community-based strategies to be developed alongside physical changes. As the work of Reconnect South Park progresses, the City and community will continue to work in partnership to identify which tools will be right for South Park and surrounding communities and the Seattle context.

Examples of neighborhood stability tools that could be applicable to businesses or residents include:

- Rent stabilization for residents and businesses
- Tenant protections, including for businesses
- Zoning & land use rules to support desired development scenarios
- Community Land Trusts, land banking and nonprofit-owned commercial space
- Tax incentives and financial assistance for land owners and small businesses
- Community Benefits Agreements (CBAs) and developer requirements
- Local procurement and workforce development
- "Legacy Business" programs
- Streamlined permitting and reduced red tape to support small business growth

Each of these tools has strengths, and challenges that would need to be considered before they were implemented. Planning early and consistently for affordability and stability, along with planning for infrastructure, will aid in the success of the Reconnect South Park initiative.

**Note: The analysis below examines each Potential Future's physical potential to create space for housing, jobs, and small-business growth. Because these futures are defined primarily by their physical form, the results show what could be possible—not guaranteed outcomes. Achieving desired results will depend on policy choices, partnerships, and strategies developed through the community investment planning process that is commencing in the spring of 2026.*

AFFORDABLE HOUSING

CURRENT CONDITIONS

South Park remains one of Seattle's few relatively affordable neighborhoods, but rising property values and rents are pushing out long-time residents and families who have built their lives there. The value of a typical home in South Park has steadily increased in the past two decades, reaching peaks in 2024. Median gross home rents are $1,795 per month and median home values are $619,800, which are 12% and 34% less, respectively, relative to Seattle.

Community-led housing models — including land trusts, resale-restricted ownership, and cooperative housing — are gaining traction in South Park as a strategy to keep housing affordable and under local control amidst rising property values and housing cost pressures. However, opportunities for affordable land are limited.

HOW EACH FUTURE PERFORMS

All Potential Futures would not produce affordable housing on their own. Lasting affordability would depend on policy decisions and partnerships that enable community-led approaches such as land trusts or cooperative housing.

Reroute + Reclaim would provide the most opportunity for affordable housing development.

Narrower Boulevard and **Wider Boulevard** would unlock available land for additional housing if street redesigns are compatible with new homes.

Bridges + Trails would not directly improve housing quality or supply, and any indirect improvements to housing due to new connections over SR 99 would likely be minor.

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would there be space for more affordable housing?	⊕ Potential for substantially more affordable units	⊕ Potential for substantially more affordable units	+ Potential for more affordable units	• No new housing
Would new housing be impacted by being close to high-traffic roads?	⊕ All new units far from high-traffic roads and near other land uses	⊕ All new units far from high-traffic roads* and near other land uses	− New units near a high-traffic road	• No new housing
COMPOSITE EVALUATION	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	• **SAME**	• **SAME**

In this analysis, 'high-traffic' refers to roadways carrying more than 30,000 vehicles per day. Under Narrower Boulevard, SR 99 would fall below this threshold. See* **Technical Documentation *for methodology. Note: Housing stability outcomes are evaluated based on changes to available land associated with each future, while broader decisions affecting the housing market, including transit service, zoning, and regional economic drivers are outside the scope of this Potential Futures Analysis. For additional context and more detail, see this measure's* **Technical Documentation**.

NEIGHBORHOOD STABILITY

CURRENT CONDITIONS

South Park residents and community organizations are actively working to protect the neighborhood's stability and cultural vitality amid increasing development pressure. Rising property values and rents have already pushed out many long-time residents and small businesses, and those who remain face ongoing cost pressures that threaten their ability to stay. In response, local leaders are organizing around housing, small business, and land stewardship efforts that help residents remain in place and maintain community control over future growth. These community-led efforts are complemented by City and regional initiatives that provide critical funding and policy support to advance local priorities.

HOW EACH FUTURE PERFORMS

All Potential Futures would require strong neighborhood stability strategies—such as community land trusts, renter protections, and locally driven housing or business stabilization efforts—to help current residents and businesses remain in South Park as investment and physical change occur.

Reroute + Reclaim would have the most land and highest potential for community transformation, expanding opportunities for affordable housing and business space in an area where such projects often lack available sites. It could also raise cost pressures, increasing the need for neighborhood stability measures.

Narrower Boulevard and **Wider Boulevard** would also provide new land for housing and business uses, offering potential for new affordable developments but also some risk of cost pressures.

Bridges + Trails would not create new housing or business space. Improvements along the highway edges and crossings could increase nearby property values, but they would not create opportunities for new affordable development.

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Could the pressure to move away from South Park be reduced through development of new houses and businesses?	+ Most new affordable housing and business space potential	+ Some potential for new affordable housing and business space	+ Some potential for new affordable housing and business space	• No changes to housing or business opportunities
Would policies be needed to reduce the pressure to move away from South Park caused by changes to SR 99?	− Possible increase in property values unless neighborhood stability policies are adopted	− Possible increase in property values unless neighborhood stability policies are adopted	− Possible increase in property values unless neighborhood stability policies are adopted	− Possible increase in property values unless neighborhood stability policies are adopted
COMPOSITE EVALUATION	+ **BETTER**	• **SAME**	• **SAME**	− **WORSE**

For additional context and more detail, see this measure's **Technical Documentation**.

LOCAL BUSINESS GROWTH

CURRENT CONDITIONS

South Park is known for its deep cultural roots and a strong sense of community. It's also home to a resilient business landscape. South Park currently has a diverse economy, including industrial parks, a local business district, and Seattle's only working farm. More than 30 family-owned businesses operate across sectors such as food service, retail, auto repair, wellness, and creative industries. Many of these businesses reflect the area's Latino heritage and have longstanding ties to the neighborhood. These businesses also face the same affordability challenges as residents, and there are concerns about being priced out from the area.

At the same time, South Park's identity as a working waterfront and industrial hub is a defining economic asset. Industrial businesses and numerous logistics, fabrication, and marine service companies benefit from the nearby Duwamish Waterway and major freight routes. This dual identity—as both a small-business corridor and a vital industrial zone—positions South Park uniquely within Seattle's economy, and its future will depend on how investments support both identities.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim would change how freight traffic moves through the area, shifting regional patterns while improving local circulation. Reclaimed land could provide new sites for business development within the corridor. Reconnecting streets and separating residential areas from freight routes could improve safety and access for industrial businesses while creating a more welcoming environment for retail activity.

Narrower Boulevard would moderately change how freight traffic arrives and moves around in the area. Reclaimed land could create opportunities for industrial and retail development along the corridor, while also improving visibility and access for local businesses.

Wider Boulevard would not substantially change truck movement in the area. Reclaimed land could create opportunities for industrial and retail development along the corridor, but boulevard-adjacent sites would be located next to a busy freight street, reducing their suitability for pedestrian-oriented retail or small business activity.

Bridges + Trails would not require freight routes to shift, maintaining truck access patterns and business operating conditions similar to today.

LOCAL BUSINESS GROWTH *CONT.*

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would small businesses be easy to get to?	⊕ New street connections improve business access	⊕ New street connections improve business access	+ New street connections slightly improve business access	• No significant changes
Would deliveries be easier to make?	− Street changes limit truck access through South Park	− Street changes limit truck access through South Park	• Freight routes on SR 99 unchanged	• Freight routes on SR 99 unchanged
Would it be easier and safer to visit local businesses?	⊕ Improved visibility, appeal, and safety for businesses	⊕ Improved visibility, appeal, and safety for "main street" businesses	+ Bicycle and pedestrian improvements could offset negative impacts of truck traffic	• High freight volumes make the area less attractive for small, local businesses
Would land be available for new businesses and more jobs?	⊕ Substantial reclaimed land potential	+ Moderate reclaimed land potential	+ Moderate reclaimed land potential	• Minimal reclaimed land
COMPOSITE EVALUATION	+ **BETTER**	+ **BETTER**	+ **BETTER**	• **SAME**

Note: Business and economic development outcomes are evaluated based on changes to available land associated with each Potential Future, while broader changes in the local economic environment, zoning, and regional economic drivers are outside the scope of this Potential Futures Analysis. For additional context and more detail, see this measure's* **Technical Documentation.

JOB OPPORTUNITIES

CURRENT CONDITIONS

The greater South Park area is part of the Duwamish Manufacturing and Industrial Center—one of the largest concentrations of industrial and maritime employment in the region. Most of the area's roughly 6,400 jobs are in manufacturing, transportation, warehousing, and construction, supported by nearby port, freight, and logistics facilities. These sectors form the backbone of the regional industrial economy, providing skilled and middle-wage jobs that are essential to Seattle's competitiveness.

Within South Park itself, smaller employers add diversity to the job base. Local restaurants, retail shops, and service providers offer employment that is more accessible to neighborhood residents, many of whom work close to home. Together, these industrial and small-business jobs make South Park one of the few areas in Seattle where a range of work—industrial, commercial, and service—is still concentrated in close proximity.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim, **Narrower Boulevard**, and **Wider Boulevard** would generate many construction job opportunities from the reconstruction of the SR 99 corridor, including the demolition of the current highway, rebuilding the boulevard and/or recreating the street grid, and construction of new uses on reclaimed land. New land uses could generate many new, permanent jobs. Job quality would benefit from diverse commercial and public uses of reclaimed land.

Bridges + Trails would support the lowest potential for new jobs, though there would still be jobs for construction of transportation infrastructure across and along SR 99.

The Potential Futures would each have opportunities for long-term jobs in the industrial areas surrounding residential South Park, local businesses, and construction jobs.

JOB OPPORTUNITIES *CONT.*

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would there be more jobs in the long-term?	⊕ Potential for substantial increase in number of jobs	⊕ Potential for substantial increase in number of jobs	⊕ Potential for substantial increase in number of jobs	+ Potential for increase in number of new jobs
Would there be more short-term construction jobs?	⊕ Removing SR 99 and rebuilding street grid would create many construction jobs	⊕ Reconstruction of the corridor as a boulevard would create many construction jobs	⊕ Reconstruction of the corridor as a boulevard would create many construction jobs	+ Bridge and trail developments would create some construction jobs
Would the jobs be stable, skilled, and well-paying?	⊕ Substantial reclaimed land and improved business attractiveness could support diverse job types and higher job quality	⊕ Repurposed land and improved business attractiveness could improve job quality	⊕ Repurposed land and improved business attractiveness could improve job quality	+ Minimal reclaimed land for new jobs, but improved street connectivity may improve job quality
COMPOSITE EVALUATION	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	+ **BETTER**

For additional context and more detail, see this measure's **Technical Documentation**.

MOBILITY & CONNECTIVITY

Today, SR 99 helps move people and goods through the region, but within South Park it severely limits local travel options. The highway divides the neighborhood, creating a barrier that makes daily trips—like getting to school, the grocery store, or a friend's house—difficult or unsafe without driving. The measures in this section examine how changes to SR 99 could restore neighborhood connections while maintaining reliable regional travel.

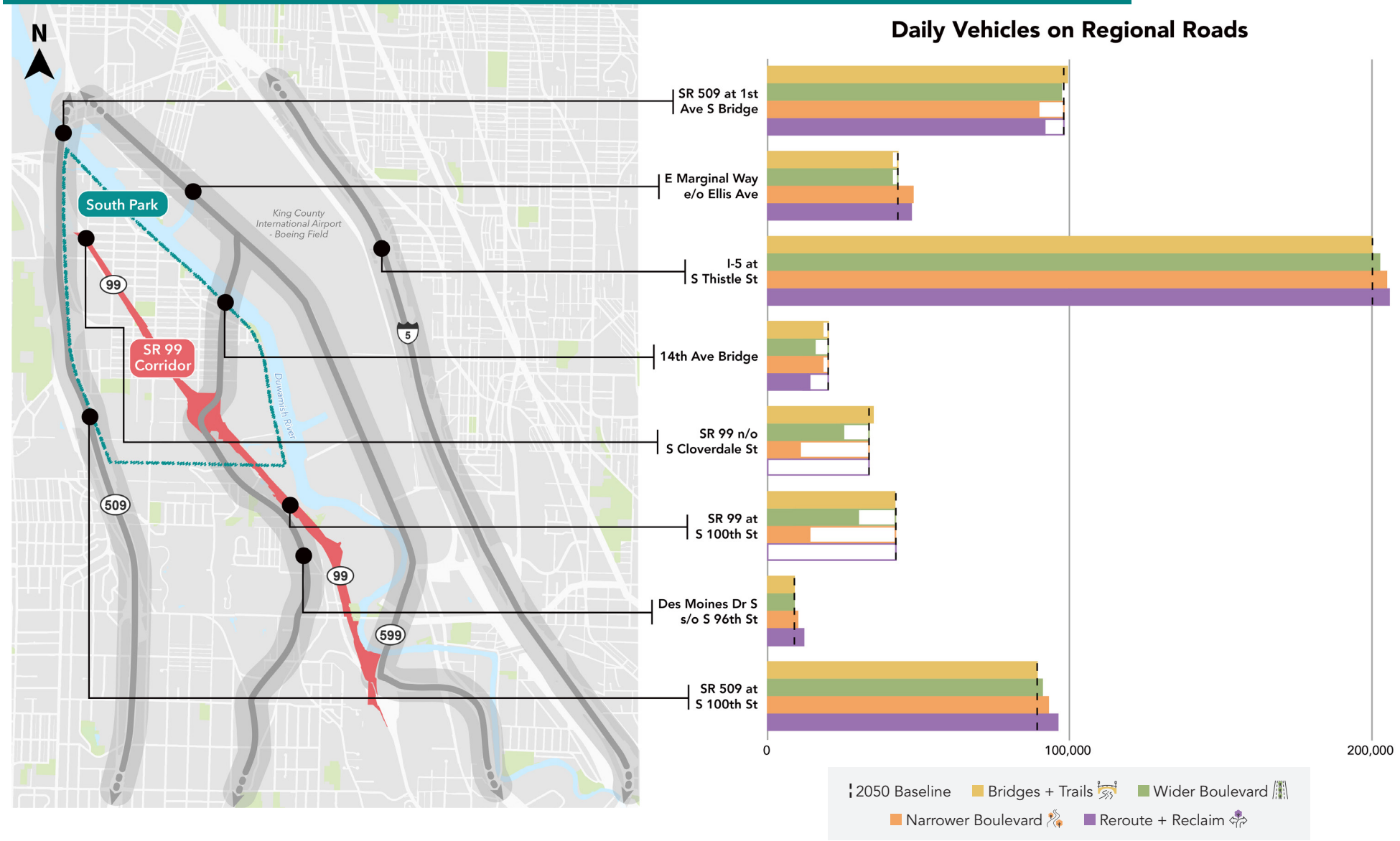
SR 99 carries relatively low traffic volumes compared with other nearby highways and primarily serves through-traffic and freight rather than local residents (who make up only about 10% of traffic on this segment). For those living in South Park, the highway leaves few safe or direct ways to move within the neighborhood. There are only two crossings within the three-mile study area. The street-level crossing at S Cloverdale Street has narrow sidewalks but no bike facilities, and the pedestrian bridge at S Henderson Street is too steep for a wheelchair user or most bicyclists. These gaps make it hard—especially for residents without cars—to reach everyday destinations safely and reliably. Trails running north and south of South Park do not connect through the neighborhood, and transit service is limited, with long walks to bus stops, infrequent service, and extended travel times to downtown.

People in South Park have expressed a desire for safer, more reliable ways to travel within their neighborhood and to nearby destinations without depending entirely on cars. At the same time, commuters and freight operators rely on a regional network that supports efficient and predictable movement of people and goods. Future designs must balance these needs—reconnecting local streets, improving safety and access for all modes, and maintaining effective regional mobility.

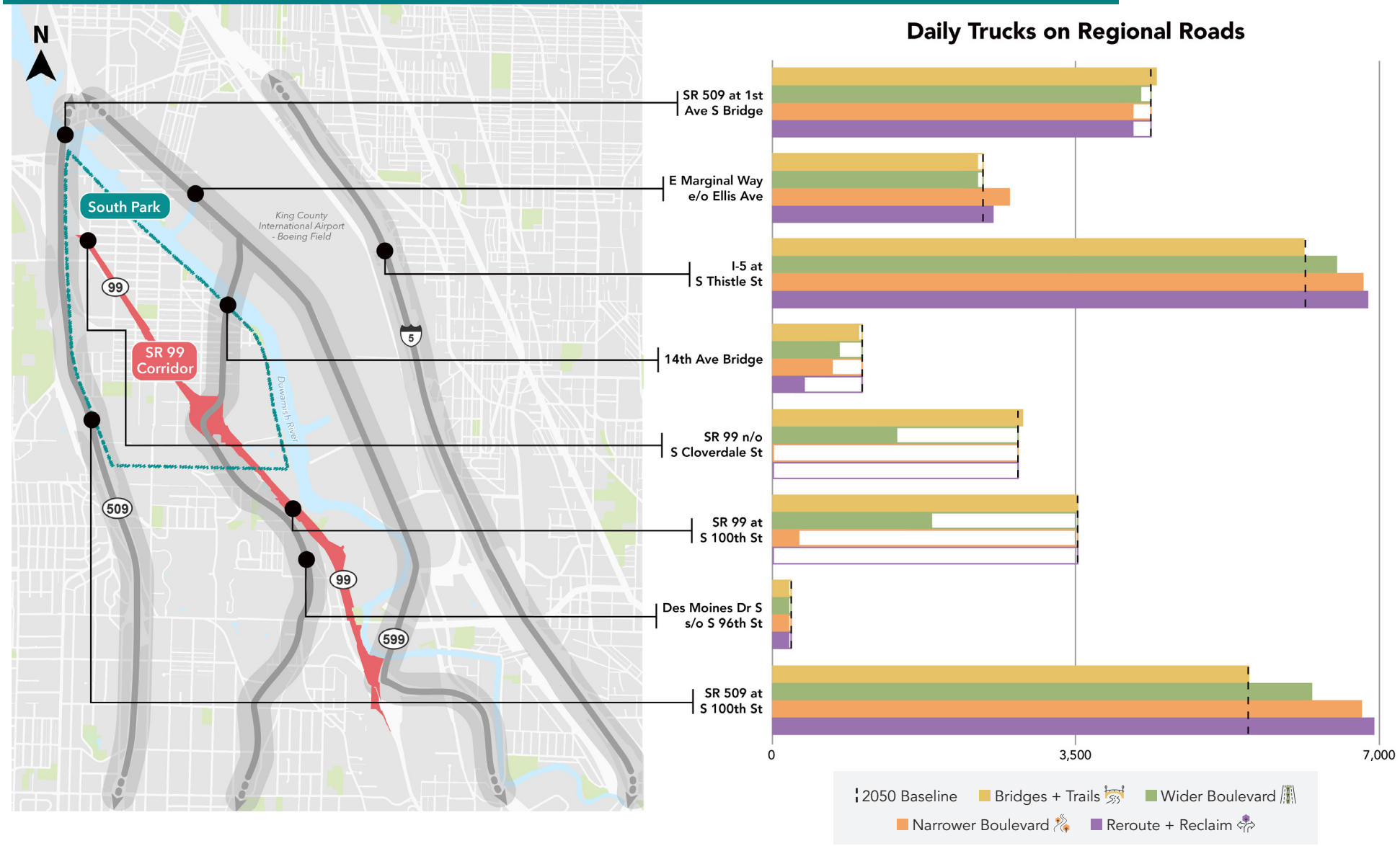
The narrow sidewalk along S Cloverdale St under SR 99 is one of the few places to cross from one side of SR 99 to the other

Analysis for this phase of Reconnect South Park is preliminary and uses tools that provide a high-level look at how travel patterns could change in each Potential Future. Future phases of analysis will need to refine this analysis based on a community-driven vision for SR 99 within South Park and the potential effects of changes to SR 99 on other regional roads and communities surrounding South Park that could experience changes in vehicle traffic as a result of changes to SR 99.

Each Potential Future would result in different changes in traffic patterns. This figure shows changes in total vehicles.



Each Potential Future would result in different changes in traffic patterns. This figure shows changes in total trucks.



REGIONAL TRAFFIC

CURRENT CONDITIONS

The analysis area for this measure was Regional Roads & Surrounding Areas (not just South Park — including homes and community hubs alongside I-5, SR 509, and other regional routes.)

SR 99 runs parallel to I-5 and SR 509, which together handle most regional travel. The SR 509 Completion Project will connect directly to I-5 south of Sea-Tac Airport as soon as 2028. Most trips (90%) on SR 99 are drivers passing through South Park rather than residents, and SR 99 carries substantial freight traffic.

HOW EACH FUTURE PERFORMS

In cities that have removed or narrowed highways, a meaningful share of the traffic has typically not reappeared on nearby roads — some people change their route, their timing, mode of travel, or whether they make the trip. This analysis took a conservative approach and didn't adjust the numbers for that pattern.

Under any of the scenarios that change SR 99, traffic would spread across multiple existing routes. Changes to daily vehicle volumes on SR 509 and I-5 in **All Potential Futures** are projected to be limited compared to what those roads already handle (see previous pages for route-by-route detail). It is possible that traffic diverted from SR 99 to existing alternative routes would affect peak period operations of these alternative routes, which will be assessed in future planning phases.

Reroute + Reclaim and **Narrower Boulevard** would shift truck traffic to other regional freight routes like I-5 and SR 509 and thus have the potential to create a measured increase in the share of trucks using those routes.

Wider Boulevard and **Bridges + Trails** are not likely to meaningfully change the share of trucks using other regional routes.

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would daily traffic grow on I-5 and SR 509?	• Similar to baseline	• Similar to baseline	• Similar to baseline	• Similar to baseline
Would it feel like there are more trucks traveling on I-5 and SR 509?	– Increase in truck share	– Increase in truck share	• Similar to baseline	• Similar to baseline
COMPOSITE EVALUATION	– **WORSE**	– **WORSE**	• **SAME**	• **SAME**

Note: The analysis for this Potential Futures Analysis has looked at the potential diversion of daily traffic to other regional roads. This is a high-level assessment and does not replace more detailed assessment as part of future phases and studies. For additional context and more detail, see this measure's* **Technical Documentation.

LOCAL VEHICULAR TRAFFIC

CURRENT CONDITIONS

Due to the highway, there is a lot of vehicle traffic passing through South Park. In 2050, if things are the same as today, total daily vehicle miles travelled (VMT) within South Park is estimated to be 251,000 with 18,900 from trucks. Total VMT on surface streets (excluding SR 99) is forecasted to be 91,000 per day with 4,900 from trucks.

Driving across South Park typically takes 5 to 7 minutes, but the disconnected street grid adds extra travel time. Freight traffic from the industrial areas just south of South Park will often get to and from the area by traveling along SR 99 or 14th Avenue S.

The analysis area for this measure includes the SR 99 Corridor and the South Park Community.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim would greatly reduce car and truck travel in South Park overall.

Narrower Boulevard and **Wider Boulevard** would also lower total traffic in South Park. Under either option, SR 99 itself would become a surface street, so traffic that currently runs on the highway would now interact more with the neighborhood. The boulevards would be more visible than the highway, which might also make traffic feel heavier, particularly with the Wider Boulevard.

Bridges + Trails would have a minimal effect on traffic in South Park.

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would there be more traffic in South Park overall?	⊕ Approximately 2/3 decrease	⊕ Approximately 1/2 decrease	+ Approximately 1/4 decrease	• Similar to baseline
If SR 99 is now a local street, how much would its traffic raise total street traffic in South Park?	• N/A	− Approximately 1/8 increase	⊖ Approximately 1/2 increase	• N/A
Would there be more trucks in South Park overall?	⊕ Approximately 3/4 decrease	⊕ Approximately 3/4 decrease	⊕ Approximately 1/2 decrease	• Similar to baseline
If SR 99 is now a local street, how much would its trucks raise total truck traffic on South Park streets?	• N/A	• Similar to baseline	⊖ Approximately 1/2 increase	• N/A
COMPOSITE EVALUATION	+ **BETTER**	+ **BETTER**	• **SAME**	• **SAME**

Note: Traffic volumes and distribution patterns at this stage are based on high-level modeling. Results would be refined in future planning phases with more detailed analysis. For additional context and more detail, see this measure's* **Technical Documentation.

NEIGHBORHOOD RECONNECTION

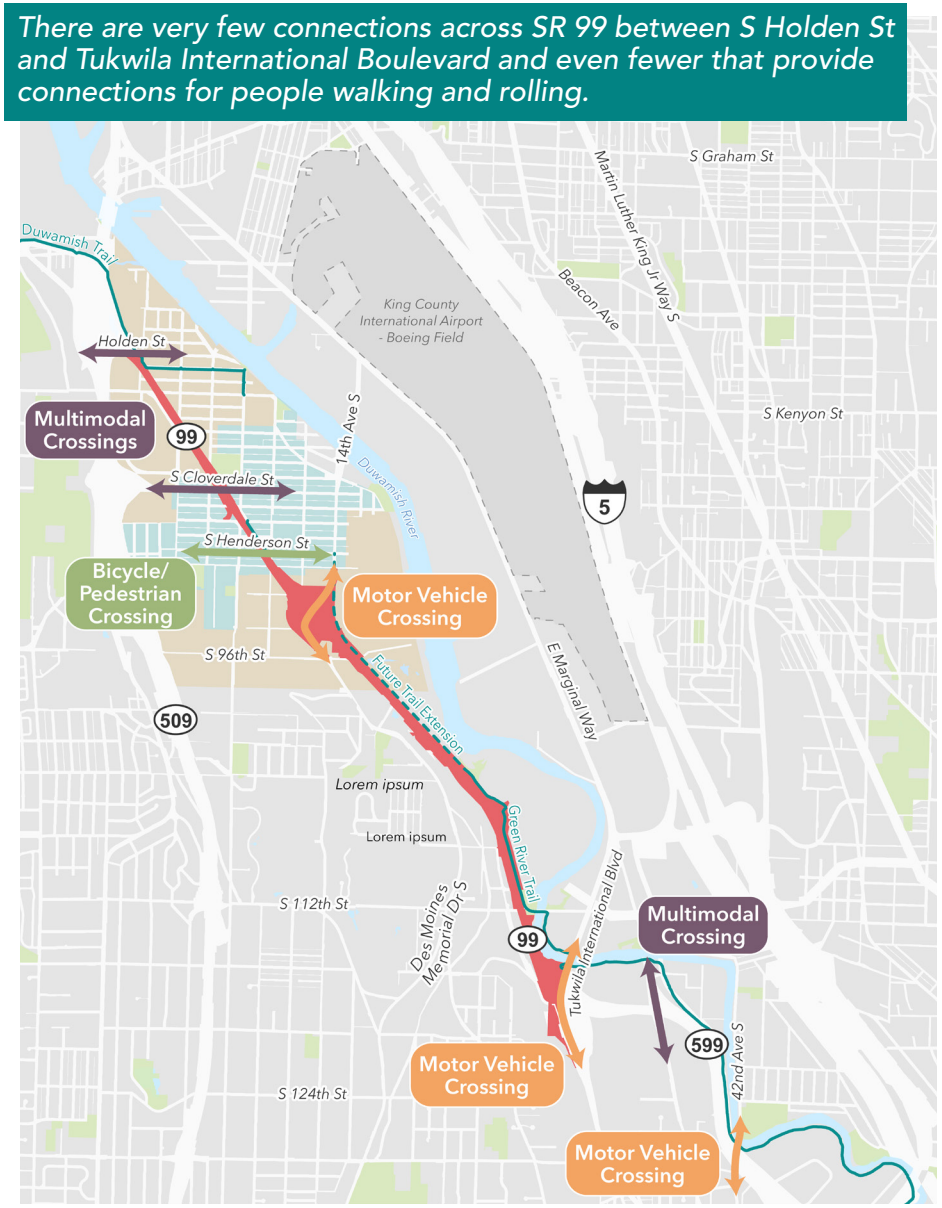
CURRENT CONDITIONS

SR 99 cuts diagonally across South Park's street grid, creating 22 dead-end streets and dividing the neighborhood in two. In this three mile segment, there are just two places to walk or drive across the highway and none that work well for bikers. The barrier created by the highway makes it difficult to walk, bike, or drive even short distances to schools, parks, and businesses.

Physical barriers that sever a neighborhood's street grid have measurable effects beyond travel time. Research links reduced walkability to lower rates of physical activity, fewer day-to-day social ties, and reduced access to nearby services — all of which shape long-term health and civic outcomes.

Two regional trails approach South Park from opposite directions but do not yet connect. To the south, the Green River Trail runs almost 20 miles through the river valley; to the north, the Duwamish Trail follows the river toward the Salish Sea and links to the Alki Trail. Between them, the gap through South Park is bridged only by on-street bike routes and a narrow path next to the highway.

There are very few connections across SR 99 between S Holden St and Tukwila International Boulevard and even fewer that provide connections for people walking and rolling.



NEIGHBORHOOD RECONNECTION *CONT.*

HOW EACH FUTURE PERFORMS

Reroute + Reclaim would fully remove the barrier created by SR 99. It would create many new opportunities to reconnect routes for access to community hubs, the regional trail system, and other amenities.

Narrower Boulevard and **Wider Boulevard** would both add at least two new at-grade intersections, making traveling across SR 99 more direct.

Bridges + Trails would have new and improved crossings of SR 99. All crossings would still require traveling under or over the highway.

All Potential Futures would connect the Duwamish and Green River Trails, though the level of comfort and separation from vehicles would vary significantly.

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would the freeway barrier go away so people can easily cross the neighborhood?	⊕ Full removal of SR 99 barrier	⊕ Full removal of SR 99 barrier, 2-lane street does not present a significant new barrier	+ Full removal of SR 99 barrier, 4-lane street may create some physical and perceived barriers	• No removal of barriers
Would there be new direct connections across the highway between parts of South Park?	⊕ Potential for many new connections across SR 99	+ Potential for some new connections across SR 99	+ Potential for some new connections across SR 99	+ Potential for some new connections across SR 99
Would South Park have a comfortable trail link from the Duwamish River Trail to the Green River Trail?	⊕ Yes, fully separated from vehicle traffic	⊕ Yes, physically separated, but adjacent to 2-lane street	⊕ Yes, physically separated, but adjacent to 4-lane street	+ Yes, physically separated, but adjacent to freeway
COMPOSITE EVALUATION	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	+ **BETTER**	+ **BETTER**

For additional context and more detail, see this measure's **Technical Documentation**.

IMPROVED WALKING AND BIKING INFRASTRUCTURE

CURRENT CONDITIONS

Conditions for walking and biking near SR 99 are uncomfortable and unsafe. Narrow sidewalks, steep grades, and constant traffic noise make travel difficult, especially for children and older adults. The S Cloverdale underpass is dimly lit and often dirty, while the pedestrian bridge is steep, narrow, and isolated. The route many students use to reach school—the "scary trail"—runs just a few feet from highway traffic, separated only by a chain-link fence. The path is long and isolated, with no nearby development or clear way to exit if someone feels unsafe.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim would reconnect the local street grid with safe, calm neighborhood streets, greatly improving walking and biking comfort.

Narrower Boulevard and **Wider Boulevard** would both transform SR 99 into a boulevard with crossings, sidewalks, and bike lanes. **Wider Boulevard** would carry more traffic at higher speeds, meaning more noise and safety risks for people walking or biking. **Narrower Boulevard** would see less traffic and feel safer and more comfortable for those traveling on foot or on bike.

Bridges + Trails would add a new bridge for people walking and biking at 8th Ave S and S Donovan St and widen and improve existing crossings with additional lighting and emergency call boxes.

This measure is a companion to "Street Safety for Vulnerable Users", which focuses more on predicted collision levels in the Potential Futures.

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would the quality of infrastructure (sidewalks, lighting, ADA compliance) be improved?	⊕ Fully connected, high quality walking and biking routes	+ Connected walking and biking network with high-quality design	+ Connected walking and biking network with high-quality design	+ Some improvements to walking and biking route quality
Would people walking and biking through South Park and across SR 99 feel safe?	⊕ Safe, comfortable routes, with low traffic exposure	⊕ Comfortable routes with limited traffic exposure	+ Comfortable routes with some traffic exposure along boulevard	• Minor safety improvements possible without changes to traffic exposure
Would walking and biking connections be separated from traffic?	⊕ High quality connections separated from traffic exposure	+ Physically protected connections with modest traffic exposure	+ Physically protected connections with moderate traffic exposure	• Limited separation and protection from traffic
COMPOSITE EVALUATION	⊕ **MUCH BETTER**	+ **BETTER**	+ **BETTER**	• **SAME**

For additional context and more detail, see this measure's **Technical Documentation**.

PUBLIC TRANSIT CONNECTIONS

CURRENT CONDITIONS

No buses currently run on SR 99 through South Park. Metro Routes 60 and 132 operate in the area but are hard to reach from some parts of the neighborhood. Transit trips to downtown Seattle take 30 to 60 minutes, compared with 20 minutes or less by car.

The nearest light-rail stations—Rainier Beach and Tukwila International Boulevard—are about 5 miles away. Sound Transit plans a new station on E Marginal Way in Tukwila, which could be reached via the Green River Trail or new future bus routes.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim would make transit stops easier to reach, with new, direct walking routes and safer, more comfortable crossings. Removing the highway barrier could also allow more direct bus routes and new stops through the neighborhood.

Narrower Boulevard would also make transit stops easier to reach, with at-grade crossings and comfortable pedestrian access. The new boulevard could support more direct bus routes and additional stops.

Wider Boulevard would similarly improve access to transit stops and allow for potential new or adjusted bus routes along or across the boulevard.

Bridges + Trails would make little change to current access or service opportunities, as existing crossings and bus routes would stay mostly the same.

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would transit stops be easier to reach?	+ Direct, comfortable pedestrian access routes with comfortable and safe transit stops	+ Direct, comfortable pedestrian access routes with comfortable and safe transit stops	+ Direct, comfortable pedestrian access routes with comfortable and safe transit stops	• Similar to baseline
Would transit connections be better?	+ Potential for more direct routes, due to removal of the highway barrier, and more stops or service	+ Potential for more direct routes, across or along the new boulevard, and more stops or service	+ Potential for more direct routes, across or along the new boulevard, and more stops or service	• Similar to baseline
COMPOSITE EVALUATION	+ **BETTER**	+ **BETTER**	+ **BETTER**	• **SAME**

For additional context and more detail, see this measure's **Technical Documentation**.

EMERGENCY AND DISASTER RESPONSE

CURRENT CONDITIONS

South Park is difficult to access from the east and west due to the Duwamish Waterway and SR 509. Because SR 99 has so few crossings, it further limits access during emergencies or evacuations.

SR 99 is not part of the state's designated seismic lifeline network, and existing crossings at S Cloverdale St and S Henderson St could fail in a major earthquake. If the S Cloverdale connection failed, it would be very difficult to get people and emergency vehicles in and out of the neighborhood.

Seattle Fire Station 26, at S Cloverdale St and 8th Ave S, serves all of South Park but faces the same barriers caused by the highway.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim, **Narrower Boulevard**, and **Wider Boulevard** would all make it easier for emergency vehicles to move through South Park. Removing or replacing the SR 99 overpass structure at S Cloverdale St would eliminate a key seismic risk.

Bridges + Trails would not change circulation for emergency vehicles and would leave some risk of bridge failure during a large earthquake.

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would it be easier for emergency vehicles to get around?	⊕ More direct routes within South Park	⊕ More direct routes within South Park	⊕ More direct routes within South Park	• Current routes unchanged
Would emergency vehicles be better able to respond in a disaster?*	+ Many new routing options to all locations in South Park. At grade connections eliminate seismic vulnerability.	+ New at grade street connections	+ New at grade street connections	• Bridges and overpasses could be a risk in a seismic event
COMPOSITE EVALUATION	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	• **SAME**

Note: Emergency response systems are designed to function locally; non-lifeline regional highways such as SR 99 are relevant for recovery and logistics, not for primary response. For additional context and more detail, see this measure's* **Technical Documentation.

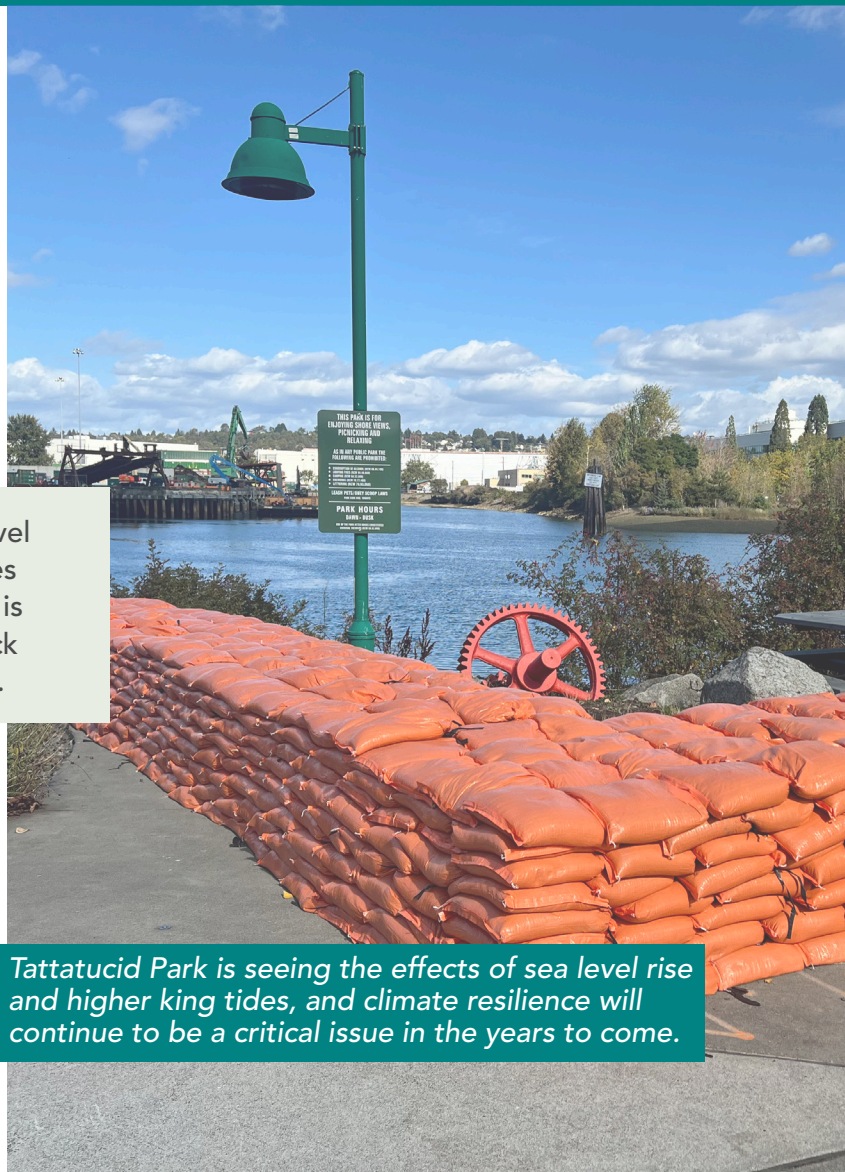
HEALTHY ENVIRONMENT

The past, present, and future of South Park is tied to the Duwamish River that flows alongside it. Decades of industrial activity along the river have led to many environmental challenges, such as dealing with the impacts of pollutants from manufacturing, shipping, and sewage disposal. While direct disposal of pollutants into the river is no longer permitted, stormwater runoff continues to pick up pollutants from road surfaces and wash them into the Duwamish River. The pollution from prior decades of industrial practices, presence of toxic chemicals, and polluted runoff became so severe that in 2001, the Environmental Protection Agency (EPA) declared the lower Duwamish River a "Superfund" site, which triggered federal orders to clean up the site. These cleanup efforts continue to this day to reduce the level of toxins in the water, protecting the river, fish, wildlife, and humans.

Aside from pollution, South Park is also at high risk for flooding and impacts from sea level rise, especially in the areas along the north end of the neighborhood. Some public spaces along the Duwamish River are already difficult to access due to rising tides. Another risk is due to a lower coverage of trees in South Park compared to the Seattle average. The lack of shade makes South Park vulnerable to higher temperatures and the heat island effect.

Decades of driving in the area prior to lead being removed from gasoline in the 1970s alongside lead from aviation fuel combustion has contaminated much of the soil beneath unpaved areas of South Park. Any construction activities in the greater South Park area must also be mindful of exposing lead to the community.

Any changes to SR 99 in South Park would have the opportunity to remedy harm done to the natural environment, and offer a safe, healthy place for South Park residents to live, work, and play.



Tattatucid Park is seeing the effects of sea level rise and higher king tides, and climate resilience will continue to be a critical issue in the years to come.

RUNOFF REDUCTION AND WATER QUALITY IMPROVEMENT

CURRENT CONDITIONS

South Park's water quality challenges stem from overlapping sources—runoff from roadways, including SR 99, and from nearby industrial areas, aging sewer infrastructure, and contaminated soils and sediments along the Duwamish River from heavily-polluting legacy industrial activity. The highway's broad paved surface generates large volumes of runoff that carry oil, tire residue, and metals into drains that often discharge directly to the river. Chemicals from tire residue are highly toxic to salmon, even at very low levels. During major storms or high tides, the combined sewer system can overflow, releasing untreated mixtures of stormwater and sewage. Even with new drainage improvements that reduce local flooding, much of this polluted runoff still reaches the river, adding to the contamination of a long-polluted waterway already under federal Superfund cleanup.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim would remove all the pavement from the current highway and add new green space that can absorb and filter rainwater. It would also introduce some new paved surfaces on reconnected streets. Overall, it would substantially reduce the volume of polluted runoff entering the Duwamish River and improve overall neighborhood water quality.

Narrower Boulevard would also perform well, with a smaller roadway footprint and more planted areas along and beside the street. These changes would meaningfully reduce untreated runoff and improve local drainage.

Wider Boulevard would reduce overall paved areas and add some new opportunities to filter water before it reaches the river.

Bridges + Trails would focus on localized stormwater elements near crossings and trails, with corridor-wide runoff patterns remaining largely similar to today.

South Park is adjacent to the Duwamish River, but there are limited opportunities to access it.

RUNOFF REDUCTION AND WATER QUALITY IMPROVEMENT *CONT.*

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would there be more or less paved roadway area?	⊕ Approximately 3/4 decrease	⊕ Approximately 1/2 decrease	⊕ Approximately 1/3 decrease	⊙ Similar to baseline
Would there be opportunities for rainwater to be treated where it falls?	⊕ Many opportunities to treat runoff through large new parks, restored wetlands, and along reconnected streets	⊕ Added green space and planted zones could substantially increase the ability to absorb and filter runoff	⊕ Added green space and planted zones could substantially increase the ability to absorb and filter runoff	⊙ Would rely primarily on existing drainage system with limited additional on-site treatment areas
Would there be less untreated water getting into the Duwamish River?	⊕ Substantial decrease in polluted runoff entering river	⊕ Substantial decrease in polluted runoff entering river	⊕ Substantial decrease in polluted runoff entering river	⊙ No reduction in untreated discharge
COMPOSITE EVALUATION	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	⊙ **SAME**

Note: Water quality outcomes reflect changes to roadway pavement only, not potential redevelopment of reclaimed land. New development is subject to Seattle's on-site stormwater management requirements, but would introduce some new paved surface, so final outcomes would depend on future land use decisions. For additional context and more detail, see this measure's* **Technical Documentation.

CLIMATE RESILIENCE

CURRENT CONDITIONS

The South Park neighborhood is at a high risk for climate impacts such as sea level rise, storm-related flooding, and poor air quality. South Park is also very vulnerable to extreme heat. Areas with many hard surfaces – such as parking lots, rooftops, and roads like SR 99 – are especially prone to higher temperatures or heat island effect. Lack of vegetation and widespread industrial uses also contribute to higher temperatures, which increases residents' risk of heat stroke, heart disease, and can worsen existing illnesses. Transportation-related emissions from the high vehicle and freight traffic in the area are a major contributor to climate change and increased temperatures.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim would substantially increase tree cover and open space, creating more shade, cooler conditions, and greater capacity to absorb rainfall and floodwater. By replacing large paved areas with permeable landscapes, it would lessen both heat exposure and surface flooding. The reconnected street grid could significantly reduce transportation emissions by making walking, biking, and transit easier, and supporting new community and business opportunities within walking and biking distance.

Narrower Boulevard and **Wider Boulevard** would moderately increase tree cover in open spaces and on neighborhood streets. The boulevard would include landscaped areas and flood-resistant design elements to improve water infiltration. These futures would improve walking and biking connectivity, and potentially improve transit service, reducing transportation emissions.

Bridges + Trails would add a small amount of paved surface from new bridge infrastructure, along with some new planted buffer areas along SR 99.

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would there be more tree shade and less hot pavement?	⊕ ~3/4 decrease in pavement; substantial increase in planted spaces	⊕ ~1/2 decrease in pavement; moderate increase in planted spaces	+ ~1/3 decrease in pavement; moderate increase in planted spaces	• minimal increase in pavement; slight increase in planted spaces
Would the local area be less prone to flooding?	⊕ ~42-acre decrease in impermeable surface area and increased water absorption	⊕ ~24-acre decrease in impermeable surface area and increased water absorption	⊕ ~17-acre decrease in impermeable surface area and increased water absorption	• ~1-acre increase in impermeable surface area; reduced flood risk from roadway elevation
Could people get around more easily in ways other than driving a car?	⊕ Much easier to get around without driving a car	⊕ Easier to get around without driving a car	⊕ Easier to get around without driving a car	• Somewhat easier to cross SR 99 with new crossings
COMPOSITE EVALUATION	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	• **SAME**

Note: Heat island and flooding outcomes reflect changes to roadway pavement only, not potential redevelopment of reclaimed land. Final outcomes would depend on future land use decisions. For additional context and more detail, see this measure's* **Technical Documentation.

TREES AND ENVIRONMENTAL RESTORATION

CURRENT CONDITIONS

The Duwamish Valley is one of Seattle's most ecologically important landscapes, serving as the city's primary lowland drainage corridor and a transition zone between urban uplands and tidal waters. Where present, vegetation helps stabilize soils, slow and filter runoff, and manage water quality before it reaches the river. In the southern portion of the corridor, SR 99 runs directly alongside the Duwamish River, allowing polluted runoff from traffic to directly affect water and soil quality along the shoreline.

Around 15% of South Park is covered with tree canopy, which is comparable to other urban and industrial areas like downtown, SODO, and Georgetown but lower than other, more residential neighborhoods. Most trees are young or isolated, with limited ability to intercept rainfall or improve air quality. Restoration is constrained by compacted and contaminated soils, high groundwater, and the dominance of paved and industrial surfaces.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim would create the largest increase in trees and planted areas, both in South Park and along the shoreline to the south, where at least 59 acres of roadway could become restored riparian landscape. The reclaimed land could support continuous greenery that transforms the river's edge and adds many new trees throughout the neighborhood.

Narrower Boulevard would also include major new green space along the shoreline, with added tree cover and planting areas throughout South Park. Together, these improvements would create more vibrant, shaded, and pedestrian-friendly corridors.

Wider Boulevard would provide a slightly smaller, but still substantial, increase in shoreline planting and tree canopy, offering broad environmental benefits and noticeably more shade and vegetation within the neighborhood.

Bridges + Trails would provide some potential for new green space near the existing SR 99 and 14th Ave S interchange. However, this Potential Future lacks opportunities for broader corridor-wide greening, resulting in limited improvement to overall environmental quality.

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Could there be more green spaces in the area?	⊕ 59-100 acres of new passive green space	⊕ 48-79 acres of new passive green space	⊕ 44-71 acres of new passive green space	⊙ 4-17 acres of new passive green space
Could there be more new trees?	⊕ Up to 25,000 new trees	⊕ Up to 21,000 new trees	⊕ Up to 19,000 new trees	⊙ Up to 2,000 new trees
COMPOSITE EVALUATION	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	⊙ **SAME**

For additional context and more detail, see this measure's **Technical Documentation**.

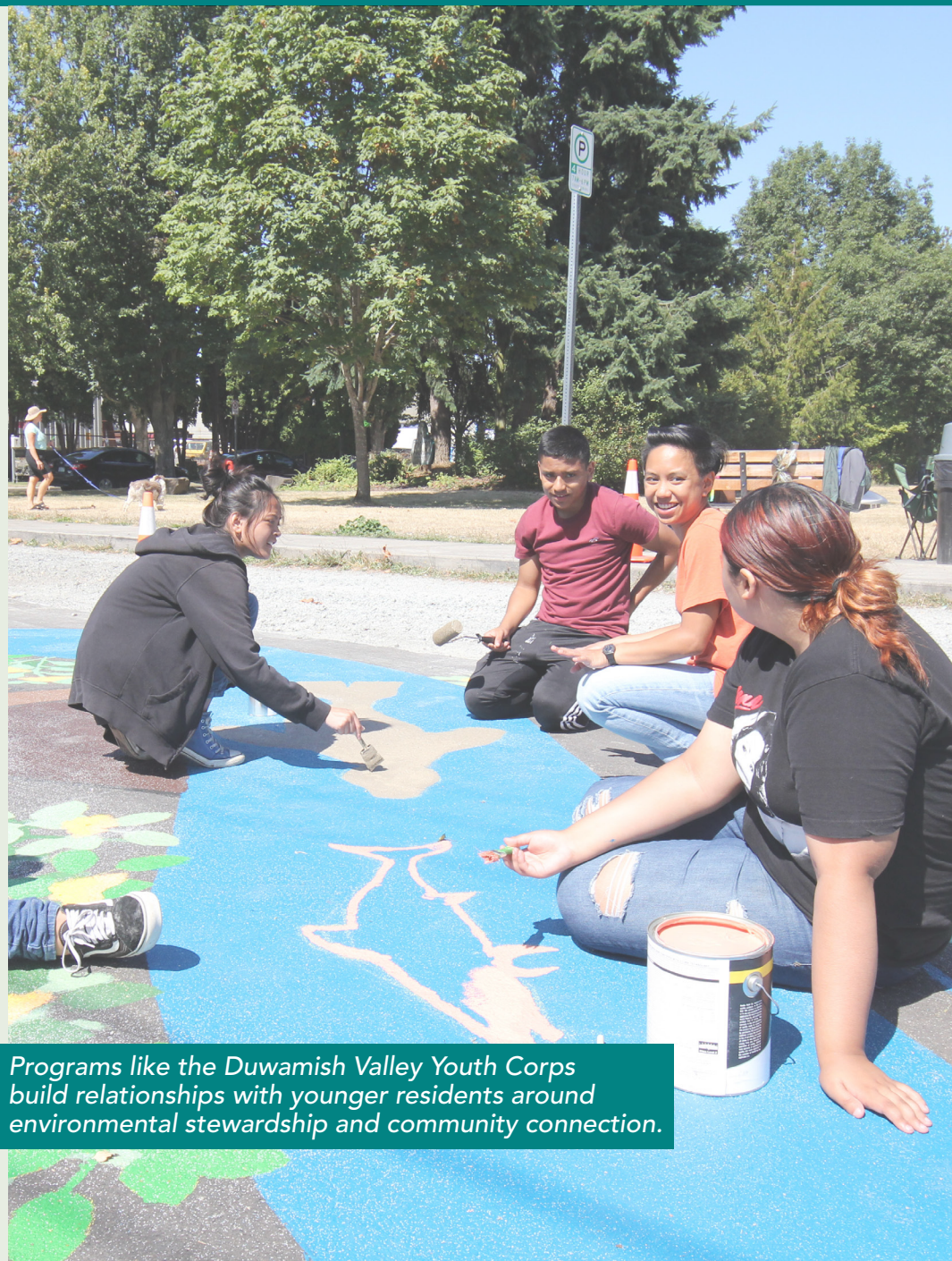
ECOSYSTEMS AND HABITAT RESTORATION

CURRENT CONDITIONS

South Park is located along the Lower Duwamish Waterway, one of the region's highest-priority areas for habitat restoration. The river remains critical for the regional ecosystem, especially for Chinook Salmon, a keystone species whose presence supports an entire food web, from orcas in Puget Sound to eagles, otters, and other wildlife that depend on healthy aquatic ecosystems.

Salmon recovery is central to multi-agency efforts to clean up and restore the Duwamish. Projects like the Duwamish River People's Park have already begun reconnecting shoreline habitat and improving water quality. South Park's remaining wetlands and riverbanks — though limited — play an important role in extending this habitat network. Restoring these areas can benefit not only salmon, but also the broader web of life they support. In turn, healthier ecosystems can provide cleaner air and water, greater flood resilience, and more access to nature for South Park residents. Two barriers to fish passage within the SR 99 Corridor Analysis Area exist and are included in the statewide injunction. Retrofits to these barriers are not currently programmed.

Just south of South Park, SR 99 runs immediately alongside the Duwamish River, leaving little to no space between the highway and the shoreline. This proximity has severely limited the potential for the riverbank to support valuable habitat. Stormwater runoff from the highway, noise, and light pollution all further harm the river environment. This section of shoreline along SR 99 is a connected part of the ecosystem and reimagining it could improve both the habitat and community access to the river. Changes along the shoreline could require land acquisition and complex interjurisdictional coordination that would need to be assessed and refined in future phases of study and analysis.



Programs like the Duwamish Valley Youth Corps build relationships with younger residents around environmental stewardship and community connection.

ECOSYSTEMS AND HABITAT RESTORATION *CONT.*

HOW EACH FUTURE PERFORMS

Reroute + Reclaim, **Narrower Boulevard**, and **Wider Boulevard** would all create substantial opportunities for habitat restoration and ecosystem health. The scale of the benefits would depend on the extent of and approach to reclaimed land.

Bridges + Trails would include small ecosystem improvements through vegetated buffers and trailside plantings but would not support additional meaningful species migration or habitat restoration.

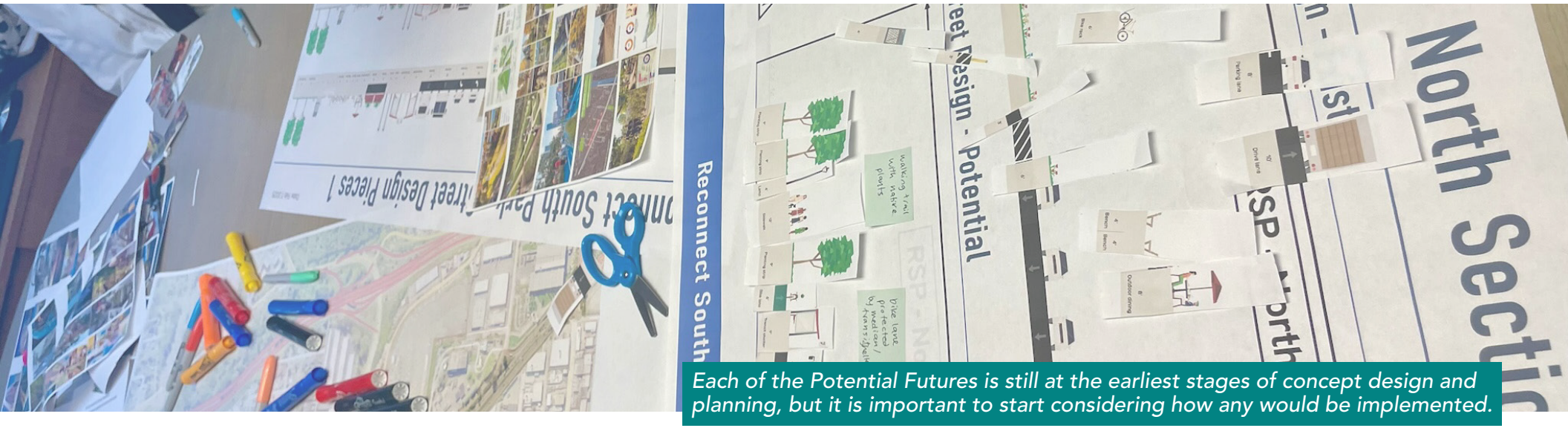
	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Would there be new areas for wildlife to inhabit?	⊕ Much more land available in large connected areas	⊕ Much more land available along the new boulevard	⊕ Much more land available along the new boulevard	• Limited land available in smaller areas
Would new habitats be well-connected to one another?	⊕ Wetlands previously disconnected by SR 99 could be reconnected	⊕ New boulevard would improve movement of pollinators and birds	+ New boulevard would improve movement of pollinators and birds, but would still have 4-lane street dividing open spaces from river	• Green spaces stay disconnected
Would barriers to wildlife movement be removed?	⊕ Barriers removed with potential improvements to Hamm Creek	⊕ Barriers removed with potential improvements to Hamm Creek	⊕ Barriers removed with potential improvements to Hamm Creek	• No barrier removal
COMPOSITE EVALUATION	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	⊕ **MUCH BETTER**	• **SAME**

For additional context and more detail, see this measure's **Technical Documentation**.

COST & FEASIBILITY

Maintaining SR 99 in its current form carries ongoing public costs associated with roadway maintenance, opportunity cost in the land use, and impacts to public health, all while providing limited benefit to the surrounding community. The large and aging roadway requires continual repair, drainage maintenance, and pavement management out of proportion to the number of vehicles it serves, relative to other routes with a similar number of lanes and type of interchange structures. This reflects a broader challenge of sustaining mid-century infrastructure that no longer aligns with the current transportation network or community priorities.

Transforming SR 99 will require time, coordination, and investment. In this study, feasibility refers not only to cost but also to the initial evaluation of design and engineering complexity, environmental review, permitting, and long-term maintenance needs conducted to date. Because SR 99 is owned and maintained by WSDOT, any future change would require close collaboration among state, city, regional, and tribal partners, along with review under state and federal environmental processes.



Each of the Potential Futures is still at the earliest stages of concept design and planning, but it is important to start considering how any would be implemented.

The existing pedestrian bridge at S Henderson St connects the two sides of SR 99, but doesn't add substantial community value.

Modern corridor planning focuses on maximizing public value—improving safety, reliability, and quality of life while using public funds efficiently. Reimagining the SR 99 corridor provides an opportunity to apply that approach in a way that supports neighborhood priorities while assuring regional connectivity and long-term system reliability.

Each Potential Future remains in an early stage of formulation and this Potential Futures Analysis is intended to inform a community-driven vision. Further analysis and coordination would be needed before any changes to SR 99 could begin. Considering feasibility now helps identify the partnerships, reviews, and funding strategies required to guide next steps and ensure that future decisions are technically sound, fiscally responsible, and responsive to community priorities.

NET PUBLIC VALUE

CURRENT CONDITIONS

SR 99 has existing operations and maintenance costs to WSDOT, including for landscape, bridge, and pavement maintenance.

Existing seismic vulnerabilities of the SR 99 bridge over S Cloverdale Street will eventually need investments that have not yet been planned, so costs are still to be determined. There are also two barriers to fish passage under SR 99 in the study area; future compliance with fish passage requirements is part of the broader regulatory context affecting long-term public value. In addition, the pedestrian bridge over SR 99 along S Henderson Street does not meet ADA standards, but reconstruction has not yet been planned. No revenues are currently generated from the SR 99 right-of-way.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim would create the largest opportunity to repurpose corridor land for community and economic uses, while eliminating long-term highway maintenance costs. Upfront costs would likely be higher due to new street construction and soil remediation, though many of these costs would occur during initial implementation.

Narrower Boulevard and **Wider Boulevard** would provide opportunities for new community spaces and improved public value, with moderate upfront costs for reconstruction and soil remediation. These futures would still include ongoing operations and maintenance for new roadways, landscaping, and trails, though public spaces such as parks would carry relatively low ongoing costs.

Bridges + Trails would provide limited opportunity for new public and community value while retaining ongoing costs for maintaining the existing highway. Upfront costs would be significant for constructing new bridges and crossings, which would introduce additional and ongoing maintenance costs. Soil remediation needs would be lower than in other Potential Futures.

South Park is adjacent to the Duwamish Manufacturing and Industrial Center that includes major port facilities for international and domestic trade.

NET PUBLIC VALUE *CONT.*

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Could new uses of land generate economic value for the public?	⊕ Up to 41 acres of land for new businesses, housing, and community spaces in the heart of South Park and adjacent industrial areas and 59+ acres of new green space	⊕ Up to 31 acres of land for new industrial and residential uses, and 48+ acres of green space	⊕ Up to 27 acres of land for new industrial and residential uses, and 44+ acres of green space	• Up to 13 acres of land for new uses in the industrial area
Would ongoing operations and maintenance costs be higher than today?	+ Approximately 11 lane-mile decrease in roadway, no bridges; new trail, at least 59 acres of public land	+ Approximately 3 lane-mile decrease in roadway, no bridges; new trail, at least 48 acres of public land	• No net change in roadway lane-miles, no bridges; new trail, at least 44 acres of public land	− Around 2 new bridges, new trail, maintenance of existing SR 99, at least 4 acres of public land, new lid space
How much more would construction costs be than the costs of keeping the current highway in a state of good repair (an order-of-magnitude estimate)?*	− Lower road and trail costs, but higher soil remediation cost	− Higher road and trail costs, with moderate soil remediation cost	− Higher road and trail costs, with moderate soil remediation cost	− Higher road, trail, and bridge costs, but some soil remediation costs
COMPOSITE EVALUATION	+ **BETTER**	+ **BETTER**	• **SAME**	− **WORSE**

Note: Rough order of magnitude (ROM) costs for the Potential Futures have been developed for this analysis and would need to be refined along with the potential design of any Potential Future. The capital costs assessed as part of this analysis also have not assessed potential project components beyond what has been detailed in this report, such as potential mitigation projects in other communities as a result of diverted traffic. For additional context and more detail, see this measure's* **Technical Documentation.

CONSTRUCTION DISRUPTION

CURRENT CONDITIONS

SR 99 is a long-established corridor, so there is currently no active construction-related disruption. However, past roadway projects in and around South Park have shown how major construction can affect daily life and business operations. When key routes such as the South Park Bridge (2010–2014) or the West Seattle Bridge (2020–2022) were closed or rebuilt, residents and businesses faced detours, traffic delays, and reduced customer access. These experiences highlight the importance of careful construction planning and coordination to minimize disruption during any future corridor work.

HOW EACH FUTURE PERFORMS

Scope note: This measure covers roadway, bridge, and trail construction only. Construction of buildings on reclaimed land is not included and would extend the overall construction period, particularly in scenarios that reclaim more land.

Reroute + Reclaim would cause long-term construction activity but the least day-to-day disruption to traffic. Once SR 99 is closed and traffic is rerouted to regional highways such as I-5 and SR 509, work could proceed continuously within the corridor without major detours inside South Park. Construction would last several years and include demolition, soil remediation, and new street construction, but neighborhood streets could remain open for local access. Construction of housing, parks, and other uses on reclaimed land would occur on a separate timeline and is not captured in this measure.

Narrower Boulevard and **Wider Boulevard** would create the most visible and prolonged construction impacts. Because the new boulevards would be built in place of the existing highway, traffic would need to continue operating alongside active work zones for much of the construction period. This could mean temporary lane closures, detours, or one-directional operation, and occasional full closures depending on alignment. Both would take several years to complete and could temporarily affect local access and nearby businesses. Construction of new buildings and site improvements on reclaimed land would follow on a separate timeline and is not captured in this measure.

Bridges + Trails would result in moderate and more localized construction impacts. Work would be concentrated at specific crossings, such as a new bridge or lid at 8th Ave S and S Donovan St, which could require short-term full closures of SR 99. Other portions of the highway would remain open, limiting disruption to nearby streets and businesses.

CONSTRUCTION DISRUPTION *CONT.*

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
How much of South Park would be disrupted by construction?	Construction activities throughout SR 99 Corridor	All of SR 99 to be removed and reconstructed	All of SR 99 to be removed and reconstructed	Localized impacts from new bridge and interchange construction
Would construction take a long time?	Demolition and remediation likely to take multiple years	Demolition and boulevard construction will take multiple years	Demolition and boulevard construction will take multiple years	New bridge and trail construction may take several years with localized effects
Would there be many detours and road closures during construction?	One-time closure of SR 99, local streets would remain open with limited disruption	Phased full closures and detours during major reconstruction	Phased full closures and detours during major reconstruction	Occasional full closures of SR 99 required for new bridges
COMPOSITE EVALUATION	WORSE	MUCH WORSE	MUCH WORSE	SAME

For additional context and more detail, see this measure's **Technical Documentation**.

All of the Potential Futures would take thoughtful planning for how to minimize community disruption.

REGULATORY FEASIBILITY

CURRENT CONDITIONS

The SR 99 right-of-way is currently owned and maintained by WSDOT and is part of the National Highway System (NHS). The United States Department of Transportation (USDOT) defines the NHS as "roadways important to the nation's economy, defense, and mobility." Redesignation or removal from the NHS would require consistency with regional and State plans and federal approval. When property was acquired for SR 99, recordkeeping was less thorough than today. Some land originally acquired for the highway may carry clauses with requirements for what would happen if the land were not needed for highway purposes in the future. Potentially, this might require handing the land back to its owners before SR 99 was built. The land may also carry access restrictions that would need to be modified for new kinds of uses to be built.

Reuse of the SR 99 corridor would require coordination with WSDOT and would need to follow WSDOT's right-of-way policies and procedures. These procedures can transfer land to a local jurisdiction for transportation purposes but may require payment at fair market value for non-transportation uses. Potential land acquisition costs, ownership changes, and interjurisdictional coordination have only been included in this evaluation at a preliminary level.

Changes to SR 99 would require review under the National Environmental Policy Act (NEPA) and the Washington State Environmental Policy Act (SEPA) and the amount of potential change would inform how environmental review would happen.

HOW EACH FUTURE PERFORMS

Reroute + Reclaim would align with policy goals in reducing emissions, promoting environmental protection, supporting non-car-based transportation, improving health and safety, and new housing opportunities. Additional transportation analysis in future project phases could further evaluate how this approach relates to WSDOT policies regarding congestion management and highway system redundancy.

Narrower Boulevard would align with policy goals in reducing emissions, promoting environmental protection, supporting non-car-based transportation, and new housing opportunities. Future analysis could further examine alignment with WSDOT congestion and system performance policies.

Wider Boulevard would also align with many of these policy goals while maintaining a higher-capacity roadway to support regional travel and freight movement.

Bridges + Trails would be broadly consistent with current regional transportation plans by maintaining the existing transportation system, while also aligning with policies that support improved bicycle and pedestrian connectivity. However, it would provide fewer opportunities to advance policy goals related to reducing transportation emissions and achieving broader health and environmental outcomes.

For **all Potential Futures** the regulatory issues would require research and potentially lengthy processes to reuse reclaimed land for community-driven, non-transportation purposes.

REGULATORY FEASIBILITY *CONT.*

	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Do local, regional, and statewide plans support this Potential Future?	⊕ Strongly aligned with environmental and transportation policy	⊕ Strongly aligned with environmental, transportation, and housing policy	+ Moderate alignment with environmental, transportation, and housing policy	• Limited alignment with existing policy goals for land use, transportation, and environment
Would it be difficult to get approval for this Potential Future?	⊖ Significant and lengthy redesignation, environmental review, and land transfer processes likely	⊖ Significant and lengthy redesignation, environmental review, and land transfer processes likely	– Lengthy environmental review and land transfer processes likely	• Environmental review needed, likely to be relatively straightforward
COMPOSITE EVALUATION	• **SAME**	• **SAME**	• **SAME**	• **SAME**

For additional context and more detail, see this measure's **Technical Documentation**.

Many policy plans are aligned with community priorities for the future of South Park and SR 99.

Evaluation Summary

The following figure provides a summary of all measures, including a composite evaluation for each goal area.

KEY				
Much Worse	Worse	Same	Better	Much Better

Category	Measure	REROUTE + RECLAIM	NARROWER BOULEVARD	WIDER BOULEVARD	BRIDGES + TRAILS
Health & Wellbeing	**Health & Wellbeing Composite**	+	+	•	•
	Air Pollution	+	+	+	•
	Noise Pollution	+	+	•	•
	Street Safety for Vulnerable Road Users	+	•	−	•
	Access to Parks and Public Spaces	++	+	+	+
	Public Health	++	+	+	•
Affordability & Economic Opportunity	**Affordability & Economic Opportunity Composite**	+	+	+	•
	Affordable Housing	++	++	•	•
	Neighborhood Stability	+	•	•	−
	Local Business Growth	+	+	+	•
	Job Opportunities	++	++	++	+
Mobility & Connectivity	**Mobility & Connectivity Composite**	+	+	+	•
	Regional Traffic	−	−	•	•
	Local Vehicular Traffic	+	+	•	•
	Neighborhood Reconnection	++	++	+	+
	Improved Walking and Biking Infrastructure	++	+	+	•
	Public Transit Connections	+	+	+	•
	Emergency and Disaster Response	++	++	++	•
Healthy Environment	**Healthy Environment Composite**	+	+	+	•
	Runoff Reduction and Water Quality Improvement	++	++	++	•
	Climate Resilience	++	++	++	•
	Trees and Environmental Restoration	++	++	++	•
	Ecosystems and Habitat Restoration	++	++	++	•
Cost & Feasibility	**Cost & Feasibility Composite**	•	•	−	•
	Net Public Value	+	+	•	−
	Construction Disruption	−	−−	−−	•
	Regulatory Feasibility	•	•	•	•

Reconnect South Park: Potential Futures Analysis

We want to hear from you!

We will be engaging with community members throughout the project with surveys, meetings, online tools, workshops, and community conversations.

Interested in having your voice heard? Want to get emails about events? Have a great idea? Reach out to us!

CITY OF SEATTLE WEB PAGE:
https://www.seattle.gov/opcd/current-projects/reconnect-south-park

RECONNECT SOUTH PARK COMMUNITY COALITION WEB PAGE:
https://reconnectsouthpark.org/

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Fehr & Peers
MAKERS Architecture and Urban Design

Reconnect South Park

Potential Futures Analysis Technical Documentation

June 2026

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Introduction and Methodology

This document was developed by the Reconnect South Park technical consultant team to support the evaluation of Potential Futures for the SR 99 corridor between Tukwila International Boulevard in Tukwila and S Holden Street in Seattle. S Holden Street and Tukwila International Boulevard form logical end points for potential changes to SR 99 because they connect to other roadways that carry high volumes of traffic, including SR 599, SR 509, Tukwila International Boulevard, and E Marginal Way. Future studies may evaluate other project limits for potential changes that are either more or less extensive than those evaluated as part of this evaluation.

Each Potential Future has been evaluated across 22 measures in 5 categories based on community-driven goals and priorities. The measures are a mix of quantitative and qualitative evaluation that compare the outcomes of the Potential Futures to current and future baseline conditions. The measures and evaluation are intended to inform—not determine—the definition of a community-driven vision for the future of the SR 99 corridor. Future studies and analysis will be necessary to refine and select any actions for design and construction. This document is a companion to the Potential Futures Analysis Report to provide deeper technical background.

The framework for this analysis was built from the first two years of structured community engagement (late 2022 through 2024), led by the Reconnect South Park Coalition and reaching more than 3,000 residents, workers, and neighbors across 70 events. Community input shaped the goals, measures, and trade-offs evaluated in the analysis. Throughout, the project team coordinated with Washington State Department of Transportation (WSDOT) as the owner of SR 99 and with regional partners through the Interagency Advisory Group.

Figure 1 illustrates the analysis areas used to assess the Potential Futures. All 22 evaluation measures were analyzed within the **SR 99 Corridor**. Some evaluation measures also expanded to the **South Park Community** and **Regional Roads & Surrounding Areas** and those are noted where applicable. All three analysis areas are described below.

- **SR 99 Corridor:** the full right-of-way footprint from S Holden Street to Tukwila International Boulevard and SR 599. This analysis area includes the existing roadways, bridges, and right-of-way that form SR 99.
- **South Park Community:** including Residential South Park and Surrounding Industrial areas. This analysis area includes all of the land north of S 99th St, south and west of the Duwamish River, and east of SR 509.
- **Regional Roads & Surrounding Areas:** the alternative routes that could see potential diversion of traffic from changes to SR 99 in South Park. This analysis area includes SR 99, SR 509, SR 599, Interstate 5 (I-5), East Marginal Way, Des Moines Drive S, 14th Avenue S, 1st Avenue South Bridge, and Tukwila International Boulevard, including residential areas within 500 feet of these roads.

Physical changes to streets were developed at a concept level for the **SR 99 Corridor** and connections within the adjacent city block only. Analysis of **Regional Roads & Surrounding Areas** reflects redistributed traffic and includes initial assessment of system-level effects of the Potential Futures. Analysis of the **South Park Community** focused on initial assessment of potential changes to travel patterns, traffic safety, and community connections at the neighborhood scale.

The Potential Futures Analysis reflects an initial assessment of the potential positive and negative effects of changes to the **SR 99 Corridor**. Each of the Potential Futures would require additional refinement and analysis before being realized. Residential and commercial areas beyond the **Regional Roads & Surrounding Areas** Analysis Area have not been assessed and may require detailed assessment as part of future phases of analysis. The design of potential changes within the **SR 99 Corridor** Analysis areas identified under future environmental processes may vary from those presented in this analysis – variations to the study area in the future would require an updated analysis.

For the purposes of travel demand modeling, changes to roadway configurations have been developed for the **SR 99 Corridor** Analysis Area only. Possible uses for reclaimed land in the **SR 99 Corridor** Analysis Area have focused on a land suitability analysis, not detailed planning for future uses. Assessments of more regional effects of each Potential Future have focused on the primary regional roads that are potential alternative pathways to SR 99 and form the **Regional Roads & Surrounding Areas** Analysis Area. No roadway changes other than already planned regional transportation projects, such as the SR 509 Completion Project, have been assumed other than safety improvements to 14th Ave S in all Potential Futures. Transportation analysis outside of the **Regional Roads & Surrounding Areas** Analysis Area surrounding South Park has been at a sketch level only.

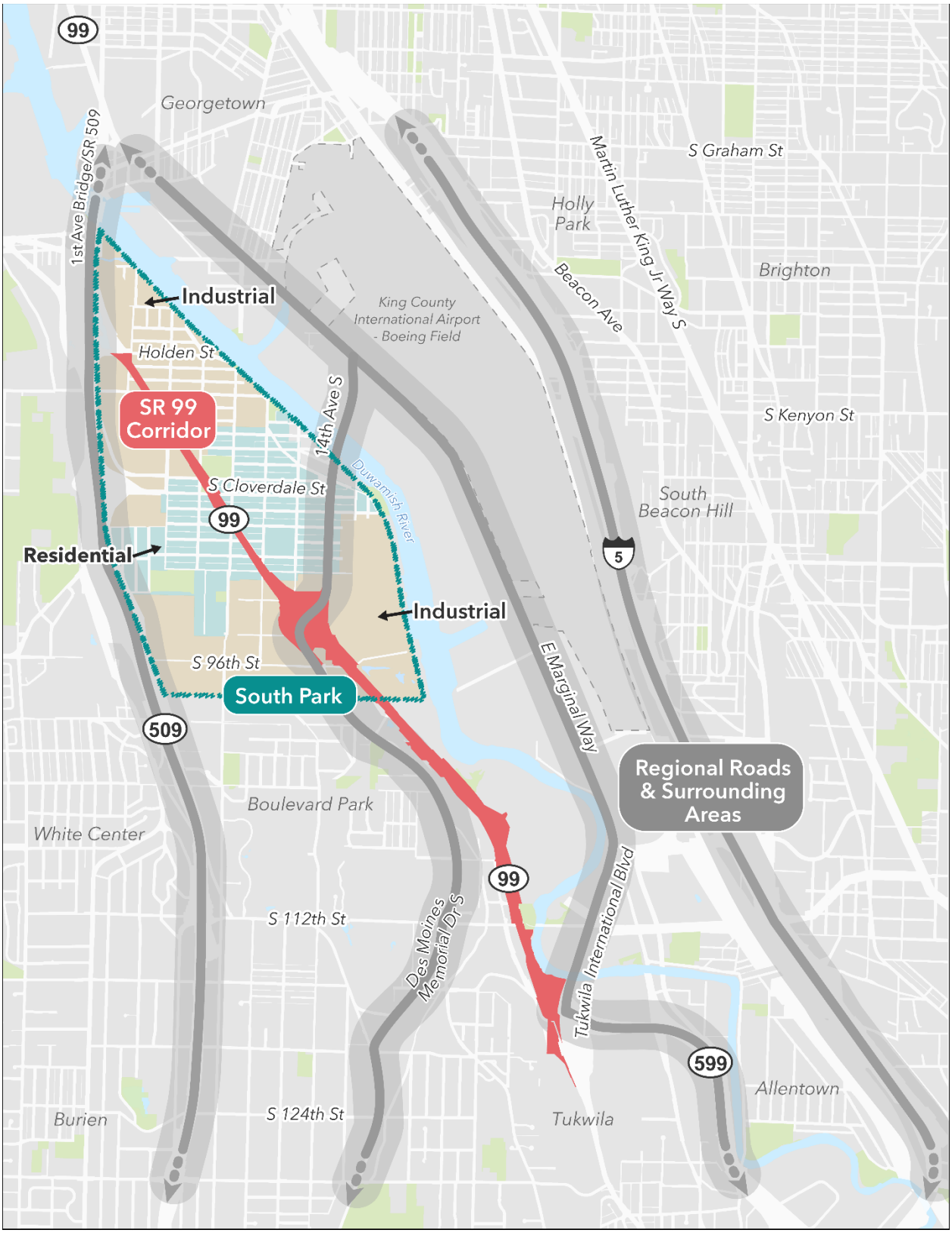


Figure 1: Reconnect South Park Analysis Areas

History of SR 99

Planning for major transportation corridors along the Duwamish waterway began in the early 20th century. Between 1910 and 1914, E and W Marginal Ways were conceived as industrial access routes running parallel to a straightened Duwamish waterway.[1] US 99 was originally routed along E Marginal Way, but growing congestion from Boeing Company traffic by the 1950s prompted proposals to reroute it west of the Duwamish.[2]

On June 10, 1957, the City Planning Commission recommended an alternate US 99 route that would not cut through the South Park neighborhood. The route was not adjusted, citing the cost of late-stage alterations.[3] Properties were condemned and acquired for highway construction between August 1957 and February 1958.[4] Construction of W Marginal Way began in November 1958 and was completed and designated US 99 in July 1959.

US 99 was decommissioned between 1963 and 1969 as newly completed I-5 accommodated greater traffic volumes. Most sections were decommissioned entirely; the South Park segment was retained and reclassified as SR 99.[5]

At the time the highway was designed and constructed, City planning documents contemplated converting South Park and Georgetown to industrial use. A 1954 City Planning Commission report stated that both neighborhoods "should be eventually converted to industrial use."[6] In 1956, South Park was zoned "transition to industrial," and in the mid-1960s was rezoned fully industrial. Residents organized and successfully convinced the City Council to repeal the industrial designation, securing the neighborhood's continued residential character.[7]

The South Park community was unable to prevent construction of the highway but successfully advocated for modifications to the original plans, which did not include pedestrian crossing routes and would have eliminated the community playground. Community advocacy resulted in the highway on-ramp being moved from Sullivan Street to Cloverdale Street to reduce impacts on playground space, the addition of a pedestrian overpass at Henderson Street connecting Concord Elementary and South Park Playground, and construction of a pedestrian sidewalk at the 14th Avenue South overpass.[8]

Most other segments of the former US 99 corridor have since been converted to surface streets or transferred to local control. The City of Tukwila secured jurisdictional transfer of 2.4 miles of SR 99 from WSDOT in 2004 and redesigned it as Tukwila International Boulevard, with street trees, transit links, and traffic calming.[9] The South Park segment remains in its original mid-century limited-access form and continues to serve regional freight movement connecting to industrial uses in the Duwamish Manufacturing and Industrial Center (MIC) and Port of Seattle facilities.

Surrounding Context

Industrial Context

The SR 99 corridor runs through the Greater Duwamish MIC, Seattle's largest industrial area and one of the oldest and most important industrial areas in Washington State, spanning nearly 4,000 acres.[10] The Duwamish River runs north to south through the MIC and empties into Elliott Bay, a natural deep-water port. The MIC is home to seaport and maritime operations managed by the Northwest Seaport Alliance, major railyards including the BNSF SIG Yard and Union Pacific Argo Yard, Boeing Field, aerospace suppliers, cement and steel processing, recycling, logistics, and food and beverage manufacturing. SR 99 and SR 509 serve as primary freight highway connections linking these uses to I-5 and Port of Seattle facilities. Freight accounts for as much as 20 percent of total vehicle volume at some locations within the study area — well above the roughly 2 percent typical in an urban context.[11]

South Park Neighborhood

South Park is a residential neighborhood in the Duwamish River Valley, bordered to the north and south by industrial uses. Commercial uses are concentrated along 14th Ave S. The neighborhood is one of Seattle's highest youth-per-capita areas; children make up approximately 30 percent of the population.[12] South Park ranks in the 99th percentile for negative health outcomes within Seattle,[13] including higher rates of asthma, diabetes, obesity, poor mental health, and disability compared to Seattle and King County averages (see page 82). Median household income is approximately 90 percent of the Seattle median. 46 percent of households rent, and 53 percent of renters spend more than 30 percent of their income on housing (see page 86).

Key community facilities are located on both sides of SR 99: the South Park Library, Community Center, Playground, and River City Skate Park are east of the highway; Concord Elementary and Marra-Desimone Park are west (see page 74). SR 99 divides the neighborhood diagonally, creating 22 dead ends and limiting access between these facilities and the residents on either side.

Southern Corridor

South of the South Park residential neighborhood, SR 99 runs immediately alongside the Duwamish River, with as little as 20 feet between the pavement edge and the riverbank at its narrowest. With no riparian buffer, highway runoff carrying vehicle-related pollutants drains directly into one of the region's most important Chinook salmon migration corridors.[14] This hard edge also functions as a barrier between western residential communities in Boulevard Park and Burien and the river shoreline, and the parks and habitat areas — including Salmon Cove Park and Cecil Memorial Park — on the river side of the highway. Hamm Creek is currently piped under the SR 99 right-of-way between Hamm Creek Natural Area and the Duwamish River, severing its upstream connection to the river.

Several large-footprint uses occupy the river side of the corridor, accessed via SR 99 and W Marginal Place S, including the Seattle City Light Duwamish Substation. Further south, the Desimone Oxbow — a 40-acre property inside a bend of the Duwamish River — is a documented juvenile Chinook transition zone where young salmon acclimate from fresh to salt water before entering Puget Sound.[15] In 2018, WRIA 9 sought state funding to acquire the site for habitat restoration, citing its scale as among the last remaining opportunities for meaningful salmon recovery on the Lower Duwamish. Funding was not secured, and in 2019 the site was developed as warehouse and distribution uses.[16] It is now occupied by the USPS Seattle Processing and Distribution Center and the Amazon DWA2 sorting facility, accessed via SR 99 and the S 102nd Street bridge over the Duwamish River.

Current SR 99 Conditions

SR 99 through South Park operates as a limited-access freeway despite carrying traffic volumes more typical of a large city arterial — approximately 40,000 daily trips, comparable to 4th Ave S, Denny Way, and Lake City Way NE.[17] Within approximately one mile of the corridor, four other continuous north-south routes also serve a regional function: I-5, SR 509, E Marginal Way, and Airport Way South. Less than 10 percent of trips on SR 99 start or end in South Park; the corridor primarily serves regional through-traffic (see Figure 7).

This section details current roadway and transportation conditions that were referenced in developing the Potential Futures for analysis. Additional descriptions of current conditions are included with each measure in this document.

SR 99 within South Park is a limited-access freeway. The roadway and right-of-way vary in width at some points, but there are generally two 40-foot roadways, one in each direction, with two lanes in each direction, separated by a center grassy median that ranges in width from approximately 25 to 35 feet. On either side of the roadways are grassy areas until the edge of the right-of-way, where SR 99 abuts adjacent properties and buildings. Figure 2 shows a general cross section.

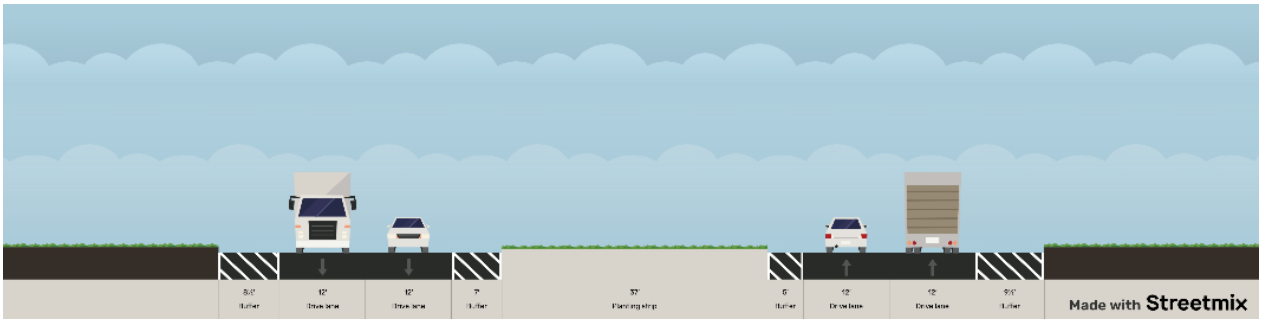


Figure 2: Existing SR 99 cross section within South Park.

South of South Park, SR 99 maintains a similar character, with two travel lanes in each direction. However, in this part of the corridor, W Marginal Pl is a two-lane road that parallels SR 99. This added width expands the paved area along SR 99 south of South Park and provides local access to businesses and green spaces. Figure 3 shows this part of the corridor at approximately the same scale as Figure 2. Plans for the Green River Trail extension will convert W Marginal Pl into a one-way southbound roadway and create a paved trail connection as far north as 14th Ave S.

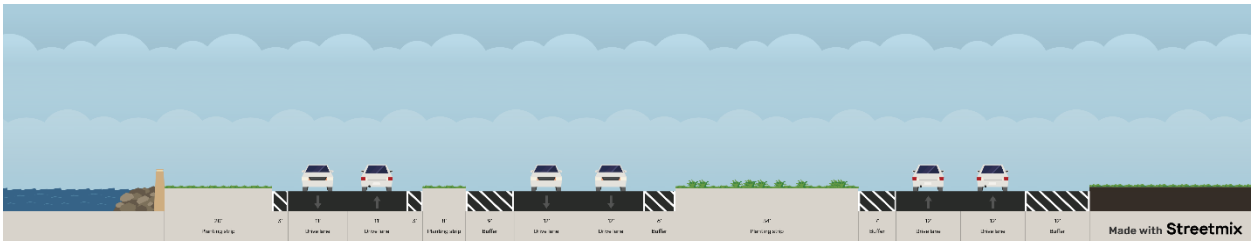


Figure 3: Existing SR 99 cross section south of South Park.

Existing vehicle volumes on SR 99 are lower than I-5 or SR 509 and are more similar to arterial streets in the City of Seattle. Figure 4 illustrates peak hour/peak direction traffic volumes on other streets within the analysis area (see map in Figure 5). The volumes on individual streets vary by time of day. Figure 6 depicts existing northbound volumes on SR 99 over from 8 AM to 4 PM. Across the analysis areas, AM volumes are generally higher than PM and have been used to illustrate potential "worst case" conditions. Future baseline analysis has focused on daily traffic volumes. Additional detail to analysis would be needed in future for changes to SR 99 operations.

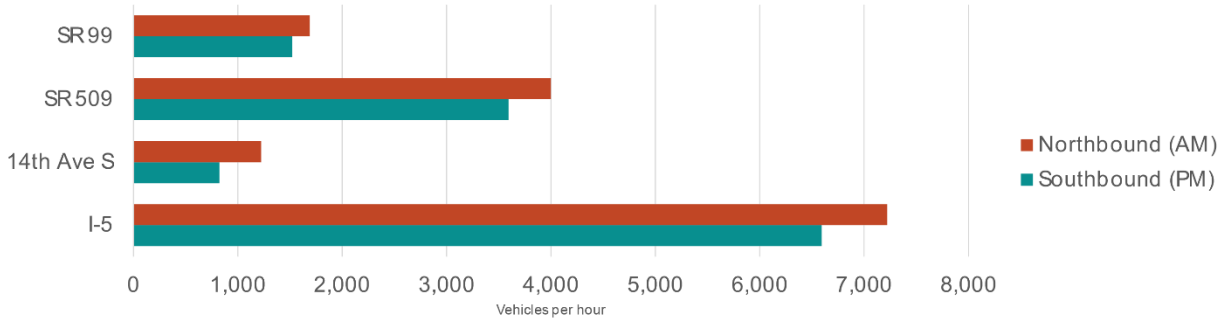


Figure 4: Peak Hour / Peak Direction Vehicle Volumes (Source: City of Seattle, 2024 Vehicle Counts for Reconnect South Park)

Figure 5: Approximate Vehicle Volume Locations

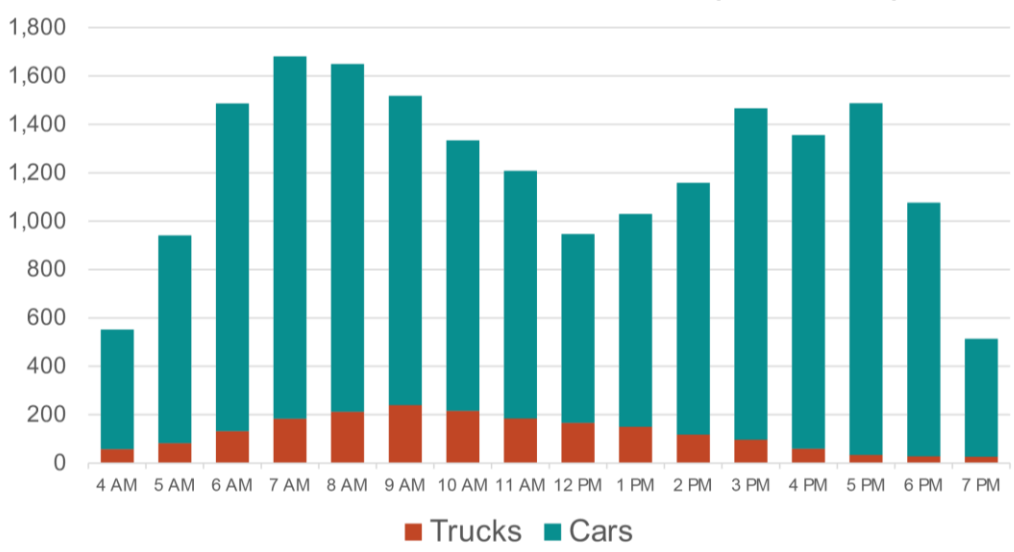
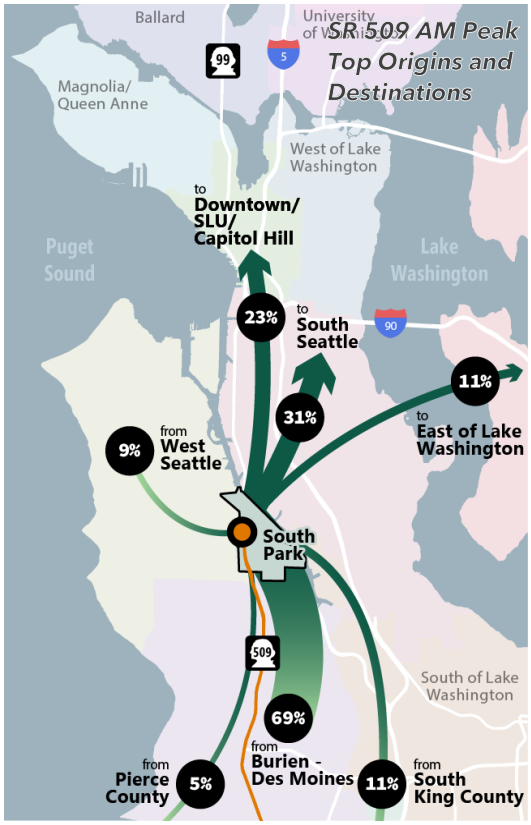


Figure 6: Existing northbound hourly vehicle volumes on SR 99 (Source: City of Seattle, 2024 Vehicle Counts for Reconnect South Park)

SR 99 plays a role in the regional roadway network. StreetLight Data is a big data source that provides vehicle origin and destination (O-D) data by aggregating information from multiple sources.[18] Analysis of SR 99 during the AM peak in comparison to I-5 and SR 509 shows some similarities and some differences (Figure 7). Origins on SR 99 are similar to those on I-5, with a balance between Pierce County, South King County (e.g. Federal Way), and communities south of Lake Washington (e.g. Renton). The largest share of destinations for vehicles using SR 99 is West Seattle, including neighborhoods along the peninsula and industrial uses along the Duwamish Valley. During the AM peak period, less than 10 percent of trips on SR 99 originate within South Park, and only about 6 percent of trips originating within South Park utilize SR 99.

Destinations for vehicles on I-5 are more focused on Downtown Seattle and neighborhoods of South Seattle, as well as vehicles continuing through Seattle to Snohomish County. Origins for vehicles on SR 509 are predominantly from Burien and Des Moines and follow similar destination patterns as I-5, with vehicles predominantly accessing Downtown Seattle and neighborhoods of South Seattle.

Because SR 99 is connected to I-5 via SR 599, drivers may be choosing to use SR 99 when their destinations are west of I-5, especially during periods when I-5 is congested. SR 509 is currently serving different O-D patterns, but this could change when the SR 509 Completion Project connects SR 509 to I-5. Upon the completion of the SR 509 Completion Project anticipated in 2029, the new segment of SR 509 between S 188th St and I-5 will be tolled. Tolling may affect use of SR 509, potentially discouraging use of SR 509 as an alternative to I-5 for regional travel, although this was analyzed in WSDOT's 2018 NEPA Re-Evaluation for the SR 509 Completion Project, which states "Traffic volumes on SR 518, S 188th Street, SR 99, and some segments of I-5 would decrease with the 2045 Build condition compared to the No Build condition as trips shift to the new facility."[19]



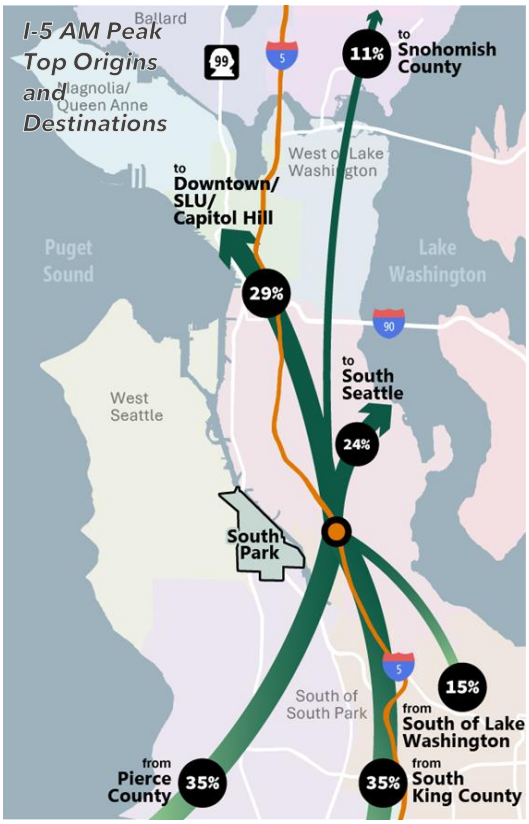


Figure 7: Top Origins and Destinations for SR 99, SR 509, and I-5 during AM Peak (Source: Streetlight Data)

Potential Futures Definition

The Potential Futures were defined through the *Potential Futures Definition Technical Memorandum* that reviewed considerations, risks, and potential fatal flaws for a broad range of possible approaches to SR 99. That memorandum defined four Potential Futures for further development and analysis:

Reroute + Reclaim: The highway is removed through the SR 99 Corridor and land is reclaimed for other purposes.

Narrower Boulevard: The highway is replaced with a street with one travel lane in each direction and restrictions on freight traffic along the SR 99 right-of-way within the South Park neighborhood.

Wider Boulevard: The highway is replaced with a street with two travel lanes in each direction.

Bridges + Trails: SR 99 is retained as is with new connections across and along the roadway to better connect the community.

From this initial definition, the technical consultant team developed concept-level design to provide the general alignment of roadways and non-motorized connections at a high level and to develop the Potential Futures Analysis. There are many potential configurations that may be possible with the umbrella of each Potential Future. The definitions for this analysis form a starting point that will need to be refined in future phases of study and analysis. Key elements of the Potential Futures that affect the Potential Futures Analysis are listed in the following section.

Reroute + Reclaim

In this Potential Future:

- SR 99 has been removed from Tukwila International Boulevard to S Holden St
- Streets that currently dead end at the highway, such as 8th Avenue S, S Donovan St, and S Henderson St are reconnected again as neighborhood streets
- A multi-use trail uses part of the former SR 99 right-of-way and connects to regional trails
- The "cloverleaf" interchange at 14th Ave S and Des Moines Memorial Drive has been removed
- South of South Park, access from Tukwila International Boulevard to existing properties such as on the Desimone Oxbow is maintained

Figure 8 and Figure 9 provide a concept level layout for this Potential Future.

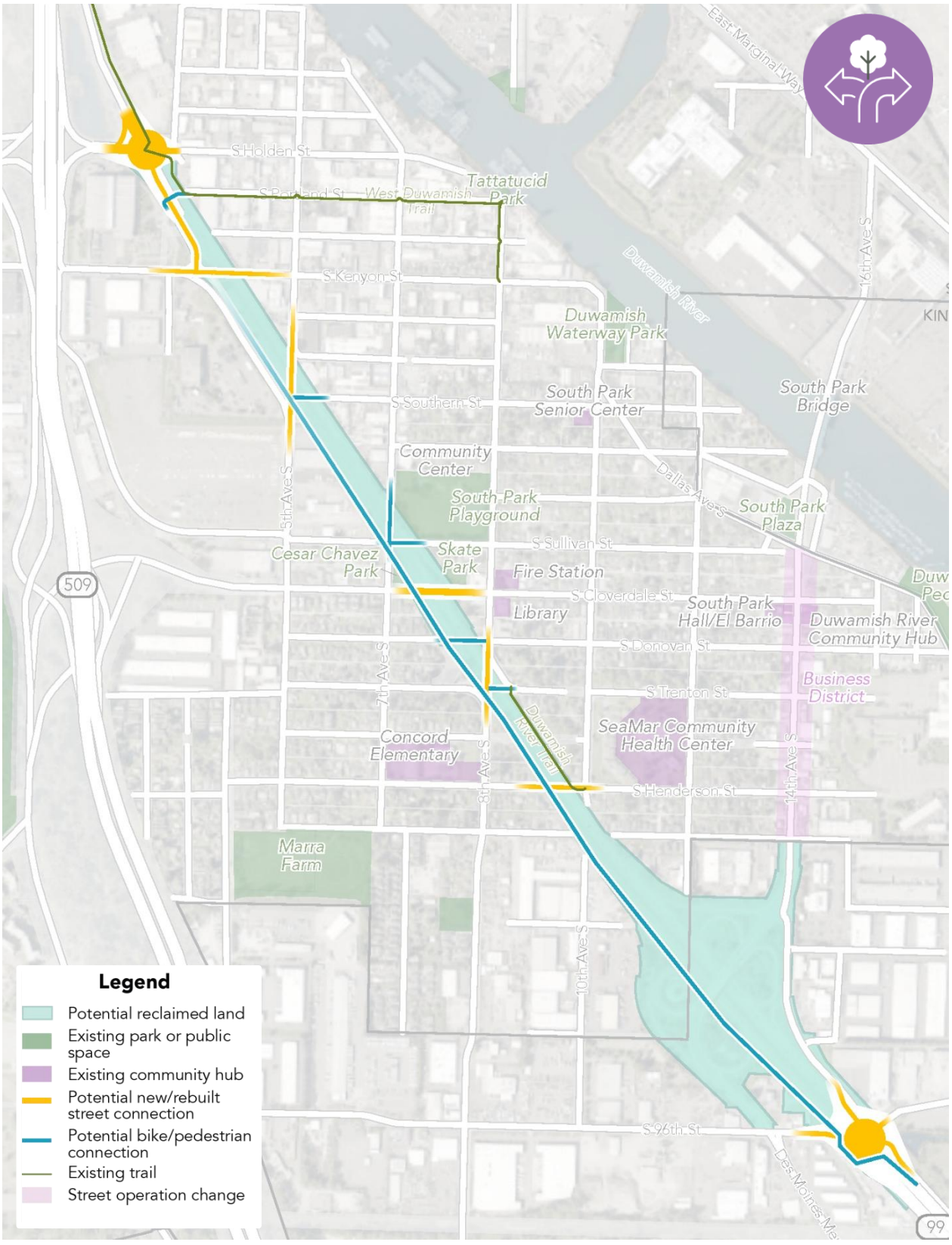


Figure 8: Concept Layout for Reroute + Reclaim between S Holden St and 14th Ave S

Figure 9: Concept Layout for Reroute + Reclaim between 14th Ave S and Tukwila International Boulevard

Narrower Boulevard

In this Potential Future:

- SR 99 has been modified to function as a city street with sidewalks and one travel lane in each direction between S Holden St and Tukwila International Boulevard *(note: that in this Potential Future, the boulevard may not continue to be designated as SR 99)*
- Freight is prohibited from the new street within the South Park neighborhood
- A multi-use trail parallels the roadway connecting to regional trails
- New signalized intersections and crossings would allow people walking, biking, taking transit, or driving to more easily access both sides of the boulevard
- The "cloverleaf" interchange at 14th Ave S and Des Moines Memorial Drive has been replaced with a roundabout
- South of South Park a street connection is maintained to Tukwila International Boulevard with one lane in each direction

Figure 10 and Figure 11 provide a concept level layout for this Potential Future.

Figure 10: Concept Layout for Narrower Boulevard between S Holden St and 14th Ave S

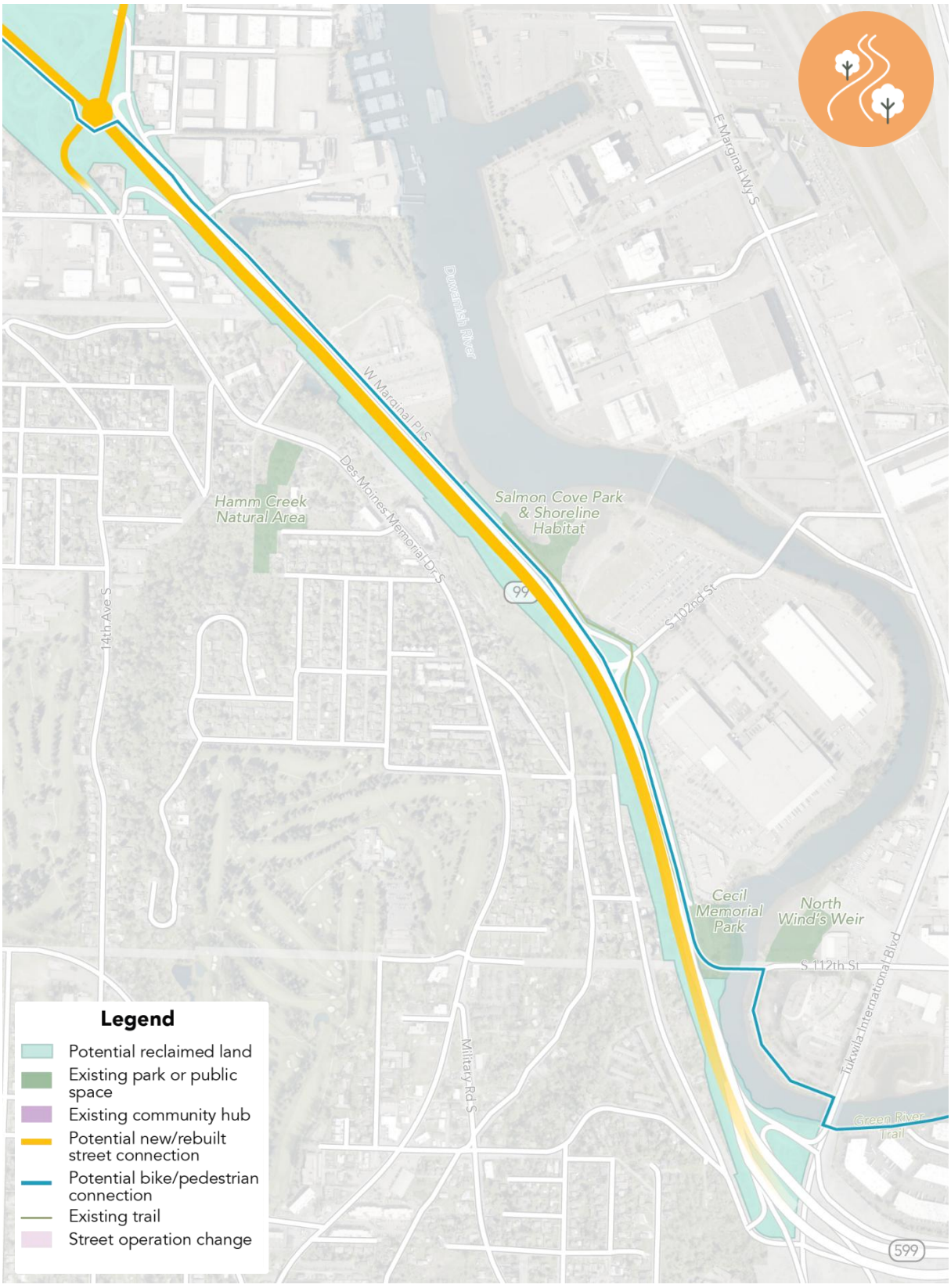


Figure 11: Concept Layout for Narrower Boulevard between 14th Ave S and Tukwila International Boulevard

Wider Boulevard

In this Potential Future:

- SR 99 has been modified to function as a city street with sidewalks and two travel lanes in each direction between S Holden St and Tukwila International Boulevard *(note: that in this Potential Future, the boulevard may not continue to be designated as SR 99)*
- A multi-use trail parallels the roadway connecting to regional trails
- New signalized intersections and crossings would allow people walking, biking, taking transit, or driving to more easily access both sides of the boulevard
- The "cloverleaf" interchange at 14th Ave S and Des Moines Memorial Drive has been replaced with a roundabout
- South of South Park a street connection is maintained to Tukwila International Boulevard with two lanes in each direction

Figure 12 and Figure 13 provide a concept level layout for this Potential Future.

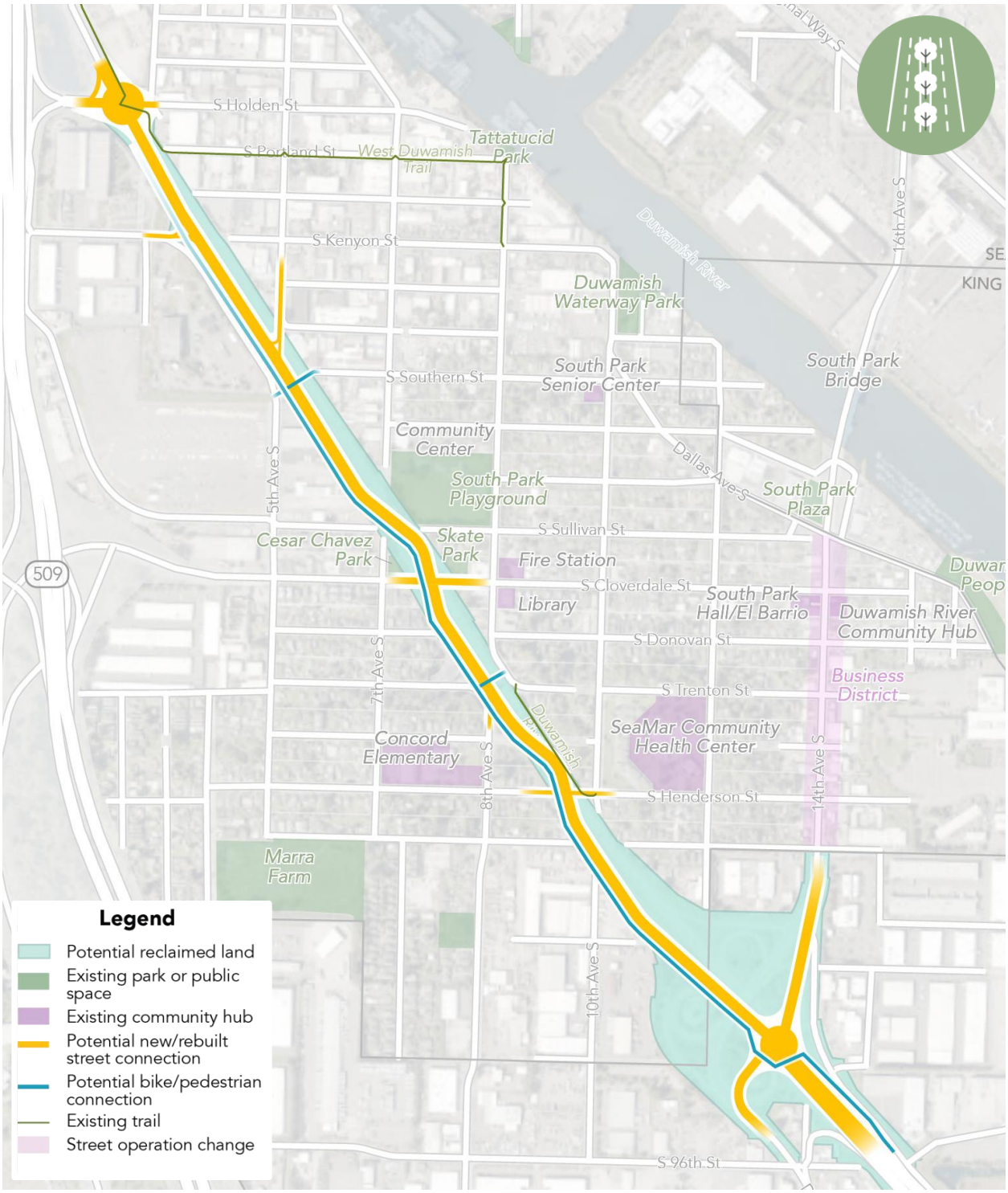


Figure 12: Concept Layout for Wider Boulevard between S Holden St and 14th Ave S

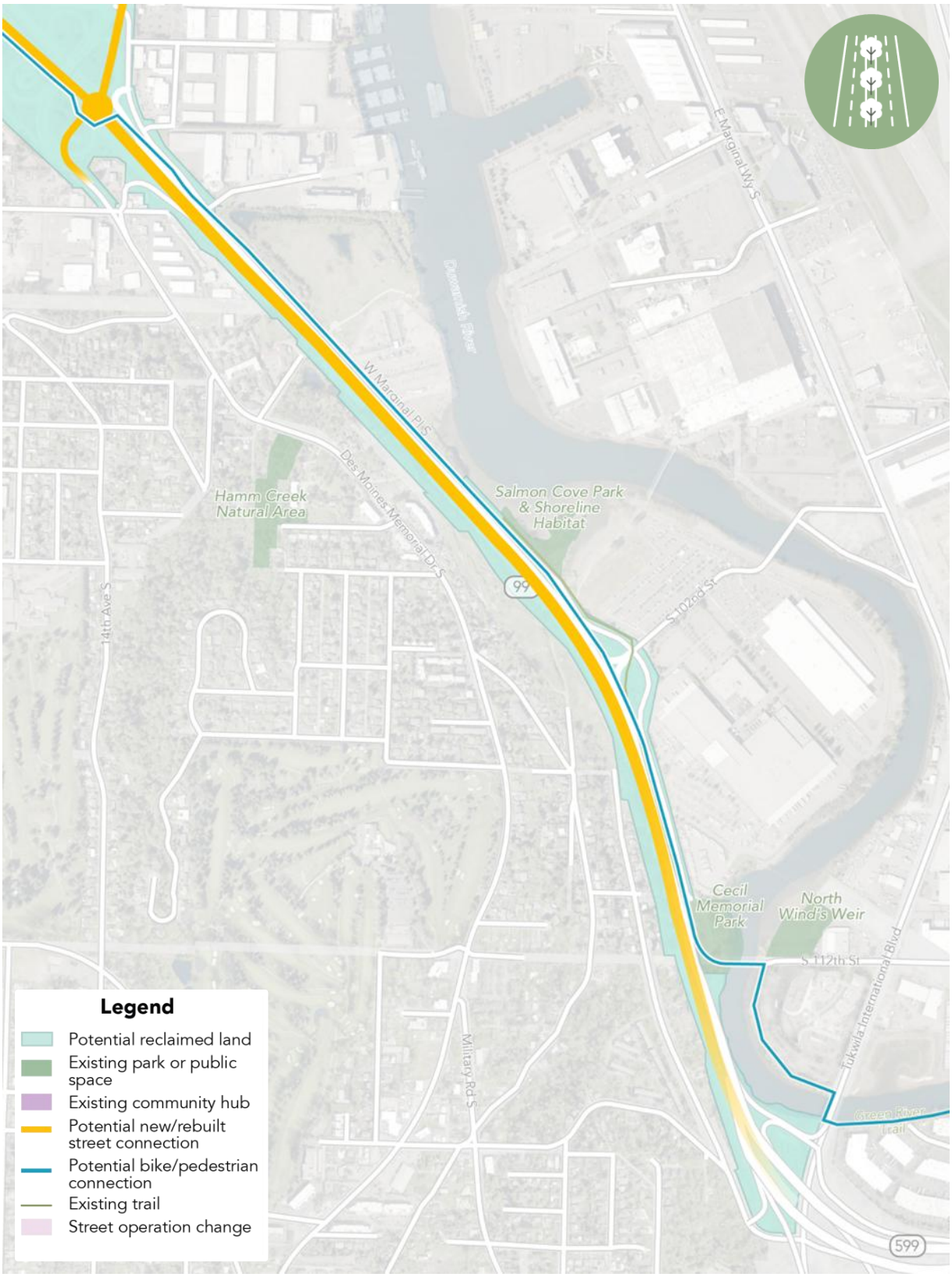


Figure 13: Concept Layout for Wider Boulevard between 14th Ave S and Tukwila International Boulevard

Bridges + Trails

In this Potential Future:

- SR 99 remains intact
- New or improved bridges for people walking, biking, and rolling connect across SR 99 at S Henderson St, 8th Ave S, and S Donovan St
- The SR 99 bridge over S Cloverdale St is reconstructed to provide wider sidewalks along S Cloverdale St
- A trail connects along the roadway to connect to regional trails
- Sound walls and plantings are provided between SR 99 and surrounding residential and community uses
- The "cloverleaf" interchange at 14th Ave S and Des Moines Memorial Drive has been replaced with an urban interchange with sidewalks and bike facilities across SR 99
- South of South Park there are no changes to the roadway

Figure 14 and Figure 15 provide a concept level layout for this Potential Future.

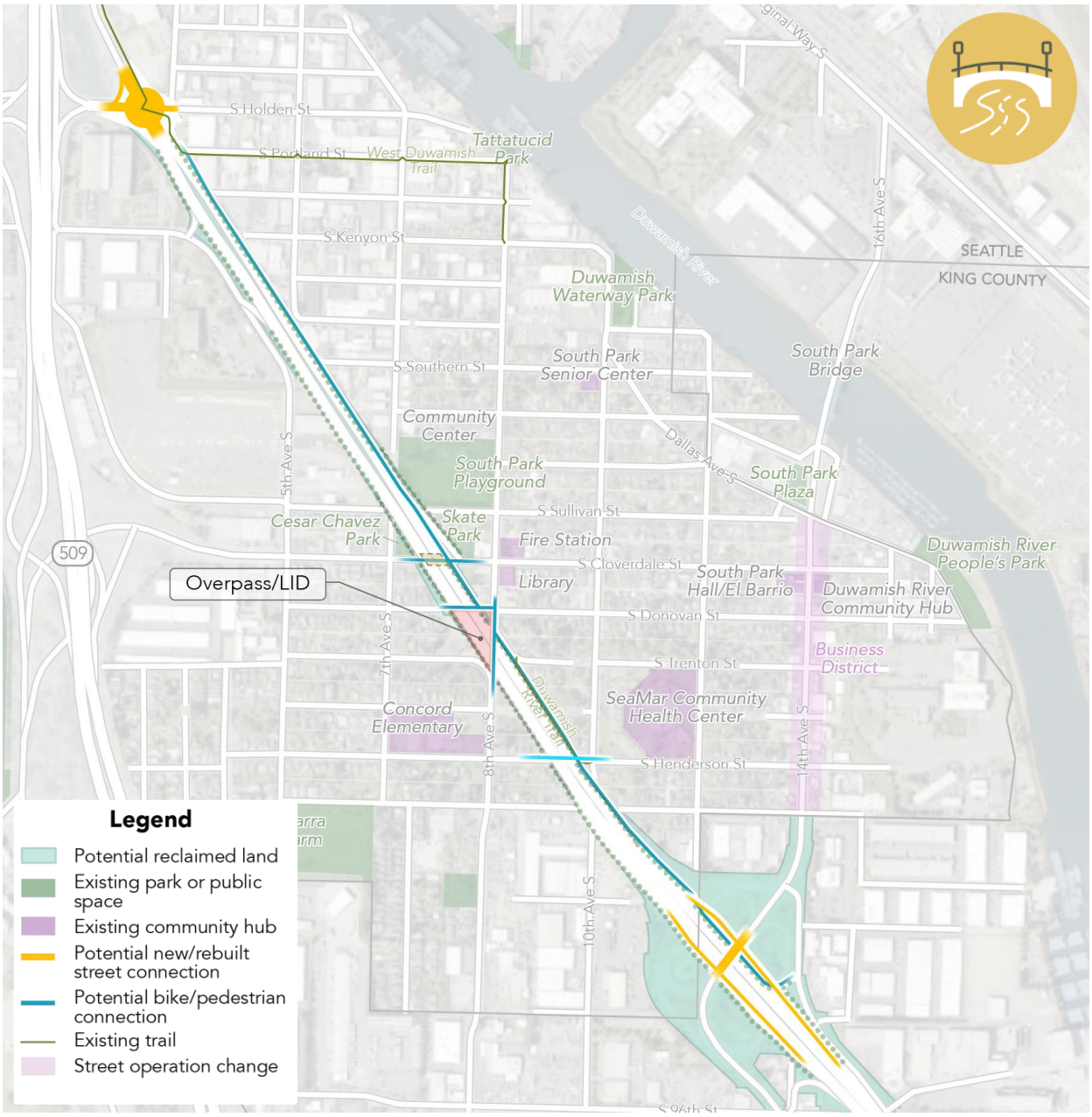


Figure 14: Concept Layout for Bridges + Trails between S Holden St and 14th Ave S

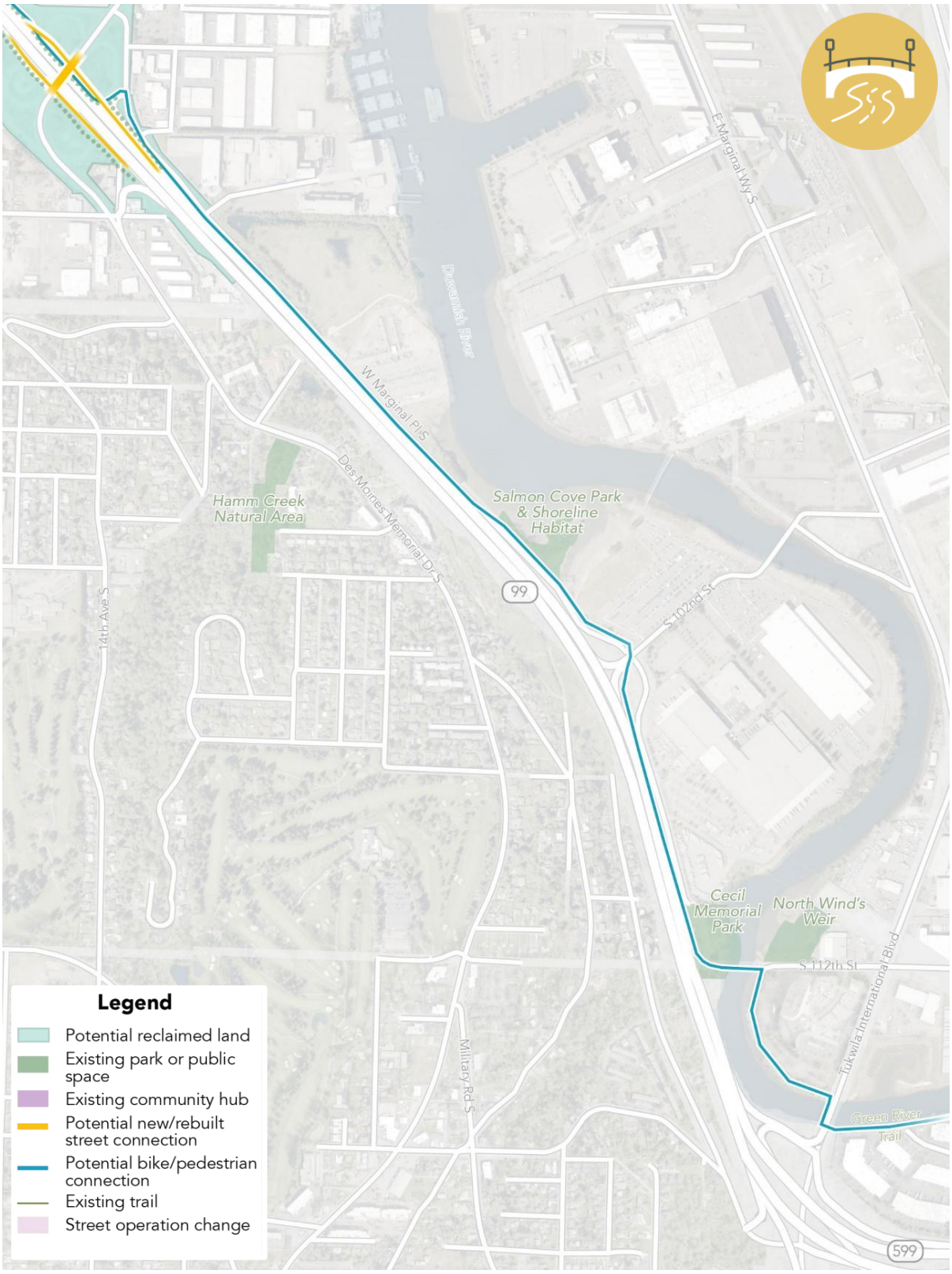


Figure 15: Concept Layout for Bridges + Trails between 14th Ave S and Tukwila International Boulevard

In each Potential Future, 14th Ave S from S Cloverdale St to SR 99 has been converted to one lane in each direction at all times from the current two lanes in the peak direction during peak hours. The City of Seattle Department of Transportation has begun consideration of this change.[20] This reconfiguration is consistent in each Potential Future because of the safety benefit it would provide. Decisions on 14th Ave S reconfiguration are not predicated on future changes to SR 99.

Travel Demand Modeling Methodology

The Puget Sound Regional Council's (PSRC) regional travel demand model, SoundCast, was used to estimate changes in travel behavior in each of the Potential Futures. SoundCast is an activity-based travel demand model that includes the four-county region of King, Kitsap, Pierce, and Snohomish counties. The model uses land use and transportation assumptions to develop projections of trip demand and assignment to the roadway and transit network. More details on the model are available in the user's guide.[21] The roadway network in the model includes arterial roadways. A visualization of the modeled roadways (dark lines) compared to all roadways (light lines) is shown in Figure 16.

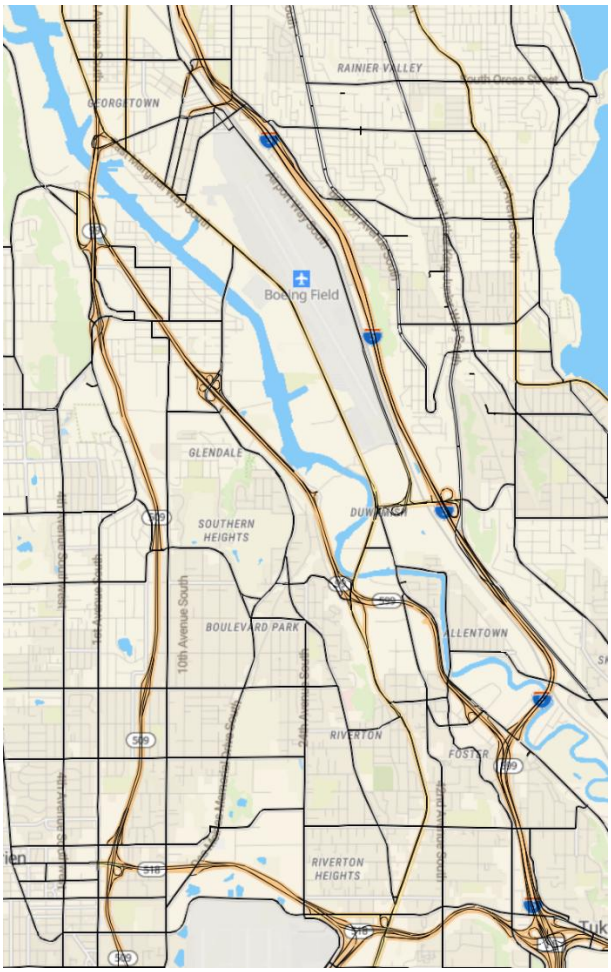


Figure 16: PSRC Model Roadway Network

The project team used the 2018 and 2050 scenarios as provided by PSRC for the Reconnect South Park analysis. The existing scenario was calibrated and validated by PSRC using household travel survey data and count data collected in 2018. The 2050 scenario is consistent with PSRC's Vision 2050 and includes the regionally adopted land use growth targets (LUV-it) and the network improvement projects from the 2022 Regional Transportation Plan (RTP), including the SR 509 Completion Project, regional buildout of transit service envisioned in the Sound Transit 3 funding package, and other planned changes to the transportation network. More information on the specific assumptions in Vision 2050[22], LUV-it[23], and the RTP[24] are available from PSRC.

Existing data was gathered from multiple sources, including WSDOT, SDOT, King County, and collected data in order to establish current conditions. The project team used the Potential Futures definition to modify the transportation network and project how travel volumes on major roadways would vary. The growth rates from the PSRC model were then applied to existing data to develop future traffic projections.

The transportation network and mode splits outside of the changes previously described are held constant. While the different roadway configurations in the Potential Futures would affect the modes of travel for how people choose to get around within South Park, in order to provide consistent evaluation across all Potential Futures, no changes in assumptions were made outside of the regional travel demand model for individual Potential Futures. It is likely that Potential Futures that provide more walkable, bikeable, and transit-friendly conditions for people in South Park would encourage increased non-auto mode choices. Future phases of analysis can provide sensitivity testing under different mode split assumptions.

Land use inputs for the purposes of travel demand modeling are held constant. The land suitability analysis described below identifies different development capacities in each Potential Future. For the purposes of travel demand modeling, no changes to the future land uses in the model have been assumed.

Travel Demand Modeling Results

The 2050 Baseline assessment projects traffic volumes on major roadways in the Regional Roads & Surrounding Areas Analysis Area ranging from 200,000 vehicles/day and 6,000 trucks/day on I-5 to 9,000 vehicles/day and 200 trucks/day on Des Moines Memorial Drive (see Figure 17 and Figure 18, as well as Table 2 and Table 3.) The relative width of each line shows the daily volume of each roadway assessed to this level of detail for this phase of the analysis.

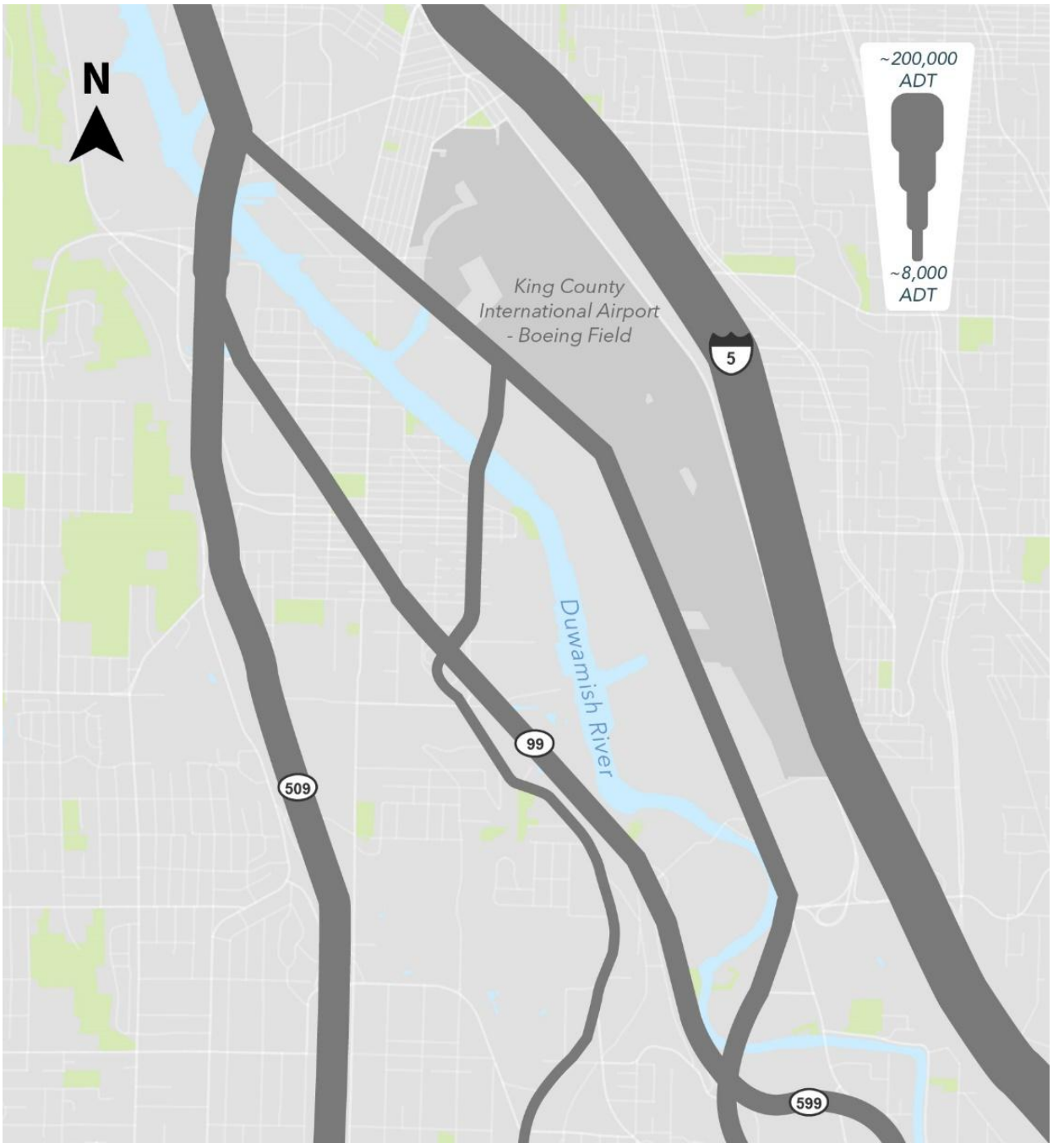


Figure 17: 2050 Baseline Vehicle Volumes on Regional Roadways

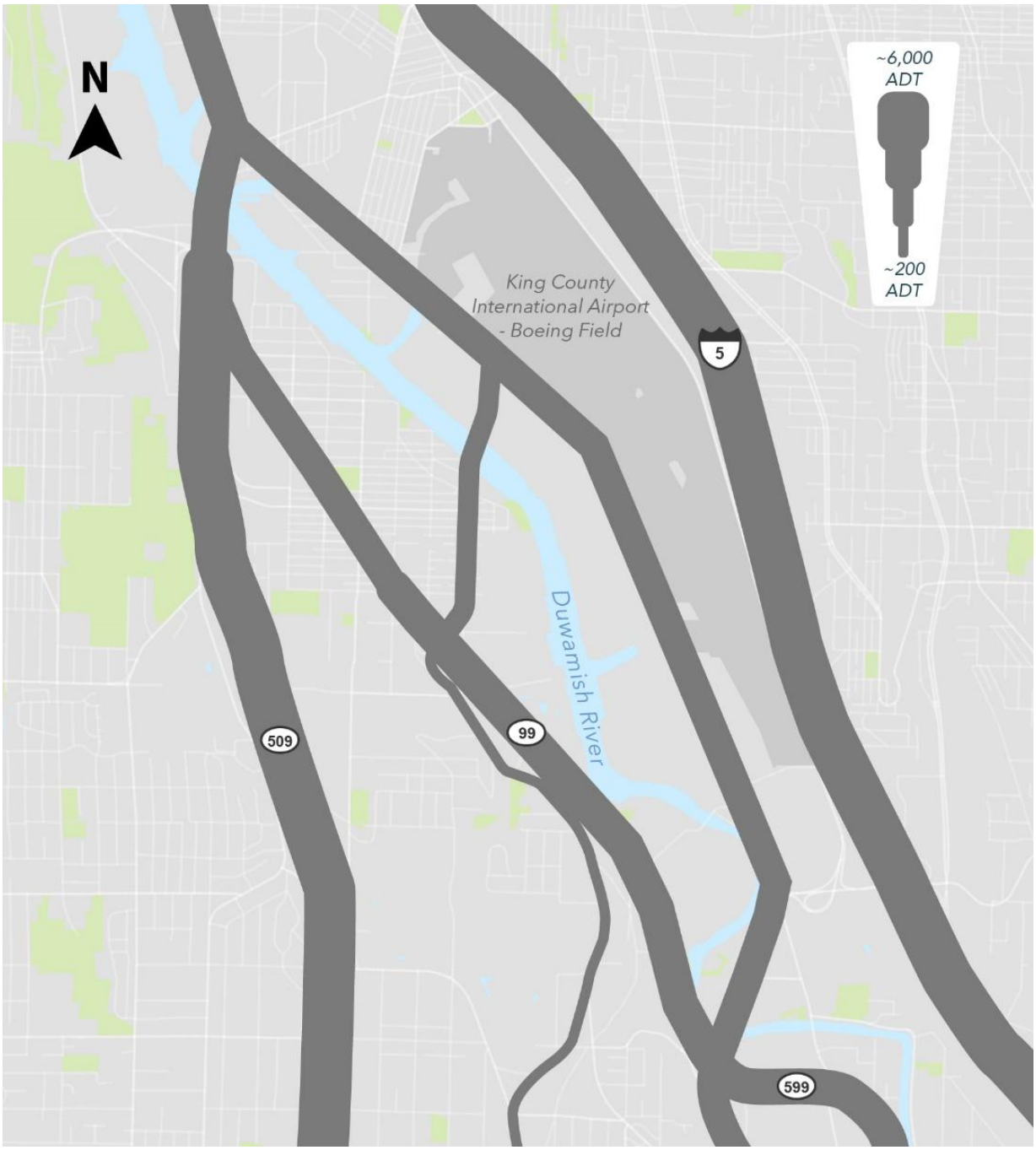


Figure 18: 2050 Baseline Truck Volumes on Regional Roadways

The forecasts were determined based on anticipated volume diversions from SR 99 to other roadways due to changes in capacity, travel speed, and access restrictions on roadways within South Park for each of the Potential Futures. The project team reviewed the volume changes suggested by the model on all viable diversion routes to determine diversions.

Diversions were separately estimated by direction (northbound and southbound), by time of day (morning peak, evening peak, and off-peak), and by mode (all vehicles and freight). The figures below summarize the daily diversions for vehicles on SR 99 south of the 14th Ave S interchange for all vehicles and freight (medium and heavy trucks). Rerouted traffic from the 14th Ave S bridge to the 1st Ave S bridge due to the assumed reconfiguration on 14th Ave S is not accounted for in these percentages.

Figure 19 through Figure 22 show the percentage of future baseline SR 99 traffic that would shift to each alternative route. Traffic would redistribute across multiple routes in each of the Potential Futures that result in changes to SR 99. In Reroute + Reclaim—which would have the greatest diversion of vehicles due to the removal of SR 99—no individual alternative route would be anticipated to receive more than 25 percent of the future baseline traffic, and most routes would see far less change. Decisions for individual drivers would depend on their specific origins and destinations and time of day.

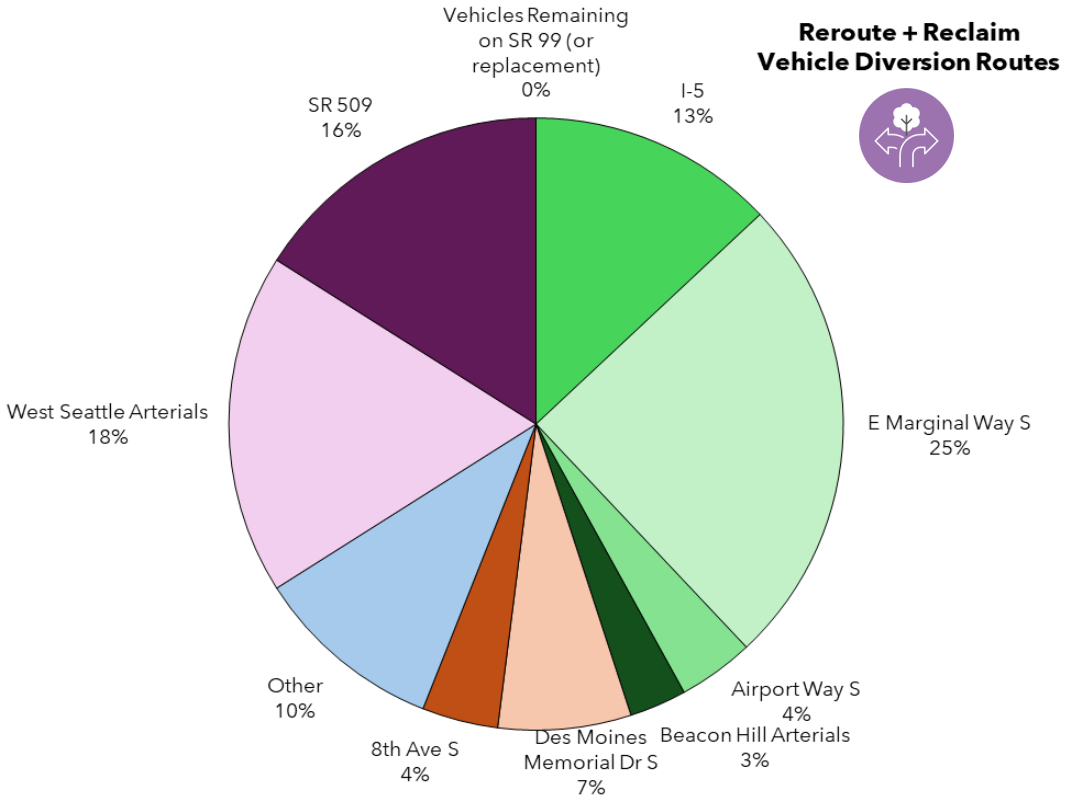


Figure 19: Vehicle Diversion Routes – Reroute + Reclaim

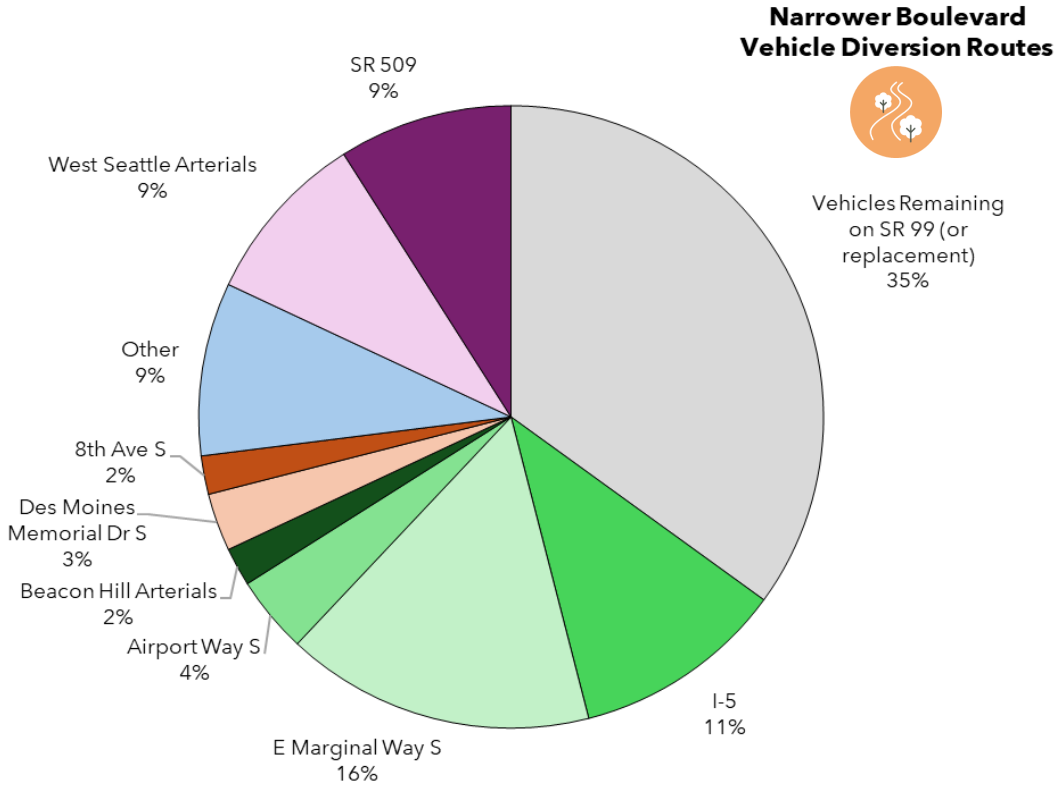


Figure 20: Vehicle Diversion Routes – Narrower Boulevard

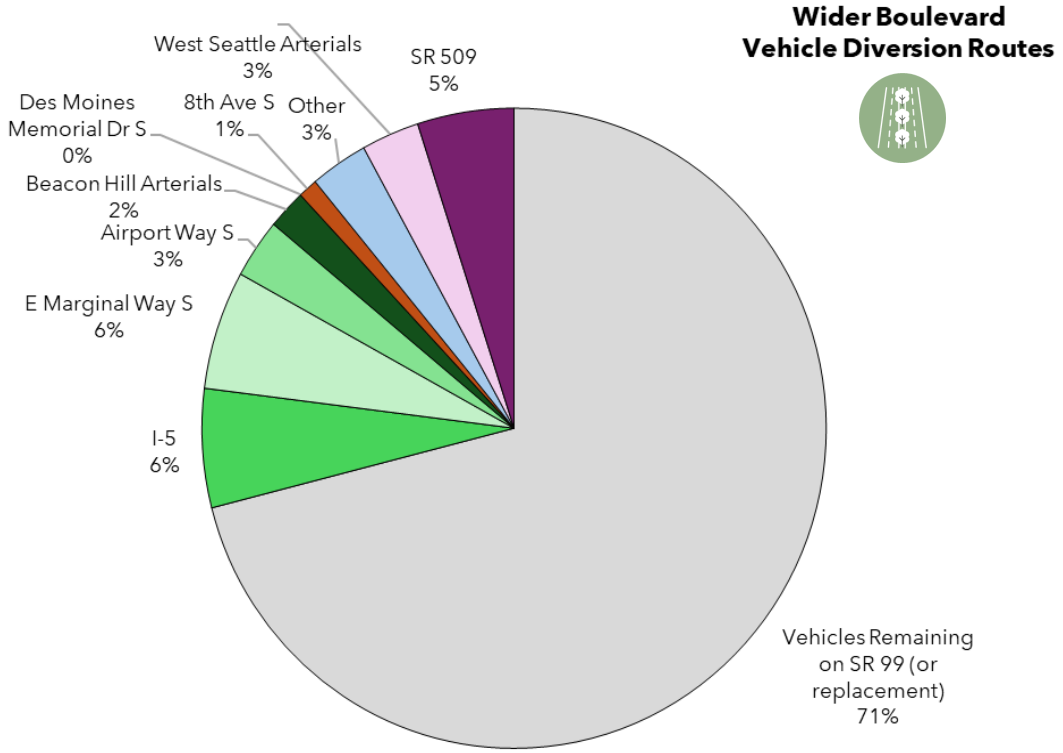


Figure 21: Vehicle Diversion Routes – Wider Boulevard

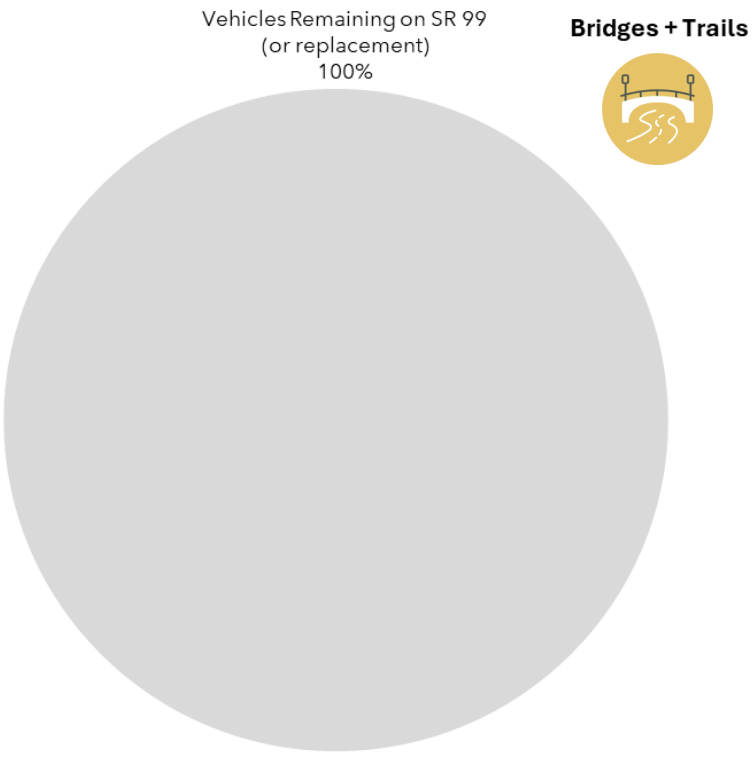


Figure 22: Vehicle Diversion Routes – Bridges + Trails

Figure 23 through Figure 26 show the percentage of future baseline SR 99 truck traffic that would shift to each alternative route. Truck traffic would redistribute across fewer routes in each of the Potential Futures that result in changes to SR 99. In Reroute + Reclaim—which would have the greatest diversion of vehicles due to the removal of SR 99—approximately 62 percent of trucks currently using SR 99 would divert to SR 509 or I-5. Decisions for individual drivers would depend on their specific origins and destinations and time of day.

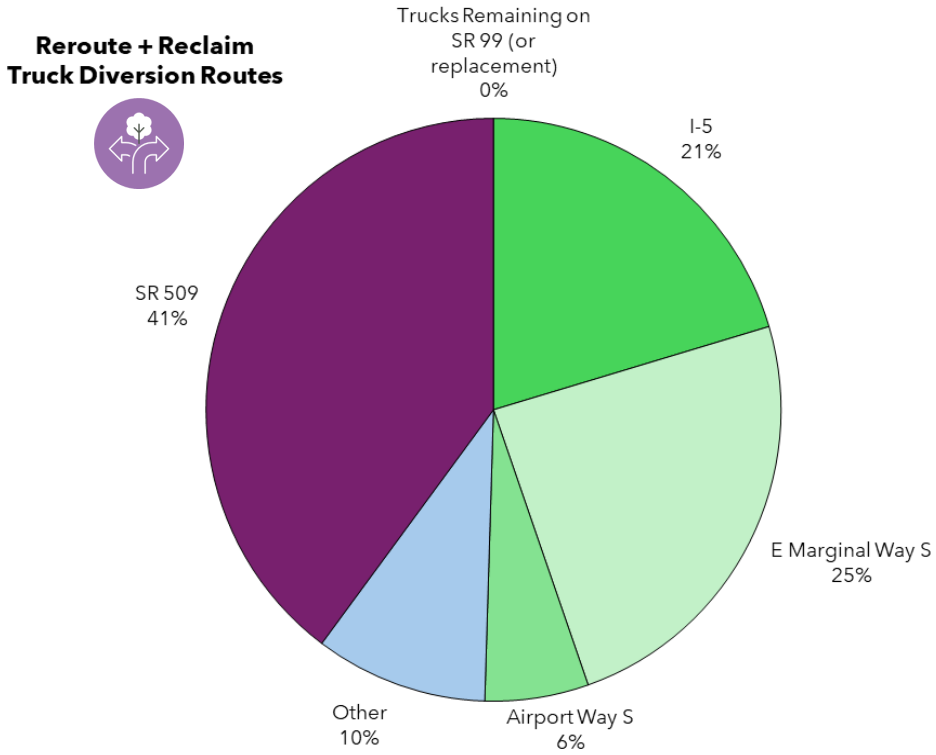


Figure 23: Truck Diversion Routes – Reroute + Reclaim

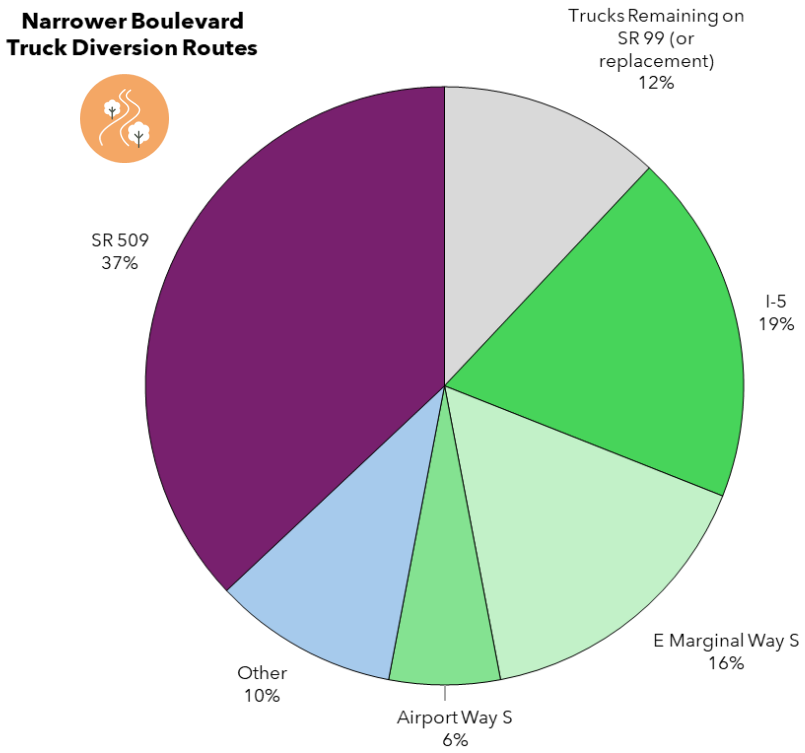


Figure 24: Truck Diversion Routes – Narrower Boulevard

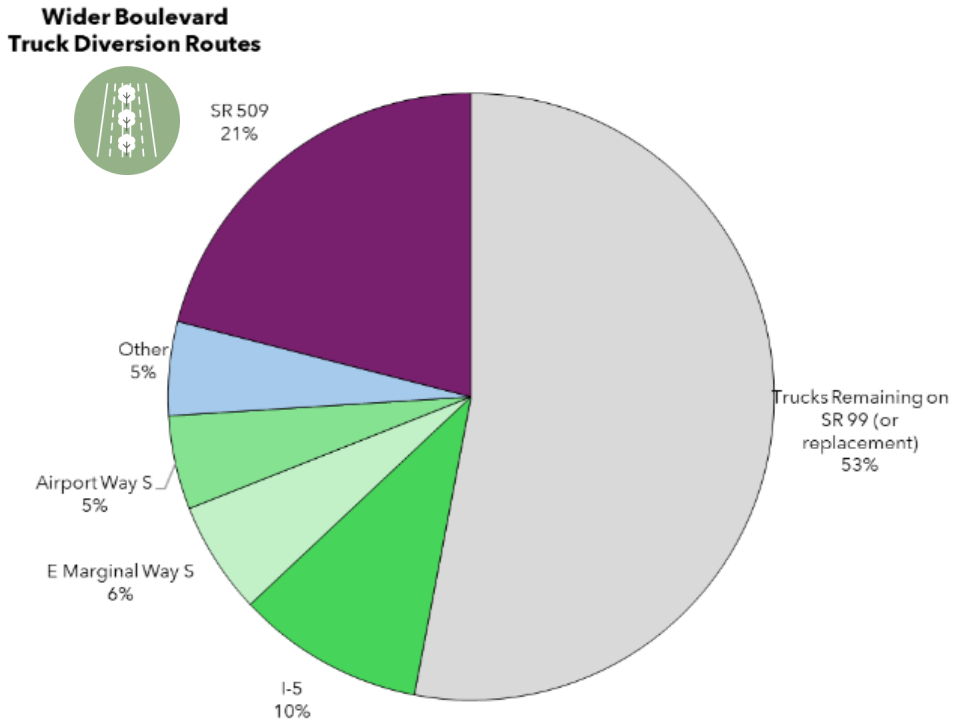


Figure 25: Truck Diversion Routes – Wider Boulevard

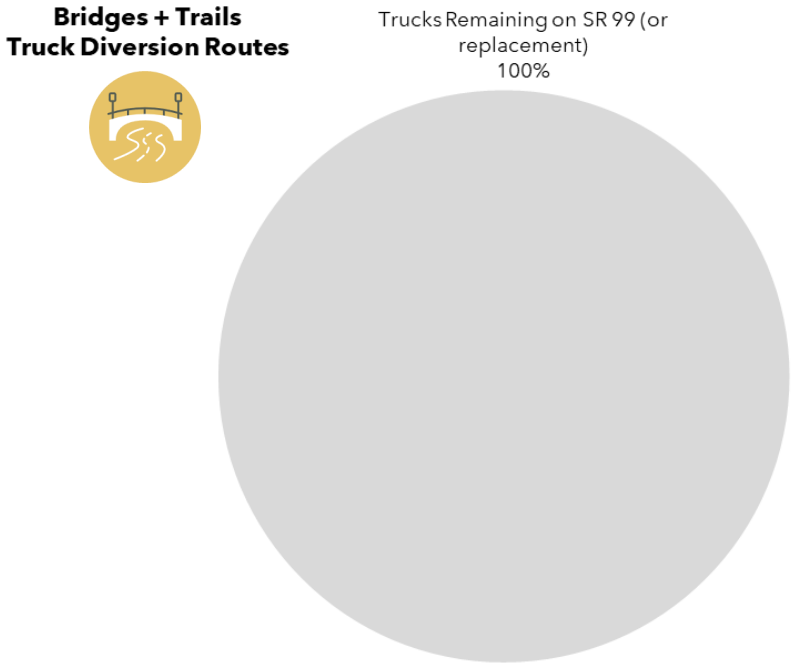


Figure 26: Truck Diversion Routes – Bridges + Trails

Existing counts were compiled from WSDOT permanent traffic count locations, WSDOT loop data, and SDOT traffic reports.

Table 1: Existing Count Data

Location	Count Source	Truck Percentages
I-5 at S Thistle St	Feb-May 2024 Tu-Th Average (WSDOT CDR loop data[25])	Assumed 2%.[26]
SR 99 at S 100th St	Feb-May 2024 Tu-Th Average (WSDOT CDR loop data)	SR 99 s/o Rose St November 2024 Traffic Count
SR 99 n/o S Cloverdale St	Feb-May 2024 Tu-Th Average (WSDOT CDR loop data)	SR 99 s/o Rose St November 2024 Traffic Count
SR 509 at S 100th St	Feb-May 2024 Tu-Th Average (WSDOT CDR loop data)	SR 509 s/o Henderson St November 2024 Traffic Count
SR 509 at 1st Ave S Bridge	Feb-May 2024 Tu-Th Average (WSDOT CDR loop data)	SR 509 s/o Henderson St November 2024 Traffic Count
14th Ave Bridge	Estimated from 2022 SDOT AADT[27]	14th Ave S s/o Director St November 2024 Traffic Count
E Marginal Way e/o Ellis Ave	Estimated from 2022 SDOT AADT	14th Ave S s/o Director St November 2024 Traffic Count
Des Moines Dr S s/o S 96th St	Estimated from 2019 King County AADT[28]	Assumed 2%

Table 2 and Table 3 show the forecasted volumes for several locations throughout the study area. Forecasts are provided for total vehicles as well as freight. Daily traffic volumes have only been developed for the specific streets shown in these tables as part of this study. As shown in Figure 19 and Figure 20, there are additional routes that would see changes in traffic volumes in each Potential Future. Note that while the Bridges + Trails combined daily volume forecasts for all vehicles and trucks are similar to the 2050 Baseline condition, there are minor differences due to the modifications to 14th Ave S consistent in all Potential Futures and described above.

Table 2: Combined Daily Volume Forecasts (all vehicles)

Location	Existing	2050 Baseline	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
I-5 at S Thistle St	193,400	200,200	205,900	204,900	202,800	200,200
SR 99 at S 100th St	44,000	42,700	0	14,600	30,400	42,700
SR 99 n/o S Cloverdale St	34,900	33,700	0	11,400	25,600	35,300
SR 509 at S 100th St	68,700	89,500	96,400	93,400	91,400	89,500
SR 509 at 1st Ave S Bridge	80,000	98,000	92,100	90,200	97,600	99,600
14th Ave Bridge	17,000	20,400	14,400	18,800	16,200	18,800
E Marginal Way e/o Ellis Ave	38,000	43,300	47,900	48,700	41,700	41,800
Des Moines Dr S s/o S 96th St	8,000	9,300	12,400	10,500	9,300	9,300

Table 3: Combined Daily Volume Forecasts (freight)

Location	Existing	2050 Baseline	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
I-5 at S Thistle St	3,870	6,140	6,870	6,820	6,510	6,140
SR 99 at S 100th St	4,490	3,530	0	320	1,850	3,530
SR 99 n/o S Cloverdale St	3,560	2,830	0	0	1,450	2,900
SR 509 at S 100th St	1,920	5,500	6,940	6,800	6,230	5,500
SR 509 at 1st Ave S Bridge	2,240	4,370	4,170	4,170	4,260	4,440
14th Ave Bridge	1,280	1,080	380	700	780	1,010
E Marginal Way e/o Ellis Ave	2,850	2,450	2,560	2,740	2,380	2,380
Des Moines Dr S s/o S 96th St	160	200	200	200	200	200

Table 4 and Table 5 below show the percent change in volumes compared with future baseline. Figure 27 and Figure 28 display the same information geographically.

Table 4: Combined Daily Percent Change in Volumes vs Baseline (all vehicles)

Location	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
I-5 at S Thistle St	3%	2%	1%	0%
SR 99 at S 100th St	-100%	-66%	-29%	0%
SR 99 n/o S Cloverdale St	-100%	-66%	-24%	5%
SR 509 at S 100th St	8%	4%	2%	0%
SR 509 at 1st Ave S Bridge	-6%	-8%	0%	2%
14th Ave Bridge	-29%	-8%	-21%	-8%
E Marginal Way e/o Ellis Ave	11%	12%	-4%	-3%
Des Moines Dr S s/o S 96th St	33%	13%	0%	0%

Table 5: Combined Daily Percent Change in Volumes vs Baseline (freight only)

Location	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
I-5 at S Thistle St	12%	11%	6%	0%
SR 99 at S 100th St	-100%	-91%	-48%	0%
SR 99 n/o S Cloverdale St	-100%	-100%	-49%	2%
SR 509 at S 100th St	26%	24%	13%	0%
SR 509 at 1st Ave S Bridge	-5%	-5%	-3%	2%
14th Ave Bridge	-65%	-35%	-28%	-6%
E Marginal Way e/o Ellis Ave	4%	12%	-3%	-3%
Des Moines Dr S s/o S 96th St	0%	0%	0%	0%

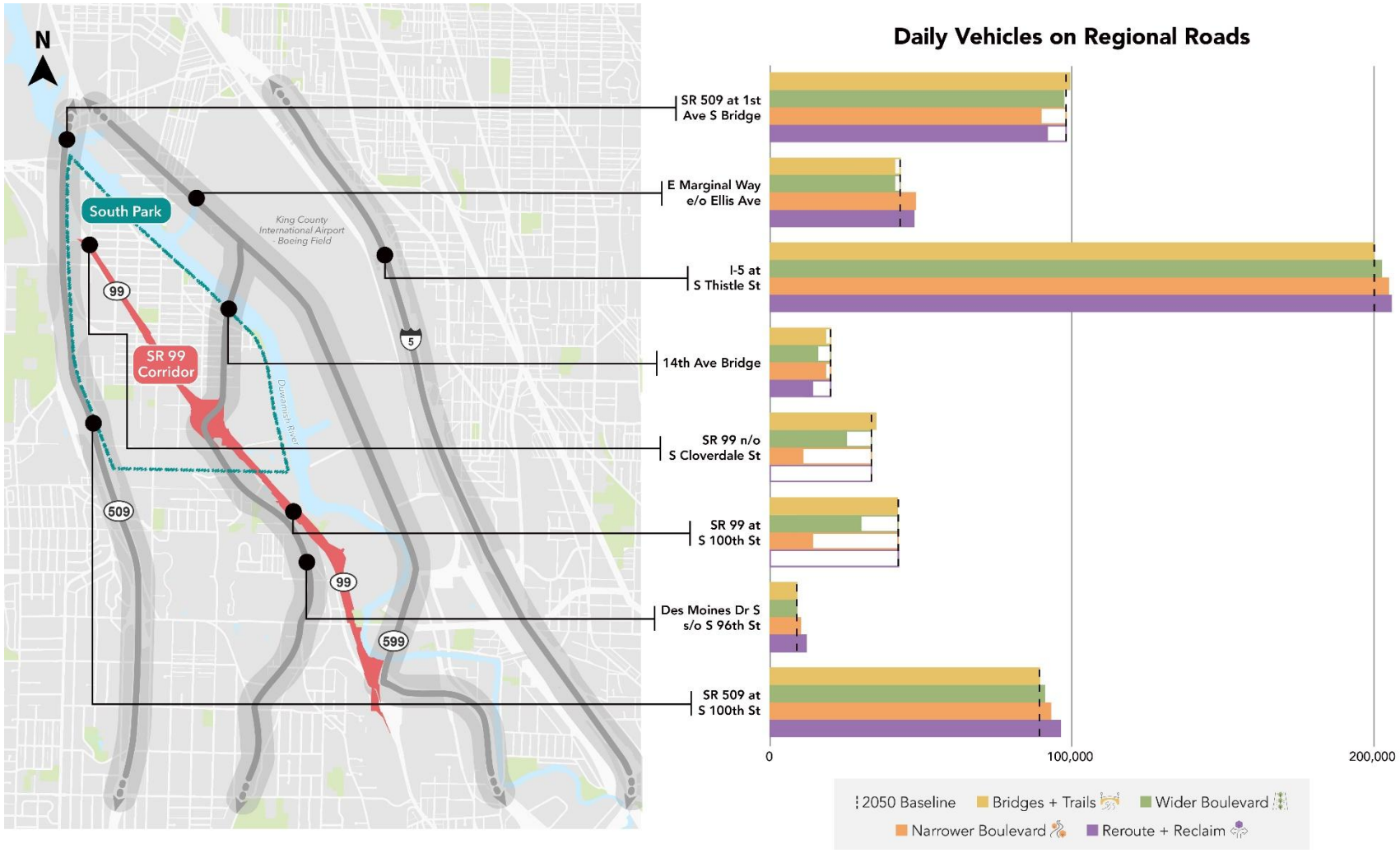


Figure 27: 2050 Baseline Daily Vehicle Forecasts and Daily Percent Change in Potential Futures (all vehicles)

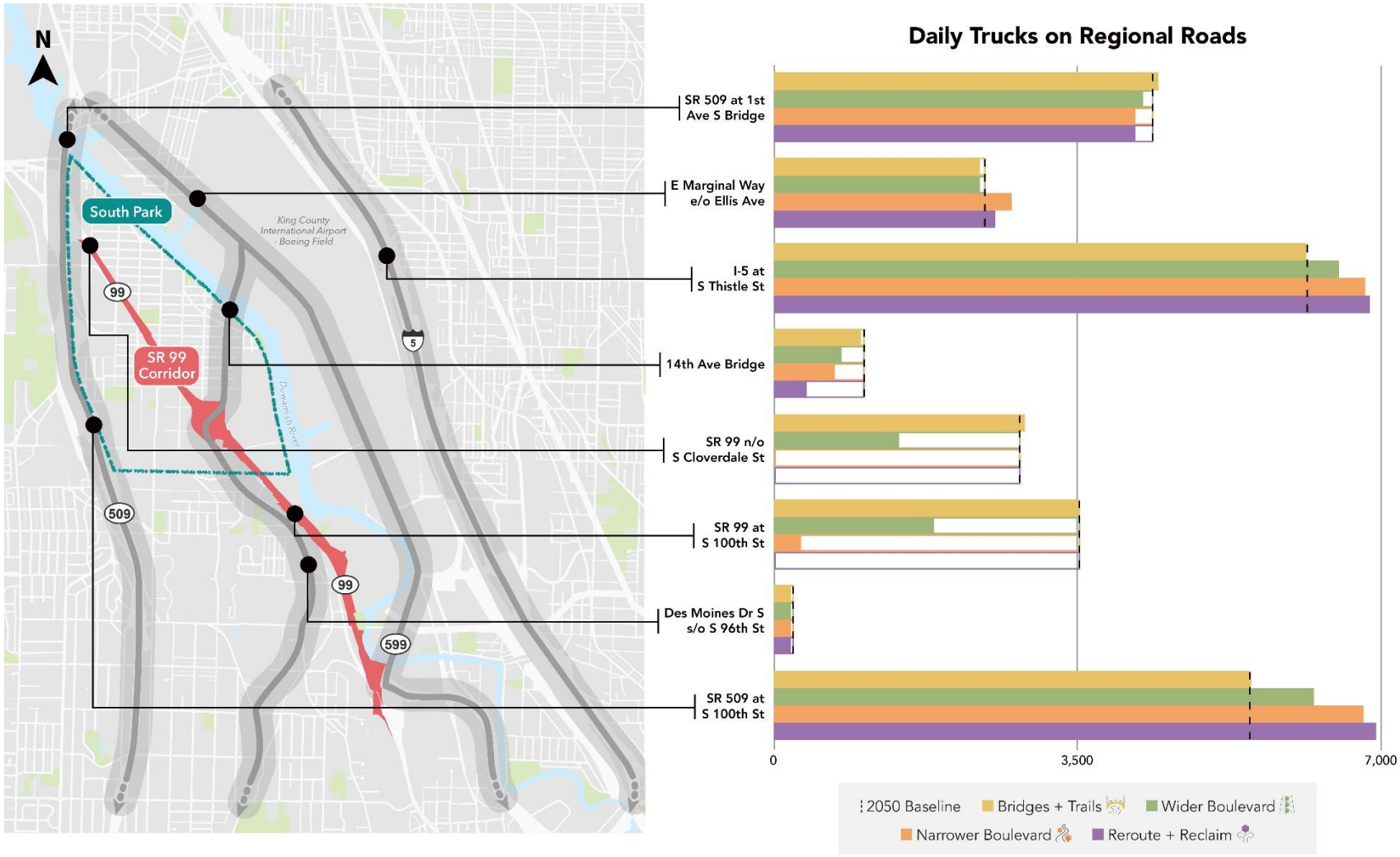


Figure 28: 2050 Baseline Daily Vehicle Forecasts and Daily Percent Change in Potential Futures (freight)

This analysis illustrates that Reroute + Reclaim would likely have the greatest change in traffic and freight volumes both within South Park and on other parallel routes. This analysis is best understood looking comparatively at each of the Potential Futures. Most of the redistribution of traffic would be to other high-volume roadways, like I-5 and SR 509. The daily changes on those roadways would be small relative to existing volumes but could vary by time of day. The full effects of traffic changes would need to be part of future studies. Reroute + Reclaim and Narrower Boulevard, with higher levels of traffic shifting to other routes, may result in more noticeable changes to E Marginal Way. This analysis has not yet explored any changes to alternate routes that could help address potential negative effects of these forecasts. Future phases of analysis would need to develop more detailed assessment of traffic operations on alternative routes and at different times of day.

Development Suitability Screening

In order to develop projections of potential land use change, the project team developed a development suitability screening analysis. This analysis looked at underlying land use conditions adjacent to SR 99 to understand land constraints and potential scale of new development that would be possible in each Potential Future. Changes in land use were only assessed within the SR 99 Analysis Area and the existing right-of-way of SR 99.

The screening took the following steps:

1. Identification of constrained land, including the following:
   - Designated wetlands
   - Critical habitat areas and riparian areas
   - Underground utility infrastructure that cannot support redevelopment
   - Areas lacking access to the street network
2. For all non-constrained areas, application of land use assumptions consistent with adjacent uses (i.e. land adjacent to industrial or commercial uses assumed to be industrial-suitable, land adjacent to residential uses assumed to be residential-suitable)
3. Projection of potential buildout of different land uses if suitable land were maximized for that use using Table 6.

The development suitability and capacity assessment is at a preliminary high level in order to compare the Potential Futures as defined for this analysis. Future refinements would need to assess the potential constraints and opportunities at a fine-grained level to develop a more detailed assessment of potential use of land no longer needed as transportation right-of-way. Future studies could also assess in more detail the potential opportunities and risks associated with refined future land use assumptions, including economic opportunity, housing stability and business continuity, stormwater implications, and noise or air quality effects of future land use.

Table 6: Land Suitability Analysis Potential Uses

Land Category	Open Space/ Parks	Residential Use	Industrial Use	Commercial/ Retail Use
Constrained / Environmentally-Suitable	X			
Residential-Suitable	X	X		X
Industrial-Suitable	X		X	X

The results of the land suitability assessment are shown in Table 7.

Table 7: Land Suitability Assessment Results

Land Category	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Constrained	*59 acres*	*48 acres*	*44 acres*	*4 acres*
Residential-Suitable	*7 acres*	*5 acres*	*4 acres*	*0 acres*
Industrial-Suitable	*34 acres*	*26 acres*	*23 acres*	*13 acres*
Total Reclaimed Land	100 acres	79 acres	71 acres	17 acres
Total Streets/Transportation	17 acres	38 acres	46 acres	100 acres
Total	**117 acres**	**117 acres**	**117 acres**	**117 acres**

The buildout areas are shown in Figure 29 through Figure 31.

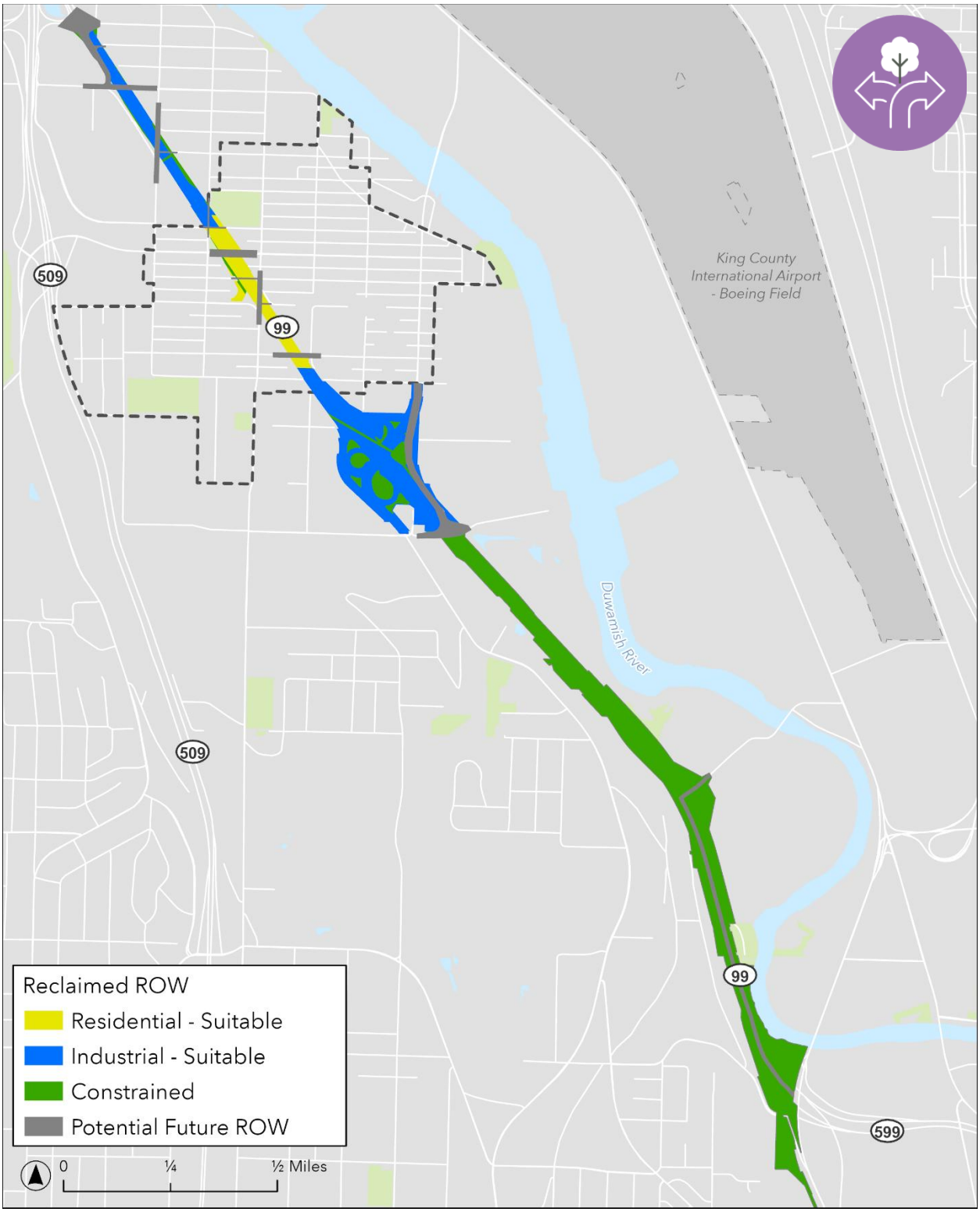


Figure 29: Land Suitability Analysis for Reroute + Reclaim

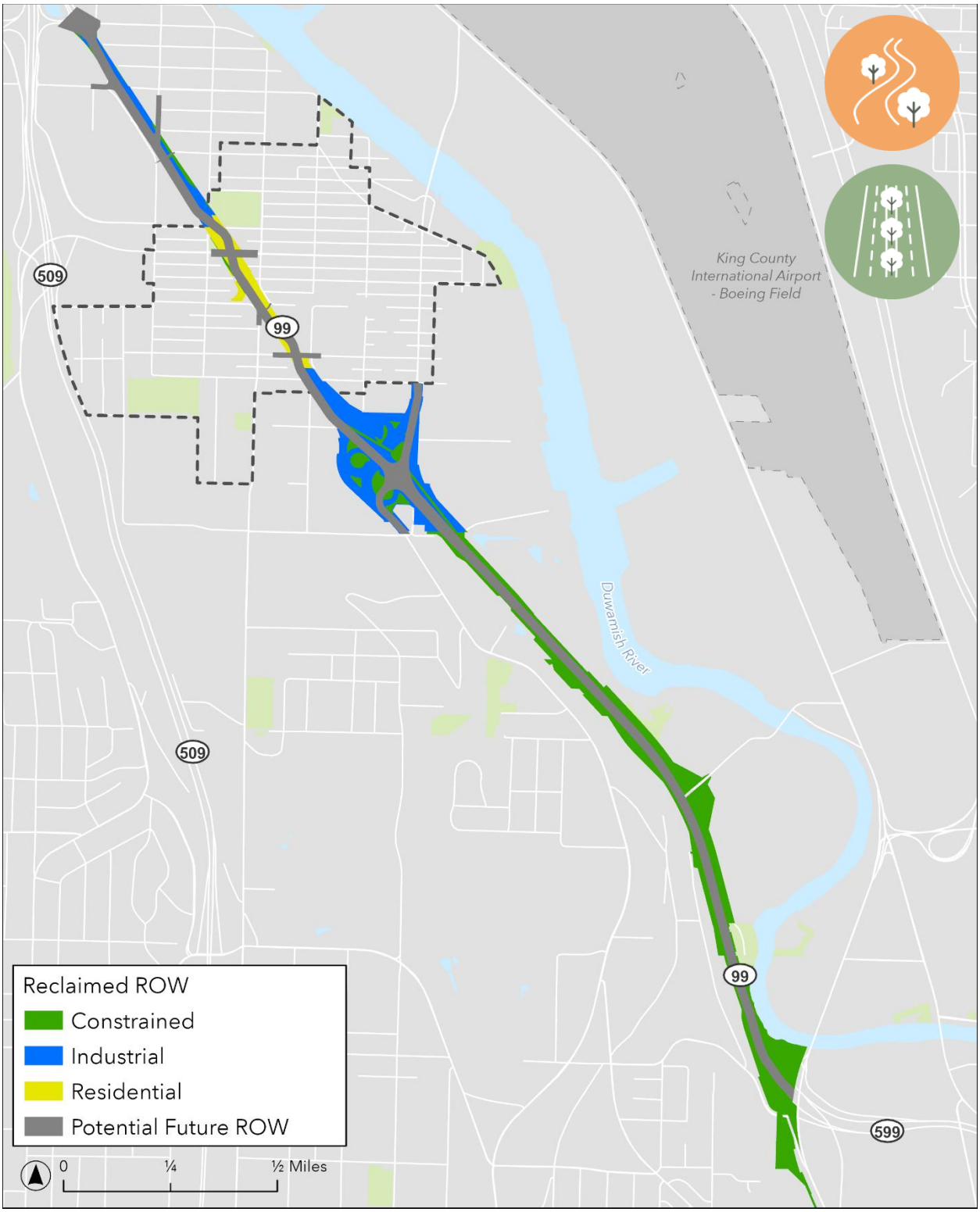


Figure 30: Land Suitability Assessment for Narrower Boulevard and Wider Boulevard

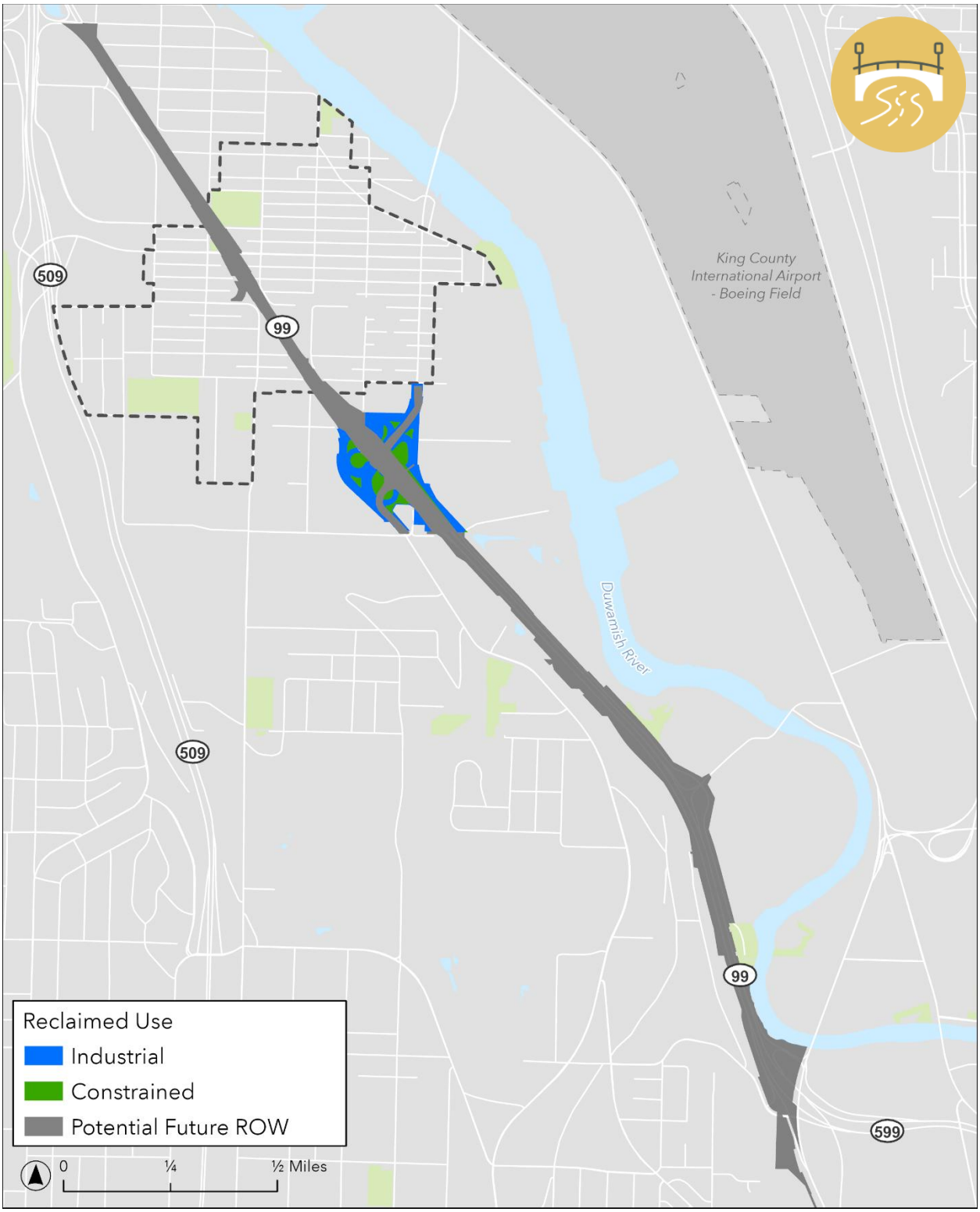


Figure 31: Land Suitability Assessment for Bridges + Trails

Using these areas and potential uses, the project team developed a potential buildout capacity for each Potential Future with these parameters:

- Open space ranges from reusing constrained land only to reusing all reclaimed land.
- Housing unit capacity assumes a zoning category of LR3 on all residential-suitable land with a potential yield of 54.4 dwelling units/acre.
- Job capacity assumes mixed-use on all residential-suitable land and commercial/industrial development on industrial-suitable land. Jobs in mixed-use development are assumed at 1 job/300 sf of buildout and jobs in commercial/industrial development are assumed at 1 job/700 sf of buildout.

The results of the buildout capacity assessment are shown in Table 8. These results are intended to provide an assessment of full buildout capacity and do not provide recommendations about future uses of land that could be reclaimed in each Potential Future.

Table 8: Buildout Capacity Assessment

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Open Space Capacity				
Open space (acres)	59-100 acres	48-79 acres	44-71 acres	4-17 acres
Housing Capacity				
Residential-Suitable Land	7 acres	5 acres	4 acres	0 acres
Total unit capacity	Up to 400	Up to 260	Up to 210	0
As share of total current South Park units	26%	17%	14%	0%
Job Capacity				
Residential-Suitable Land	7 acres	5 acres	4 acres	0 acres
Retail/Commercial space in Mixed Use	160,000 sf	100,000 sf	80,000 sf	0 sf
Industrial-Suitable Land	34 acres	26 acres	23 acres	13 acres
Retail/Commercial space in Industrial	1,500,000 sf	1,130,000 sf	1,020,000 sf	570,000 sf
# of jobs in Mixed Use	530	330	270	0
# of jobs in Industrial	2,140	1,610	1,460	810
Total # of jobs	Up to 2,700	Up to 1,900	Up to 1,700	Up to 800

Limitations on the Potential Futures Analysis

The analysis contained within this technical documentation is intended to support comparison of the Potential Futures across a broad range of measures that incorporate transportation, public health, environmental health, affordability, economic opportunity, potential cost, and implementation approach.

There are several key limitations on this analysis:

- **There have not yet been potential refinements or modifications to any Potential Future to address potential negative aspects of the travel demand forecasting.** The forecasts in the Potential Futures Analysis represent unmitigated outcomes in each Potential Future, and further refinement to reduce effects are possible in subsequent phases of analysis. Future phases of analysis will include more detailed assessment, including peak hour analysis of traffic diversions, intersection- and corridor-level level of service (LOS) and delay analysis, which would inform refinements to proposed local traffic operations and identify potential changes to transportation conditions outside of South Park that could reduce potential negative effects of changes to SR 99.
- **Detailed uses have not been identified for reclaimed land that is no longer used for transportation purposes.** Future phases of analysis will need to refine the land suitability assessment for what would be supported by physical conditions, community preferences, and market demand to enable any future reuse of reclaimed land. More detailed assessment would also be needed to understand potential restrictions on the reuse of land that was acquired by WSDOT as transportation right-of-way.
- **There has been no new collection of current environmental condition data or detailed modeling of future conditions beyond travel demand forecasting.** Measures focusing on environmental factors, such as air and noise pollution, habitat restoration, and climate resilience are based on existing publicly-available information and the Potential Futures as currently defined and may need future refinement.

Despite these limitations, the Potential Futures Analysis provides a platform for understanding the potential tradeoffs across the Potential Futures that can inform and support community priorities.

Measures and Evaluation

For each measure considered as part of this analysis, a consistent approach is presented below to reduce subjectivity and provide a clear and defensible evaluation framework across all measures. Because the measures in this analysis span a wide range of topics—from traffic volumes to noise, air pollution, parks access, habitat, and streetscape quality—no single industry standard exists for defining what level of change is "good," "bad," or "significant." Some measures, such as traffic diversion or VMT, can be evaluated using quantitative thresholds. These quantitative thresholds are informed by generally accepted benchmarks. Others, such as tree canopy, connectivity, or the quality of public space, rely more on qualitative assessment because accepted benchmarks do not exist or conditions are too context-specific for rigid numerical standards. For each measure, the project team developed a transparent and repeatable scoring approach that reflects the best available guidance, identifies when thresholds are based on professional judgment, and allows the four Potential Futures to be compared in a consistent and defensible way.

The analysis area for each measure was the SR 99 Corridor Analysis Area unless otherwise noted.

Each measure describes:

- **Definition:** outlining what the measure is.
- **Evaluation approach:** how each measure is evaluated, including criteria and thresholds for how ratings are applied. End notes are provided for more detail on evaluation thresholds.
- **Current Conditions:** outlining the understanding of existing or baseline future conditions. Additional current conditions information was developed for the *Potential Futures Definition Technical Memorandum: Considerations, Risks, and Potential Fatal Flaws*

  Summary analysis and results table: Each Potential Future is evaluated on a five-point scale from Much Worse than current conditions to Much Better than current conditions, including a summary table. To reach a final composite evaluation, the evaluation of each submeasure was converted into a numerical score from -2 (Much Worse) to +2 (Much Better). The submeasure scores were then averaged to develop the final composite evaluation. For example, three submeasures with evaluations of Much Worse (-2), Same (0), and Better (1) would average to Same: (-2+0+1)/3=-0.33. The evaluation approach and composite evaluation ranges for each category are shown below.

	Much Worse	Worse	Same or No Change	Better	Much Better
Evaluation Approach	The Potential Future would have substantially more negative effects than current conditions.	The Potential Future would have noticeable negative effects when compared to current conditions.	The Potential Future would be comparable to current conditions.	The Potential Future would have noticeable benefits compared to current conditions.	The Potential Future would have substantial benefits compared to current conditions.
Composite Evaluation Range	-2.0 to -1.5	-1.5 to -0.5	-0.5 to +0.5	+0.5 to +1.5	+1.5 to +2.0

Current or future baseline conditions for many measures include current and ongoing harms to South Park residents and workers in the form of air pollution, noise pollution, environmental conditions, public health outcomes, affordability, and economic opportunity. A "no change" outcome may have negative implications for residents in South Park and surrounding communities.

Health and Wellbeing Measures

Measures in this category evaluate different aspects of each Potential Future related to public health and community wellbeing. These measures include:

- Air Pollution
- Noise Pollution
- Street Safety for Vulnerable Road Users
- Access to Parks and Public Space
- Public Health

Air Pollution

Definition

Vehicle emissions, especially near schools, community centers, and residential areas. The analysis area for this measure was the Regional Roads & Surrounding Areas Analysis Area, including SR 99 as well as the areas within 500 feet of roads that would likely see changes in traffic patterns as a result of changes to SR 99.

Measurement Approach

There are three steps to developing the evaluation of two submeasures for this measure.

1. **Identify roadways of concern** (roads with current or projected high traffic volumes) and nearby residential uses, community hubs or uses like schools, parks and outdoor recreational facilities, day cares, senior living, and healthcare facilities.
2. **Apply a "roadway pollution factor"** in order to create a comparative analysis of the Potential Futures appropriate for this measure. The "roadway pollution factor" was developed by the technical team as a rule-of-thumb unit to compare the potential for air pollution including both passenger vehicles and trucks. This analysis counts 1 truck as 1 roadway pollution factor, and 10 cars as 1 roadway pollution factor. This weights the truck portion of vehicular volumes more appropriately for their emissions. The team selected a ratio of 1:10 because at 45mph, a diesel truck releases roughly 10 times the amount of fine particulate (PM2.5) as a car. Other particles' emissions ratios vary, as do emissions at different speeds. An air pollution model would take those differences into account to estimate air pollution. The method used in this study is intended to identify differences between alternatives, not to provide detailed air pollution modeling.
3. **Estimate the air pollution effects** on these community hubs and residential areas with each Potential Future compared to baseline conditions.

There are two submeasures for this measure:

(1) % change in air pollution exposure for residential or mixed-use zoned land
(2) % change in air pollution exposure for community hubs

There is no federal, state, or regional standard defining what percentage change in traffic-related air-pollution exposure constitutes an acceptable or significant effect at a planning level. EPA, Federal Highway Administration (FHWA), the California Air Resources Board

(CARB), the World Health Organization (WHO), and other agencies provide tools for estimating emissions and exposure, but none prescribe numerical thresholds for interpreting differences in modeled pollution. In practice, planning studies report relative changes, and agencies apply professional judgment to determine whether those changes may meaningfully influence exposure or community health. A component of air pollution from vehicles, particularly in localized conditions, comes from vehicle operating speeds, starts, stops, and idling vehicles. Future phases of analysis, particularly NEPA and/or SEPA studies would apply more detailed and comprehensive assessment of air quality effects of potential changes to SR 99. The information developed for this analysis can be used to assess relative changes for each Potential Future from the Future Baseline.

Because long-range forecasts include uncertainty and small shifts in modeled emissions may fall within normal variability, the thresholds in this report are not regulatory standards. They are a transparent, repeatable framework for consistently comparing the four Potential Futures, grounded in widely recognized scientific concepts about model sensitivity, exposure detectability, and population-level health relevance.

Both submeasures are evaluated on the same scale, and more detail on the thresholds is provided in the endnotes section.[29]

Much Worse	Worse	Same or No Change	Better	Much Better
> +10%	+5.1% to +10%	+/-5%	-5.1% to -10%	< -10%

Current Conditions

Roadway traffic, airports, and industrial air pollution sources have cumulative effects on South Park.[30]

- Health effects in South Park are likely cumulative from direct exposure to air pollution and the indirect effects of the existing SR 99 infrastructure on lifestyle, behaviors, and social engagement. This measure focuses on potential direct effects of roadway transportation.
- Air pollution from roadway traffic, airports, and industrial sources poses substantial health risks, particularly to cardiovascular and respiratory systems, and prolonged exposure to the source of pollution can exacerbate these effects.
  - Fine particulate matter (PM2.5 or particles 2.5 microns in diameter) and nitrogen oxides (NOx), primarily from vehicle exhaust, industrial emissions, and other sources of fossil fuel burning, are associated with worsening respiratory diseases and linked to premature death, particularly in people who have chronic heart or lung diseases.
  - Aircraft-related ultrafine particles (particles less than 0.1 microns in diameter) near Sea-Tac Airport and major flight paths, contribute to systemic inflammation, while roadway pollution further exacerbates respiratory issues and inflammation.[31]

- South Park and the Duwamish River Valley have one of the highest levels of environmental exposure compared to census tracts across Washington, especially:
  - PM2.5 Concentration
  - Diesel Exhaust PM2.5 Emissions
  - Toxic Releases from Facilities
- Children are especially vulnerable, and face higher hospitalization rates, increased asthma risk, and reduced lung function growth. There are multiple community gathering places proximate to the highway that could exacerbate this exposure.
- Older adults, individuals with chronic conditions (asthma, diabetes, heart disease, and lung disease), and pregnant individuals are especially susceptible to the harmful effects of air pollution.

Figure 32 and Figure 33 illustrate the high current exposure risk to air pollution within South Park as compared to Seattle as a whole.

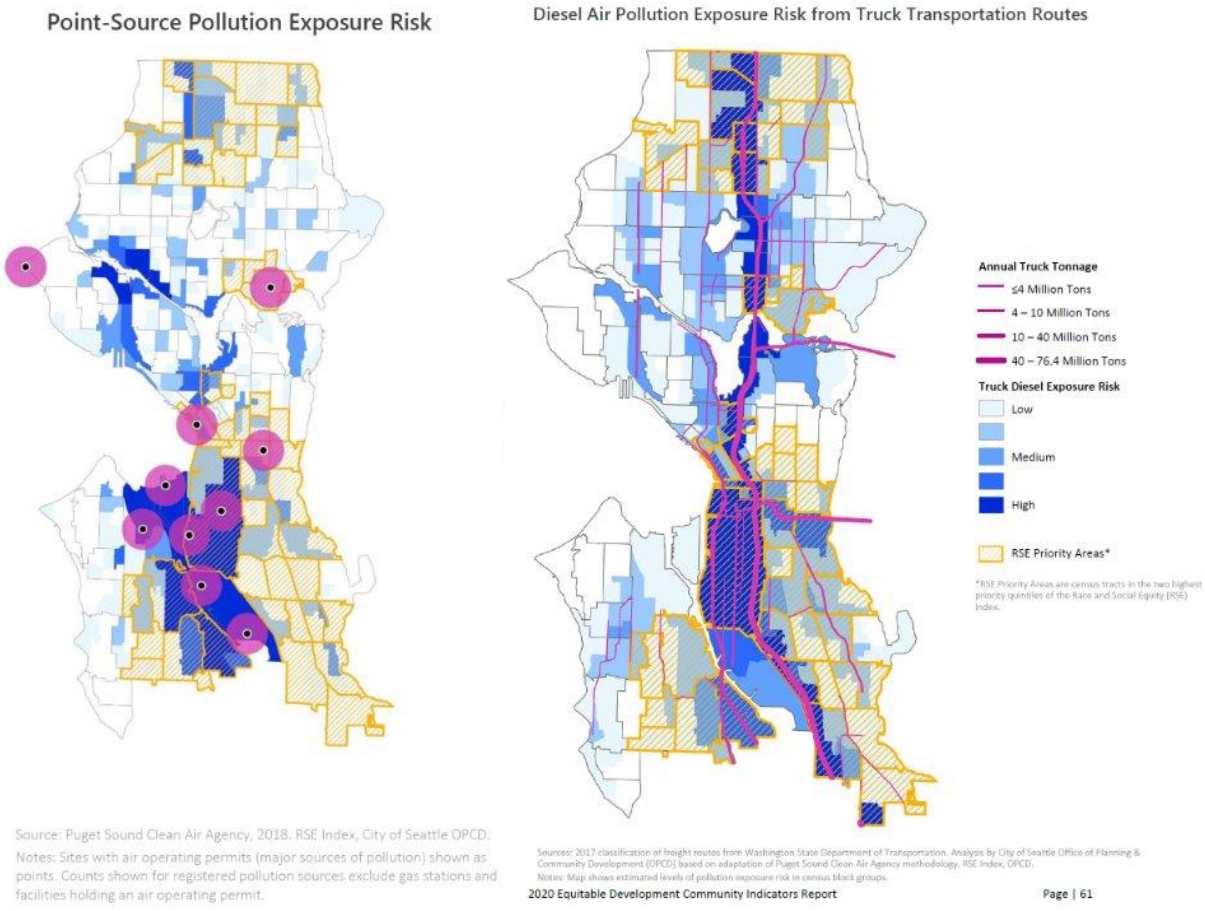


Figure 32: Point-Source and Diesel Air Pollution Exposure Risk (Source: City of Seattle [32])

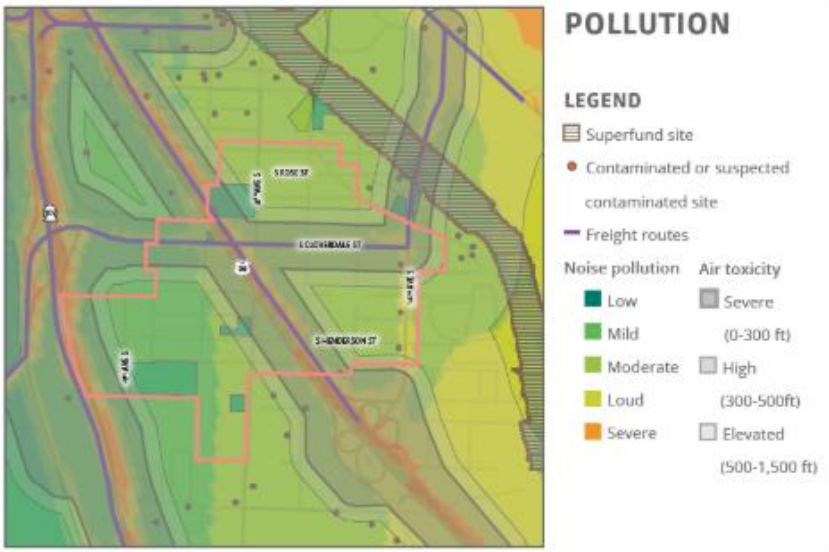


Figure 33: Noise Pollution and Air Toxicity (Source: City of Seattle[33])

Evaluation

Residences and Community Hubs in Areas of Effect

Based on the travel demand analysis described in the methodology section, the technical team identified roadways of concern as those expected to experience traffic volumes over 40,000 Average Daily Traffic (ADT) and/or an increase in traffic volume greater than 10 percent due to changes associated with the Reroute + Reclaim Potential Future—which represents the greatest changes to SR 99. As shown in Figure 34, a 500-foot buffer was applied to these roadways to identify community hubs or sensitive uses (e.g., schools, parks and recreational facilities, daycare centers, senior living facilities, and healthcare facilities) and private land areas zoned for residential or mixed use that would be most affected by roadway-generated air pollution. For residential and mixed-use land areas, the acreage includes only the portion of parcels within the buffer. All community hubs or sensitive uses were treated equally, and no additional weighting was applied to reflect differences in usage (for example, schools with daily student attendance versus parks with occasional visits).

The community hubs and sensitive uses identified along the roadways of concern include the following:

North SR 99 (north of 14th Ave S)

- South Park Community Center & Playground Park
- River City Skatepark
- Park formerly known as Cesar Chavez Park
- Concord Elementary School
- Sea Mar Community Health Center
- South Park Seattle Public Library

Middle SR 99 (from 14th Ave S to Tukwila International Boulevard)

- Harmony Gardens Youth Recovery
- Salmon Cove Park & Shoreline Habitat

South SR99 (South of Tukwila International Boulevard)

- Tukwila Community Center

SR 509

- Marra Desimone Park

I-5

- Cleveland School and Playfield
- Mercer Middle School
- Rising Star Elementary School

14th Ave S

- South Park Business District
- Sea Mar Community Food Distribution Center
- Sea Mar Community Clinics (Medical, Behavioral Health, and Dental Clinics)
- Duwamish River Community Hub
- South Park Hall
- South Park Plaza

E Marginal Way S

- South Seattle College Campus
- Duwamish Gardens Park

Des Moines Memorial Dr S

- Boulevard Park Neighborhood Center (120th St)
- North SeaTac Park & Playfield

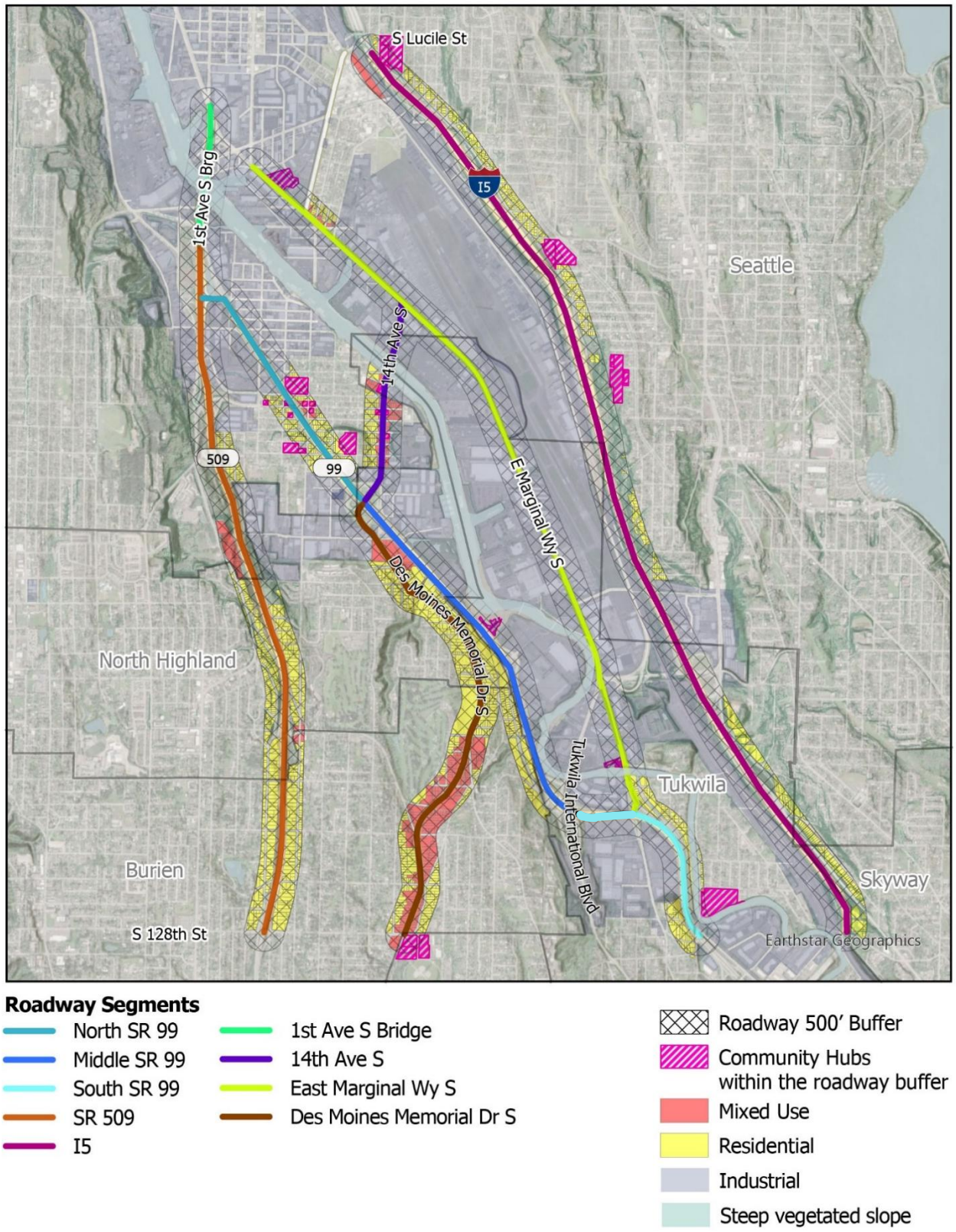


Figure 34: Roadways of Concern with Current Mixed Use and Residential Zoning

Traffic Volume Baseline and Forecasts

Table 2 and Table 3 show the estimated daily weekday volumes for current baseline and 2050 future conditions used in this analysis.

Analysis

The submeasures use "roadway pollution factor" as a unit instead of average daily traffic (ADT) or truck volume alone. The submeasures (shown in Table 9) include:

- **Residential/Mixed Use land % change.** Illustrates the overall change—and magnitude of difference—in air pollution on the region's residential and mixed-use areas. Roadway pollution factor for each segment is multiplied by the residential acreage in that segment, summed for the Potential Future, and then compared to Baseline 2050 by calculating percent change.
- **Community hubs % change.** Illustrates the overall change—and magnitude of difference—in air pollution on the community hubs located along the roadways of concern. Roadway pollution factor for each segment is multiplied by the number of community hubs in that segment, summed for the Potential Future, and then compared to Baseline 2050 by calculating percent change.

Reroute + Reclaim

- Advances South Park as a low-traffic, low-pollution neighborhood. New streets would primarily serve local rather than high-speed, regional traffic which substantially reduces local exposure to air pollution, especially for community hubs and residents near 14th Ave S and former SR 99.
- Potential shifting of traffic and associated air pollution to nearby arterials, particularly East Marginal Way and Des Moines Memorial Dr. These corridors run through already affected communities, including Georgetown and Boulevard Park (near 120th St).
- Potential larger contribution of emissions from trucks at SR 509, 1st Ave Bridge, and Des Moines Memorial Dr.

Narrower Boulevard

- Lower traffic volumes within South Park would reduce traffic-related air pollution emissions near the Narrower Boulevard and 14th Ave S.
- Similar to Reroute + Reclaim, air pollution may shift to E Marginal Way and Des Moines Memorial Dr, with overall reduction in exposure for Residential and Mixed-Use zoned land.
- Potential larger contribution of emissions from trucks at SR 509, 1st Ave Bridge, E Marginal Wy, and Des Moines Memorial Dr.

Wider Boulevard

- New intersections along the Wider Boulevard may create localized "hot spots" with higher concentrations of air pollutants due to frequent stopping and starting, affecting nearby homes and community spaces adjacent to the intersections like River City Skate Park and nearby parks.
- Air pollution decreases or limited change near community hubs and residentially zoned land in study locations.

- Potential larger contribution of emissions from trucks at SR 509.
- Future development near the Wider Boulevard would likely include some vegetation and indoor air filtration to improve indoor air quality.

Bridges + Trails

- Expected traffic volumes in Bridges + Trails are comparable to Baseline. Residents and community hubs near roadway study locations would continue to be exposed to similar levels of air pollution.
- Strategies such as the addition of an enhanced landscaping buffer along SR 99, could help reduce near-road pollution for sensitive population by altering airflow patterns and intercepting airborne pollutants, but little benefit anticipated.

Table 9: Air Pollution Evaluation

Evaluation Factor		2050 Baseline	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
(Residential or Mixed-Use acreage within 500-foot roadway buffer) x (roadway pollution factor)	*North SR 99*	*194,585*	*N/A*	*38,270*	*132,346*	*203,824*
	Middle SR 99	*473,567*	*N/A*	*111,086*	*301,870*	*473,567*
	South SR 99	*181,700*	*54,468*	*99,999*	*145,531*	*181,700*
	SR 509 segment	*2,653,090*	*3,024,634*	*2,930,506*	*2,867,755*	*2,653,090*
	I-5 segment	*3,332,253*	*3,427,127*	*3,410,483*	*3,375,529*	*3,332,253*
	1st Ave S Bridge segment	*No Residential or Mixed-Use*				
	14th Ave S segment	*83,061*	*51,353*	*71,795*	*65,960*	*76,546*
	E Marginal Way S segment	*90,154*	*93,903*	*101,397*	*86,823*	*87,031*
	Des Moines Memorial Drive segment	*239,573*	*319,431*	*270,486*	*239,573*	*239,573*
	Total study area	**7,247,983**	**6,970,916**	**7,034,022**	**7,215,386**	**7,247,584**
Residential % change in exposure from 2050 Baseline			-3.8%	-3.0%	-0.4%	0.0%
Evaluation			**Same**	**Same**	**Same**	**Same**
(Roadway pollution factor) x (# of community hubs)		180,150	124,153	140,437	160,197	179,947
Community hubs % change in exposure from 2050 Baseline			-31.1%	-22.0%	-11.1%	-0.1%
Evaluation			**Much Better**	**Much Better**	**Better**	**Same**
Average % change from 2050 Baseline			**-17.5%**	**-12.5%**	**-5.8%**	**-0.1%**
Composite Evaluation			**Better**	**Better**	**Better**	**Same**
Note: Analysis presented in this table is not intended to replace detailed assessment of potential air quality effects of Potential Futures as part of future studies.			▪ Greatest reduction of overall exposure for residential areas and community hubs	▪ Moderate reduction of overall exposure to residential areas and community hubs	▪ Slight reduction of overall exposure.	▪ No change from future baseline conditions

Noise Pollution

Definition

Effects of noise pollution from vehicles on residences and community hubs. The analysis area for this measure was the Regional Roads & Surrounding Areas Analysis Area, including SR 99 as well as the areas within 500 feet of roads that would likely see changes in traffic patterns as a result of changes to SR 99.

Measurement Approach

Estimate the noise pollution effects on the residentially-zoned land and community hubs within areas of concern. This method is intended to compare differences between alternatives, not to provide detailed noise level estimates.

1. **Identify roadways of concern** (roads with current or projected high traffic volumes) and apply a 500-foot buffer around them to identify potentially impacted community hubs and residential and mixed-use-zoned land. Remove rights-of-way and other land that could not develop with residential uses from the residentially-zoned land area.
2. **Apply a "noise-weighted traffic (NWT) impact unit"** to the residential/mixed-use areas and community hubs. This adjusts the projected average daily traffic volumes for the differences in noise between trucks and other vehicles. To support a comparative analysis of the Potential Futures appropriate for this stage of assessment, the technical team defined the NWT impact unit as a rule-of-thumb measure of potential noise pollution from passenger vehicles and trucks. In this approach, 1 truck is 1 noise impact unit, and 10 cars are 1 noise impact unit. This weighting reflects the assumption that trucks generate substantially greater noise than cars.
   - NWT impact unit = non-truck vehicular traffic/10 + truck daily traffic
     (Note: Non-truck vehicular traffic = average daily traffic – truck daily traffic)
3. **Categorize impacts by existing speed limits and noise mitigation features** such as dense vegetation, steep slopes, walls, or berms. Faster speeds generally create greater noise volumes. Mitigation features may filter or block noise. For each segment sharing the same ADT, sum the residential land area (acres) and community hubs sharing the same speed and noise mitigation category. Apply speed and mitigation factors as follows:

   Speed weight:
   - 0.5 = Local roads (<35 mph)
   - 1.0 = Arterials (35–45 mph)
   - 1.5 = Highways (55+ mph)

   Noise mitigation multiplier:
   - 1.0 = No buffer
   - 0.75 = Partial (some trees, slope, berm)
   - 0.5 = Full (steep slope, wall, or dense vegetation)

For each subsegment that shares the same characteristics, apply this formula:

- Noise impact on residential =
  (NWT impact unit) x (Noise mitigation multiplier) x (Speed weight) x (residential + mixed-use zoned land area)
- Noise impact on community hubs =
  (NWT impact unit) x (Noise mitigation multiplier) x (Speed weight) x (# of community hubs)
- Sum the noise impacts on residential-zoned land and sum the noise impacts on community hubs to determine each Potential Future's overall noise impact on each.

4. **Evaluate impacts based on the % change from Baseline 2050 conditions** for each Potential Future using the adjusted noise-weighted traffic impacts. Average the percent change for residential land and community hubs.

There is no federal, state, or regional standard defining what percentage change in noise exposure constitutes an acceptable or significant effect in a planning-level analysis. FHWA, EPA, WHO, and ISO provide guidance on noise propagation, perception, and health impacts, but none prescribe numeric thresholds for interpreting percentage changes in planning-level assessment of noise exposure. In practice, more detailed transportation and environmental analyses typically report modeled changes in noise levels in decibels (dBA) and use more detailed analysis to interpret whether changes are meaningful and potential mitigation strategies. The analysis in this report provides a framework to understand the differences in the Potential Futures when modeled and analyzed consistently.

Because traffic noise changes are non-linear—measured on a logarithmic decibel scale rather than a linear percentage scale—the relationship between traffic changes and human perception is well established: substantial changes in traffic volume are required to produce a clearly perceptible change in noise level. For example, FHWA guidance shows that a 100 percent increase in traffic volume produces only about a 3 dBA change, which is generally considered the threshold of clear perceptibility. Smaller volume changes often produce differences too small for humans to detect.

Given this context, the thresholds used in this report are not regulatory standards. Instead, they provide a transparent, repeatable framework for comparing the Potential Futures. The threshold structure reflects known relationships between traffic volume, noise generation, human perception, and exposure-response evidence from the public-health literature. Future phases of analysis, particularly National Environmental Policy Act (NEPA) and/or State Environmental Policy Act studies would apply more detailed and comprehensive assessment of noise effects of potential changes to SR 99.

There are two submeasures for this measure:

1) Community hubs % change
2) Residential % change

Each submeasure is evaluated on the following scale, and more detail on the thresholds is provided in the endnotes section.[34]

Much Worse	Worse	Same or No Change	Better	Much Better
≥50% increase	20–49% increase	+/- 20% change	20–49% decrease	≥50% decrease

Current Conditions

Comprehensive, site-specific data has not been collected as part of this phase of technical analysis. Along SR 99, the modeled average annual noise level is approximately 74 dBA (see Figure 35).[35] Residential areas and community hubs, such as schools, parks, and libraries, have the potential to be affected by roadway noise pollution from SR 99. King County conducted a Rapid Health Impact Assessment in 2016 where localized noise data was collected around the South Park Community Center that registered 65 to 80 dBA as baseline noise levels.[36]

Minimal to no noise barriers exist along SR 99 through South Park. SR 509 and I-5 have some noise barriers or land forms that protect neighboring uses from traffic-related noise (see Figure 36).

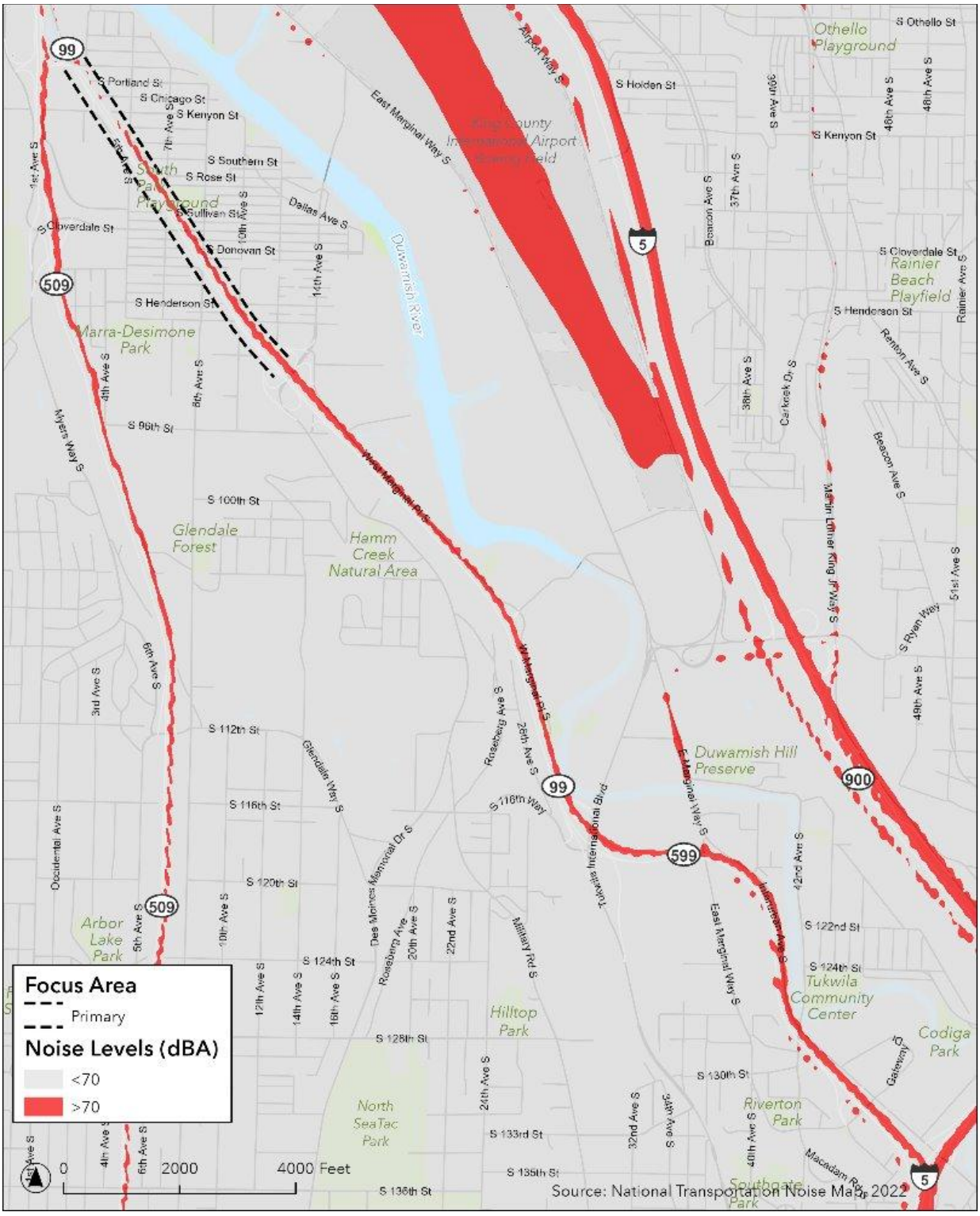


Figure 35: Modeled Current Noise Pollution (Source: National Transportation Noise Map[37])

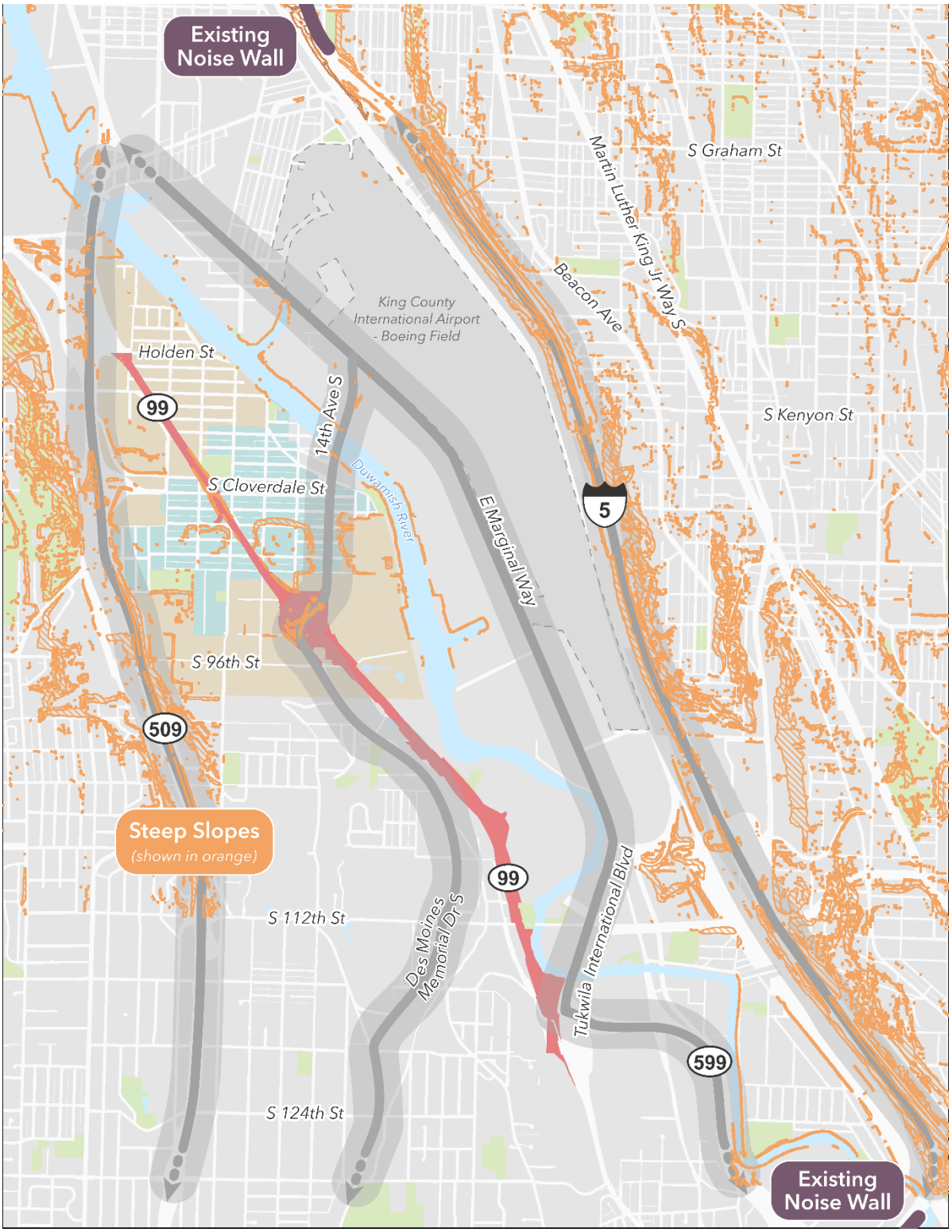


Figure 36: Existing WSDOT Noise Walls and Steep Slopes Adjacent to Roadways (Seattle only)

The U.S. Environmental Protection Agency identifies 55 dBA (Ldn) as a health-based outdoor noise level protective against activity interference and annoyance. As noise levels increase above this level, the proportion of people experiencing disruption rises.[38] More recent research indicates that average road traffic noise above 53 dBA—particularly at night or in intermittent bursts—can have substantial adverse health effects.[39]

Limited data collection with a smartphone app for purposes of documenting current conditions for planning context indicates that the quietest parts of the neighborhood already experience approximately 61 dBA (Leq). This indicates continuous exposure levels that exceed commonly cited health-based guidelines. Some noise is also generated from city streets and adjacent land uses, and future studies would be needed to further investigate the multiple causes and mitigations for existing noise levels in South Park.

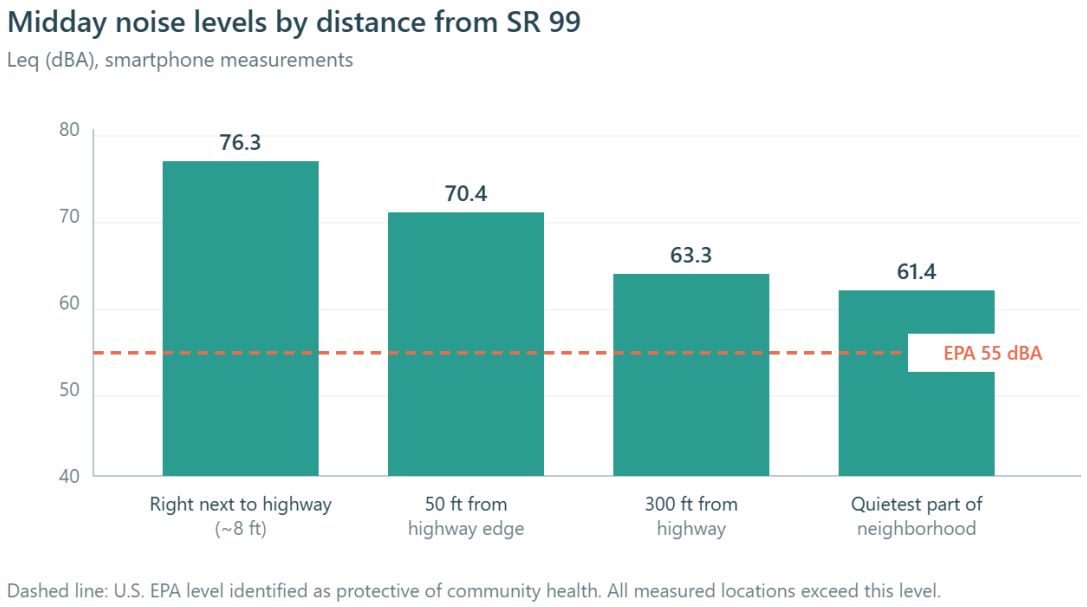


Figure 37: Current Noise Level Data Collection

Proximity to SR 99 pushes exposures well beyond this already elevated baseline. Levels reached approximately 76 dBA right next to the highway and remained above 63 dBA even 300 ft away, showing that highway noise continues to elevate exposures well into the neighborhood.

Long-term transportation noise exposure at these levels is strongly linked to physical health effects including hypertension, ischemic heart disease, heart attacks, and strokes. Large-scale studies show about a 4–8 percent increase in cardiovascular risk for each additional 10 dB of chronic exposure. Health effects include:

- A "highly activated stress response, inflammation, hypertension, and plaque buildup in arteries, increasing the risk of heart disease, heart attacks and stroke."[40]

- Indirect health effects such as speech and task interference, sleep disturbance, and impairments in classroom learning, and negative effects on emotional well-being and tranquility.[41]
- Vibrations that can disrupt hospitals and healthcare facilities.[42]
- Exposure to air and noise pollution have been linked with common mental health problems, including mood, affective, and psychiatric disorders from adolescence to young adulthood.[43]

Evaluation

Reroute + Reclaim

The removal of vehicular traffic from SR 99 would substantially reduce noise along SR 99 through South Park. General and freight traffic would shift to other locations, including SR 509, E Marginal Way, and Des Moines Memorial Drive, redistributing noise effects. SR 509 and I-5 include some noise mitigation.

Newly reconnected streets may see traffic volume increases, but it would be much lower traffic volumes and at slower speeds than today's SR 99, and thus likely at much lower decibel levels. Also, new connections could be designed to encourage slow neighborhood street speeds, support multimodal use, and include noise mitigation strategies where needed.

Reclaimed land could include uses that introduce noise sources. If needed, these could be mitigated with strategies such as noise insulation, greenways, and physical barriers between noise sources (e.g., industrial use) and sensitive areas like the Community Center, parks, and residences. Additionally, expanding landscaping along these new corridors and within the reclaimed land could further absorb sound or at least reduce the perception of noise.

Narrower Boulevard

Narrower Boulevard would have lower traffic volumes and slower speeds than Wider Boulevard. In addition, having only two travel lanes (one in each direction) further reduces vehicle speed, as drivers are less likely to accelerate for lane changing, leading to a more consistent and quieter flow of traffic. Freight restrictions on the former SR 99 right-of-way would reduce noise effects in residential South Park.

Together, these would result in lower traffic noise volumes than Bridges + Trails and Wider Boulevard, but higher than Reroute + Reclaim.

Wider Boulevard

Wider Boulevard includes several new intersections, which may slow traffic speeds with additional stops or roundabouts. It would also be designed with several traffic calming measures, such as narrower lane widths than SR 99 and vertical elements in medians and buffers. The slower speeds result in lower noise levels.

Wider Boulevard is expected to experience higher traffic volumes and faster speeds as compared to Narrower Boulevard, resulting in greater noise volumes than Narrower Boulevard and Reroute + Reclaim, but lower than Baseline and Bridges + Trails.

Wider Boulevard has fewer changes to regional traffic patterns than Narrower Boulevard, resulting in less regional noise effects.

Bridges + Trails

High speeds and traffic volumes generate the most roadway noise pollution of these options. However, the installation of noise walls and extensive landscaping along SR 99 and a highway lid at 8th Ave S and S Donovan St would reduce noise in residential areas and community hubs near SR 99, such as the South Park Playground, and Skate Park.

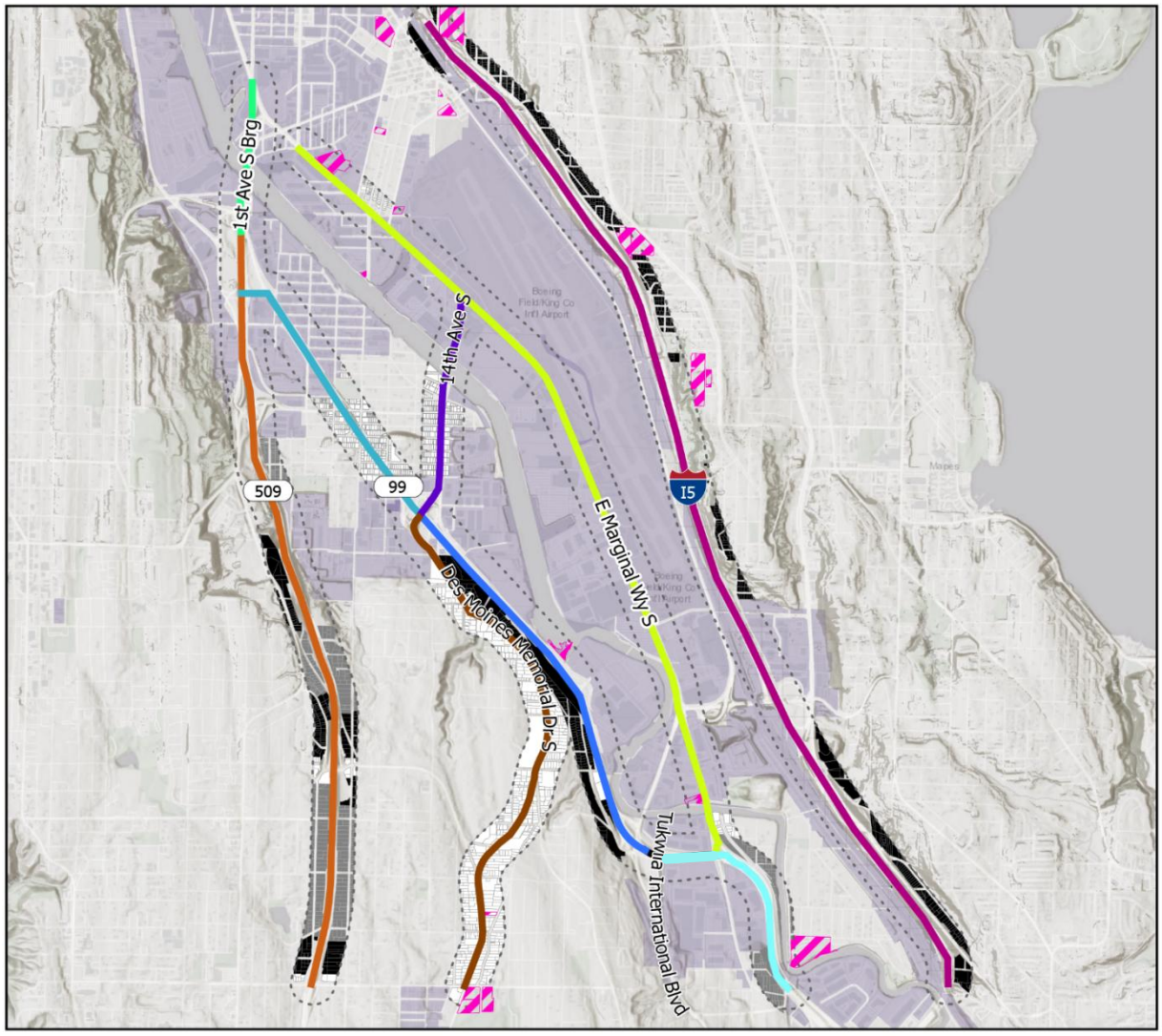


Figure 38: Noise Evaluation Map

Table 10: Noise Pollution Exposure Evaluation

Submeasure	Baseline 2050	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Noise impact on community hubs	176,922	105,317	124,867	152,144	177,442
% change from Baseline 2050 - community hubs		-40%	-29%	-14%	0%
Evaluation		**Better**	**Better**	**Same**	**Same**
Noise impact on residential acres	6,379,351	6,058,097	6,143,986	6,350,204	6,382,740
% change from Baseline 2050 - residential acres		-5.0%	-3.7%	-0.5%	0.1%
Evaluation		**Same**	**Same**	**Same**	**Same**
Combined Evaluation		**Better**	**Better**	**Same**	**Same**
Note: Analysis presented in this table is not intended to replace detailed assessment of potential noise effects of Potential Futures as part of future studies.		▪ Substantial reduction in noise levels close to SR 99 with the removal of highway traffic ▪ Noise effects are redistributed regionally; some locations have existing noise mitigation	▪ Reduction in traffic volumes and speeds reduces noise levels in South Park ▪ Noise effects are effects regionally; some locations have existing noise mitigation	▪ Slight reduction in traffic volumes and speeds reduces noise levels in South Park ▪ Limited regional effects outside of South Park	▪ Traffic volumes and speeds remain high ▪ New noise barriers mitigate noise in South Park ▪ No regional noise effects

Street Safety for Vulnerable Road Users

Definition

Transportation safety, with a focus on vulnerable road users (people walking, biking, or rolling), in South Park. The analysis area for this measure focused on the SR 99 Corridor Analysis Area, but the quantitative assessment of collision data also included two additional local intersections for which sufficient data was available and current conditions includes data on the full South Park Community Analysis Area. Analysis of potential traffic diversion routes was not included in this analysis and future analysis would be needed to understand potential effects of changes to SR 99 in the full transportation system.

Measurement Approach

There are three submeasures for this measure:

1) Predicted change in serious injury and fatality collisions
2) Predicted change in collisions involving pedestrians and bicyclists
3) Exposure risk for people with limited mobility

For both of the predictive evaluations, the evaluation reviewed historic crash data to understand baseline information about collisions with a specific focus on vulnerable road users (i.e., pedestrians and bicyclists) and more severe collisions, where a person is killed or seriously injured. Predictive tools were used to compare how Potential Futures compare to current conditions and the future baseline with no changes to SR 99.

There are no thresholds of significance for these measures published by agencies like FHWA or WSDOT.

For collision analysis, the City of Seattle's Vision Zero[44] commitment and WSDOT's Target Zero, along with professional judgement, have been used in developing the thresholds used for this report. The following scale was used for the predictive evaluations, taking into account that the predictive methods can be very sensitive to small fluctuations:

Much Worse	Worse	Same or No Change	Better	Much Better
>1.5 incidence increase	0.5 to 1.5 incidence increase	+/- 0.5 incidences	0.5 to 1.5 incidence decrease	>1.5 incidence decrease

For exposure risk for people with limited mobility, the following qualitative evaluation scale was used:

Much Worse	Worse	Same or No Change	Better	Much Better
Removes accessible options or creates new challenging crossings	Introduces steeper, longer, or freight-exposed routes	No change from current conditions	Provides direct and buffered ADA access, using bridges or ramps	Provides direct, protected, at-grade access without freight exposure or new bridges/ramps

Current Conditions

From 2019 to 2023, there were 385 collisions involving injuries in South Park. Twenty-three of these collisions resulted in a person being killed or being seriously injured. On average, between four and five people are killed or seriously injured in South Park every year in traffic crashes. By comparison, during that same period, there were 135 people killed and 997 seriously injured in Seattle.[45]

Residential South Park, which has narrower streets and slower speeds, has fewer collisions than the surrounding areas with higher-speed roadways and higher traffic volumes. SR 509, SR 99, the 1st Ave S Bridge, W Marginal Way, and 14th Ave S are all relative clusters of collisions within the study area. Figure 39 shows collisions involving injuries in South Park and the immediate surroundings. Since 2023 there have been additional serious injury and fatal collisions within the South Park community, including at least two people killed while walking across 14th Ave S at S Henderson St.

People walking and biking are involved in 27 percent of all fatal and serious injury collisions in South Park. Six of these collisions occurred on SR 99, seven occurred on SR 509 and ten occurred on local roads. In South Park, State Routes account for 13 out of 23 fatal and serious injury collisions and State Routes within the analysis area shown in Figure 39 have a higher incidence of pedestrian fatal and serious injury collisions compared to local roads within the same analysis area.

Each person killed or seriously injured in a traffic collision represents multiple lives altered or tragically ended and each Potential Future has the potential to make investments in transportation safety for all people in South Park.

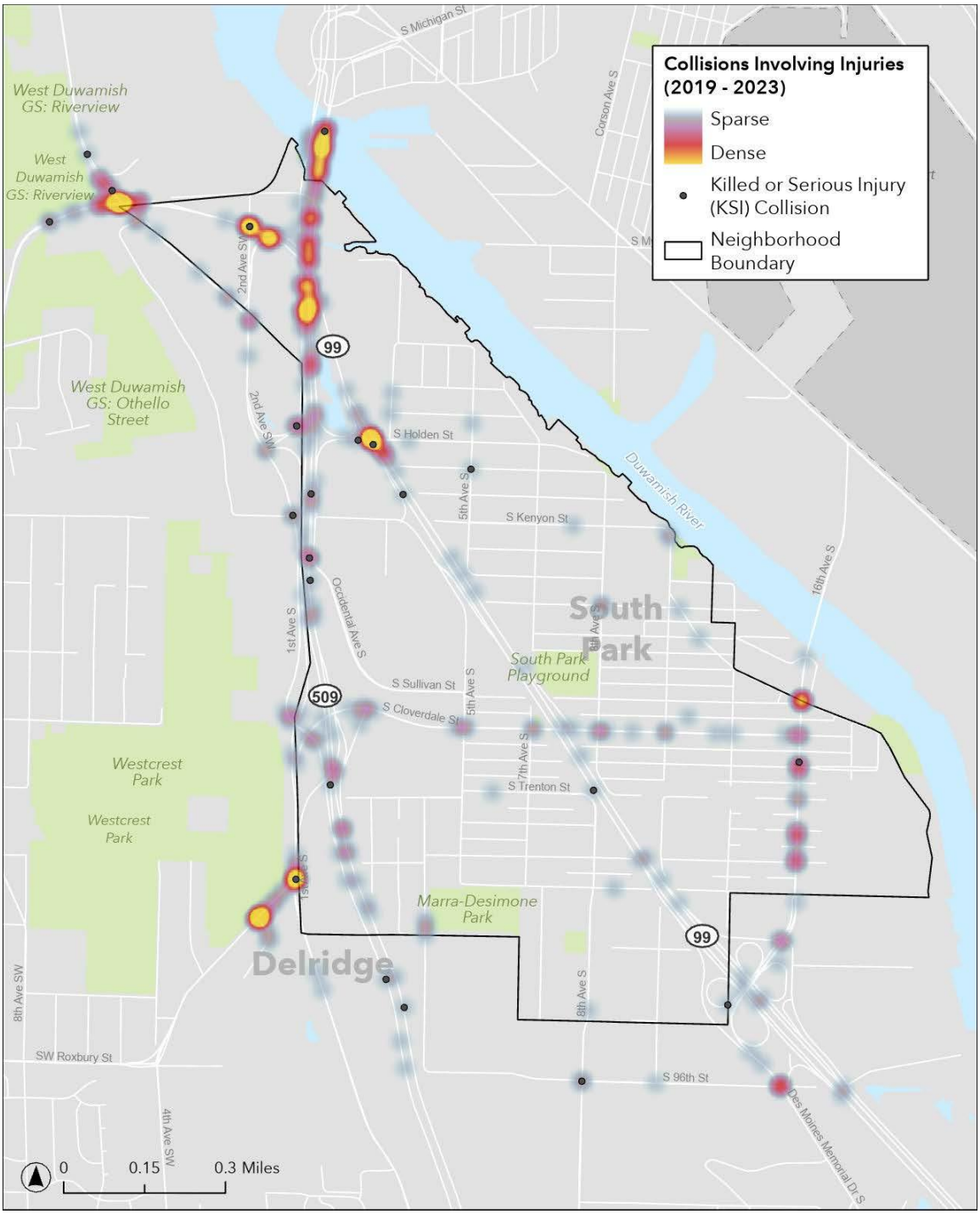


Figure 39: Collisions Involving Injuries (Source: WSDOT)

For people with limited mobility, SR 99 presents a substantial barrier to mobility. The existing S Henderson St bridge does not meet ADA standards. Crossing along S Cloverdale St can expose people to the on-ramp to SR 99. The 14th Ave S bridge over SR 99 does not have pedestrian facilities or meet ADA-compliant grades.

Table 11 and Table 12 below show the annualized observed number of collisions within the South Park Community Analysis Area on local roads related to roadway segments and related to intersections, respectively, between 2019 and 2023, based on WSDOT crash data.

Table 11: Annualized Segment Related Collisions on Local Roads in South Park between 2019 and 2023

Collision Type	Total Collisions	Bicyclist Collisions	Pedestrian Collisions
Total Segment Related	22.4	0.4	0.6
Fatal	0	0	0
Seriously Injured	0.2	0	0

Table 12: Annualized Intersection Related Collisions on Local Roads in South Park between 2019 and 2023

Collision Type	Total Collisions	Bicyclist Collisions	Pedestrian Collisions
Total Intersection Related	22	0.2	0.4
Fatal	0.2	0	0.2
Seriously Injured	0.4	0.2	0.2

Table 13 and Table 14 below show the annualized observed number of collisions on SR 99 related to roadway segments and related to intersections, respectively, between 2019 and 2023 based on WSDOT crash data.

Table 13: Annualized Segment Related Collisions on SR 99 in South Park between 2019 and 2023

Collision Type	Total Collisions	Bicyclist Collisions	Pedestrian Collisions
Total Segment Related	8.4	0	0.4
Fatal	0	0	0
Seriously Injured	0.8	0	0.2

Table 14: Annualized Intersection Related Collisions on SR 99 in South Park between 2019 and 2023

Collision Type	Total Collisions	Bicyclist Collisions	Pedestrian Collisions
Total Intersection Related	7.2	0	0.2
Fatal	0	0	0
Seriously Injured	0.2	0	0

As shown in the tables above, there were roughly 2.8 times more total annual collisions on local streets compared to SR 99 in South Park under existing conditions (44.4 collisions per year vs 15.6 collisions per year). However, SR 99 had 1.2 fatal and serious injury collisions annually compared to 1.0 fatal and serious injury collisions annually on local streets. These

results are likely the result of more conflict points on local streets and intersections and higher volumes and speeds on SR 99.

There were more pedestrian collisions annually on local streets compared to SR 99 (1.0 vs. 0.6) and there were 0.6 annual bicycle collisions vs none on SR 99.

Evaluation

Evaluation of the Potential Futures focused on locations that could be assessed in a comparative manner using available analysis tools. The safety analysis employed the Highway Safety Manual (HSM) Part C spreadsheet tool[46] to estimate the future number of collisions in South Park, primarily focusing on fatality, injury, pedestrian, and bicyclist collisions.

The HSM tool estimates the average expected number of collisions under each Potential Future using forecast volumes (i.e. annual average daily traffic, or AADT) and road characteristics, such as signal types, number of lanes at intersections, and lighting conditions, etc. For both Wider Boulevard and Narrower Boulevard, it was also assumed that the new at-grade intersections with the SR 99 Boulevard would include all the intersection safety characteristics identified in the HSM tool (dedicated left turn pockets, protected left turn signals, and red light cameras).[47]

Collisions forecasted on local roads and SR 99 were considered separately and then summed together in this analysis. Based on the availability of full forecast data from the travel demand model assessment, two local street intersections were selected to assess future conditions:

- S Cloverdale St/8th Ave S intersection
- S Cloverdale St/14th Ave S intersection

Future studies would be necessary to develop a more comprehensive, community-wide assessment of changes in collisions, which would require more detailed development of travel forecasting for a larger area, including locations outside of South Park that would see changes in traffic volumes as a result of changes to SR 99. Potential Futures that would have more substantial changes to SR 99 would be expected to have some collisions from SR 99 redistributed to roads in other communities, but would require additional analysis to understand potential magnitude and countermeasures that could address the effects of redistributed traffic. This evaluation provides a useful comparative evaluation to understand the magnitude of potential changes in the South Park community.

The results of the local intersection analysis are shown in Table 15.

Table 15: HSM Predicted Annual Collisions at the Representative Local South Park Intersections in 2050

Scenario	Future Baseline	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Total Collisions	7.6	8.8	7.2	6.9	6.9
Fatal and Injury	2.5	2.9	2.3	2.2	2.2
Bicyclist Collisions	0.1	0.1	0.1	0.1	0.1
Pedestrian Collisions	0.9	0.9	0.8	0.8	0.8

The local intersection results indicate the following:

- Similar results for the Bridges + Trails and Wider Boulevard scenarios since most of the regional traffic that would be expected to travel on SR 99 stays on SR 99.
- Modestly fewer total, fatal and injury, bicyclist, and pedestrian collisions for the Narrower Boulevard scenarios compared to the Future Baseline.
- At the representative local intersections, Reroute + Reclaim is expected to see about a 16 percent increase in total collisions, fatal and injury, and bicyclist collisions compared to the Future Baseline. There is also a forecast increase in pedestrian collisions, but the increase is less pronounced (5%).

For SR 99, analysis included the segments between S Holden Street and 14th Ave S. This includes the intersection at S Holden Street, but not the interchange at 14th Ave S, because there are still too many potential design variations to confidently analyze that intersection/interchange. The results of SR 99 analysis are shown in Table 16.

Table 16: HSM Predicted Annual Collisions on SR 99 between S Holden Street and 14th Ave S in 2050

Scenario	Future Baseline	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Total Collisions	10.2	0.3	12.9	34.5	8.8
Fatal and Injury	3.5	0.1	3.8	10.3	3.0
Bicyclist Collisions	0.1	0.0	0.3	1.0	0.0
Pedestrian Collisions	0.0	0.0	0.7	1.1	0.0

The SR 99 results indicate the following:

- Bridges + Trails is similar to a future Baseline condition, however, the conversion of the S Holden/SR 99 intersection to a roundabout in that Potential Future (and others) would likely reduce collisions somewhat from an unchanged Future Baseline.

- Narrower Boulevard would result in an increase in all collision types in South Park, with the largest percentage increase related to bicyclist and pedestrian collisions. Fatal and injury crashes would increase by 3 percent compared to the Future Baseline.
- Wider Boulevard would have a greater increase in all collision types in South Park compared to the Future Baseline. Notably the fatal and injury collisions would increase by more than three times. These results are likely an indicator of greater exposure for pedestrians and bicyclists crossing an at-grade boulevard configuration of SR 99, which could increase the potential safety risk compared to the grade-separated condition of today.
- Reroute + Reclaim would have very few collisions in South Park since almost all of the current SR 99 would be rerouted in this scenario. Total traffic volumes in South Park would be the lowest under this scenario, resulting in lower exposure for people walking and riding bikes.

Note that during this phase of assessment, analysis was limited to the South Park Community and did not evaluate the potential for additional collisions that could occur as a result of traffic diverted from changes to SR 99. That analysis would be beneficial in future phases of study in order to develop a comprehensive assessment of potential changes to SR 99, but would also necessitate the investigation of potential countermeasures along diversion routes that was beyond the scale of the current phase of assessment.

The final forecast number of collisions under each Potential Future accounted for both local and SR 99 changes above. Table 17 presents the total forecast numbers of collisions in which someone is killed or injured and collisions involving vulnerable road users and Table 18 shows the change in forecast collisions across the Potential Futures. Some of the changes, particularly to bicycle and pedestrian collisions, are just within the range of sensitivity of the HSM tool and may not represent a statistically significant change at this level of analysis even though they represent a large percentage change from the Baseline.

Table 17: Forecast Combined Annual Collisions for SR 99 and Local Intersections

Scenario	Future Baseline	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Total Collisions	17.8	9.1	20.2	41.3	15.6
Fatal and Injury Collisions	6.0	3.0	6.2	12.6	5.2
Bicyclist Collisions	0.9	0.1	0.4	1.1	0.1
Pedestrian Collisions	0.2	0.9	1.5	1.9	0.8

Table 18: Change in Forecast Collisions from Future Baseline

Collision Type	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails*
Forecast change in annual Fatal + Injury collisions	-3.0 (-49%)	+0.2 (+3%)	+6.5 (+109%)	-0.8 (-13%)
Forecast change in annual Pedestrian + Bike collisions	No change (0%)	+0.9 (+80%)	+2.0 (+183%)	No change (0%)

* *For this analysis, as described above, Bridges + Trails would likely be similar to a future Baseline and has been used as a comparison to the HSM results in each Potential Future*

Mobility-Limited Exposure Risk

- In Reroute + Reclaim, routes across the former SR 99 right-of-way would be at-grade and accessible, with comfortable routes that do not cross major freight routes. A new linear bike and pedestrian path along the former SR 99 right-of-way would provide a comfortable north-south connection within the neighborhood.
- In Narrower Boulevard, routes within the neighborhood would be at-grade and accessible. People with limited mobility would have more direct routes. There would be regularly-spaced, signalized locations to cross the new boulevard. A linear bike and pedestrian path along the former SR 99 right-of-way would be along the new boulevard and would be designed for safe and convenient north-south mobility.
- In Wider Boulevard, routes within the neighborhood would be at-grade and accessible. There would be direct routes and regularly-spaced, signalized locations to cross the new boulevard. As described in the Improved Walking and Biking Infrastructure measure, the 4-lane boulevard may be less comfortable to cross than the narrower boulevard. A linear bike and pedestrian path along the boulevard would be designed for safe and convenient north-south mobility.
- In Bridges + Trails, new or improved crossings of SR 99 would meet ADA requirements but would require people with limited mobility to use ramps to cross the SR 99 right-of-way. Route directness would improve somewhat from current conditions with new connections but would still be limited. A trail along SR 99 would improve connectivity but would require people with limited mobility to change grades to access.

The Potential Futures are evaluated in the following table.

Table 19: Street Safety for Vulnerable Road Users Evaluation

Submeasure	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Fatality and Injury Collisions	-3.0	+0.2	+6.5	-0.8
Evaluation	**Much Better**	**Same**	**Much Worse**	**Better**
Pedestrian and Bicycle Collisions	No change	+0.9	+2.0	No change
Evaluation	**Same**	**Worse**	**Much Worse**	**Same**
Mobility-Limited Exposure Risk	▪ Comfortable, at-grade crossings, with minimal exposure risk	▪ At-grade, accessible crossings, with need to cross some high-traffic streets at signalized crossings	▪ At grade, accessible crossings, with need to cross 4-lane boulevard at signalized crossings	▪ ADA-compliant crossings of SR 99; minimal improvements to overall directness and comfort
Evaluation	**Much Better**	**Better**	**Better**	**Same**
Combined Evaluation	**Better**	**Same**	**Worse**	**Same**
	▪ Reduction in predicted people killed or seriously injured in South Park due to lower traffic speeds and volumes ▪ Slight increase in total pedestrian and bicyclist collisions ▪ Direct, accessible at-grade routes with limited exposure to traffic for people with limited mobility	▪ Increase in predicted serious injuries and fatalities ▪ Increase in predicted bicycle and pedestrian collisions due to increased exposure of crossings at the new boulevard ▪ Direct, accessible at-grade routes, with some exposure to traffic	▪ Substantial increase in predicted serious injuries and fatalities ▪ Substantial increase in predicted bicycle and pedestrian collisions due to increased exposure of crossings at the new boulevard ▪ Direct, accessible at-grade routes, with some exposure to traffic	▪ Consistent travel volumes and speeds with future baseline traffic projections, with some improvement in forecast safety as a result of intersection changes ▪ Grade separated, accessible routes with slightly improved directness for people with limited mobility

Access to Parks and Public Space

Definition

Access to existing parks, recreational areas, nature, and community gathering spaces and opportunities on reclaimed land to foster well-being and social connection.

Measurement Approach

There are three submeasures for this measure:

1) Improved access to existing public spaces, including the potential for new and improved connections to parks and green spaces.
2) Opportunity to create new public space, including the amount of reclaimed land and its potential for use as parks and gathering spaces.
3) Opportunity to improve the useability of public space, including opportunities to activate public space with adjacent ground floor uses, expand and/or connect parks in a way that could add functionality, and other green space improvements (e.g., stormwater management, tree canopy).

There are no published thresholds of significance for these measures and professional judgement has been used in developing the thresholds used for this report. The following qualitative evaluation is used for each submeasure.

Much Worse	Worse	Same or No Change	Better	Much Better
Substantial reduction or impact	Modest reduction or impact	No or very limited change	Opportunity for modest improvement	Opportunity for substantial improvement

Current Conditions

Existing parks and public spaces include several near SR99 and five along the Duwamish River. With only two SR 99 crossings—the S Henderson St Overpass and the S Cloverdale St underpass—connectivity between the eastern and western parks and public spaces is limited. Parks and public spaces include:

- **West of SR 99:** Marra Farm, South Park Meadow, Concord Elementary, and Park formerly known as Cesar Chavez Park
- **East of SR 99:** South Park Community Center and South Park Playground, River City Skate Park, Duwamish River Trail, West Duwamish Trail, Tattatucid Park, Duwamish Waterway Park, South Park Plaza, and Duwamish River People's Park, South Park Pump Station

The parks and public spaces range from active play areas to restored fish and wildlife shoreline habitat.

Though several parks and public spaces—Marra, South Park Meadow, Concord Elementary School's playground, Park formerly known as Cesar Chavez Park, River City Skatepark, South Park Playground, and South Park Community Center—are all within ½ mile (10-minute walk) of each other, they do not feel connected because the only crossing nearby is challenging, especially for children or people with limited mobility. The S Cloverdale St underpass is dark; space for people walking, rolling, and biking is limited; and buffering from traffic is limited; though murals and a sidewalk railing/fence do improve the crossing. The South Park Healthy Street (see Figure 40) connects the South Park Playground to the South Park Plaza, and a Neighborhood Greenway connects this path to Marra Farm.

The South Park Green Space Vision Plan sets a strategy for a Greenway Loop and River Walk to connect and improve the park and streetscape network (see Figure 41).

South Park Healthy Street Program

In 2024, the City's Healthy Street Program[48] closed streets to through-traffic by installing permanent signs with concrete planter block bases at the intersections of South Park Healthy Streets on S Thistle St, 10th Ave S, and S Sullivan St, from South Park Playground to 13th Pl S (the future South Park Plaza site). This effort creates a safer, more walkable and bikeable public space.

Figure 40: South Park Healthy Street Project Map (Source: Seattle Department of Transportation[49])

South Park Green Space Vision Plan

The South Park Green Space Vision Plan[50] reflects the community's priorities for a connected network of green spaces and enhanced streetscapes. The "South Park Greenway Loop" aims to ensure all residential areas are within a one-block distance to walking and bicycle facilities that link current and future green spaces, realizing a "Walking Park" for the community. The "River Walk" celebrates South Park riverfront by providing better connectivity between a series of destinations along the water's edge.

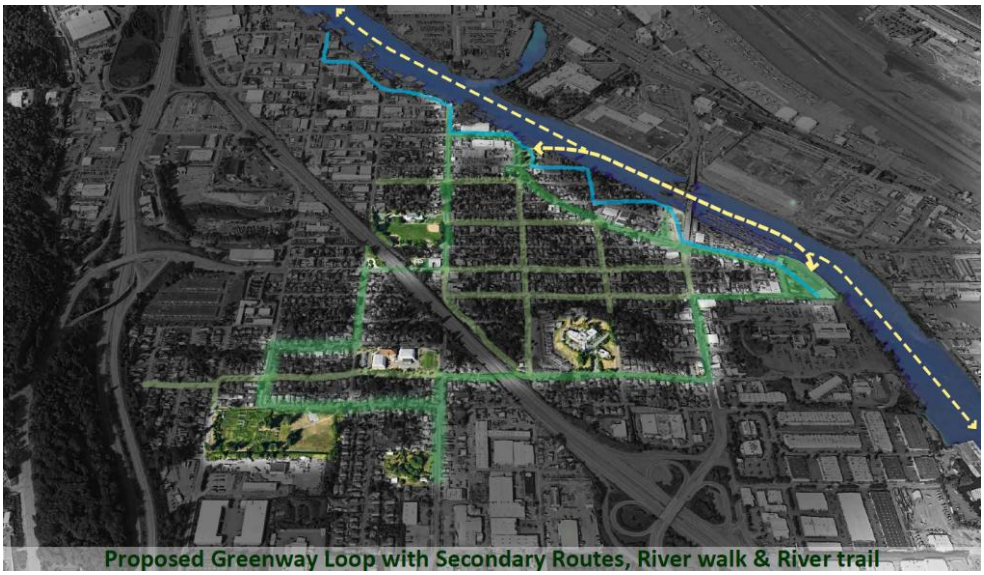


Figure 41: South Park Green Space Vision Plan (Source: Seattle Parks Foundation[51])

Evaluation

Potential Development and Green Space Connectivity

Figure 42 and Figure 43 illustrate how new streets and pedestrian routes strengthen green space connections to existing green spaces and trails. Future developments along these routes can activate parks space, expand existing spaces, and/or create new through connections making previously inaccessible green space destinations more connected to more members of the South Park community. Development may include parks, public spaces, or green stormwater infrastructure (GSI).

Figure 42: Opportunities for Connections and Green Space Near SR 99

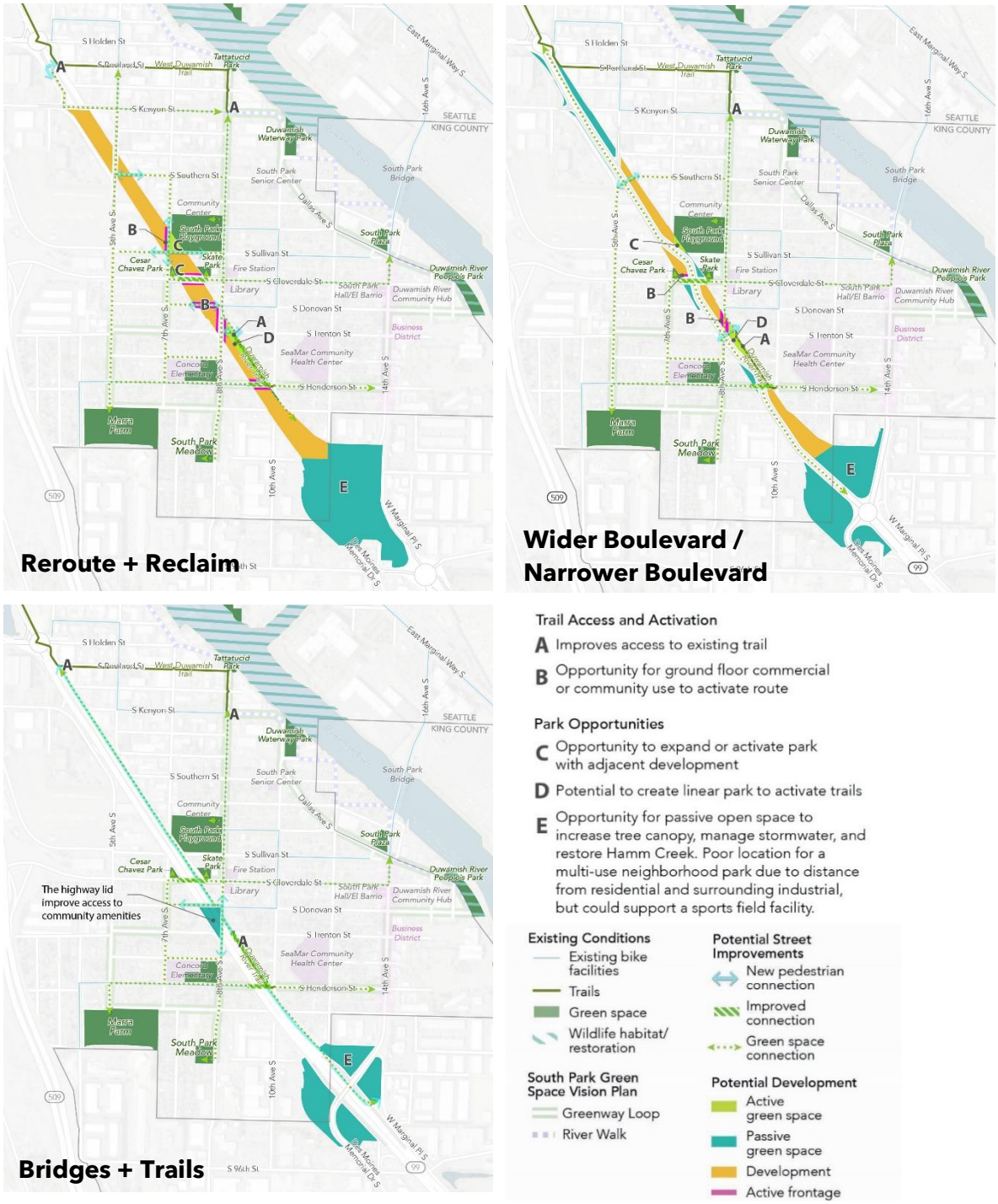


Figure 43: Opportunities for Connections and Green Space in South Park

New Public Space Opportunities

The Potential Futures have different potential for new public space. Based on the land suitability analysis, there is a range for each Potential Future. The low end of the range is only land that is constrained from being reused. The high end of the range is the potential to reuse all reclaimed land.

Table 20: Potential for Public Space in each Potential Future

Potential Public Space	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Low (Constrained Land Only)	59 acres	48 acres	44 acres	4 acres
High (All Reclaimed Land)	100 acres	79 acres	71 acres	17 acres

Table 21: Access to Parks and Public Space Evaluation

Submeasure	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Improved access to existing public spaces	▪ New vehicular connections and nonmotorized routes would provide safe and comfortable access to community destinations such as the Community Center and South Park Playground, Concord Elementary School and trails. ▪ Mobility improvements support the Healthy Street Program and South Park Green Space Vision Plan's Greenway Loop	▪ New crossings of boulevard would directly link existing public spaces. ▪ New ground floor commercial development could activate routes to the Duwamish River Trail.	▪ New crossings of boulevard would directly link existing public spaces. ▪ New ground floor commercial development could activate routes to the Duwamish River Trail.	▪ Highway lid would strengthen connections between the residential core and green space assets such as Marra Farm, neighborhood parks, Concord Elementary, and the South Park Community Center hub. ▪ Rebuilt S Henderson St Overpass and S Cloverdale St upgrades improve access across SR 99 to existing green and community spaces.
Evaluation	**Much Better**	**Better**	**Better**	**Better**

Submeasure	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Opportunity to create new public space	▪ 59-100 acres of public space suitability ▪ Opportunity to create a large, centrally located green space, adding a substantial community asset for the neighborhood. ▪ The former location of the cloverleaf could serve as passive open space or a sports field with a connected trail system to the Duwamish River Trail.	▪ 48-79 acres of public space suitability ▪ Some reclaimed land would be suitable as linear parks along new streets, to widen the Duwamish River Trail, and/or generally along the new boulevard. ▪ Multi-use trail, strengthens walking and biking connections to existing and future parks and green spaces. ▪ Cloverleaf provides a large site to provide stormwater, tree canopy, Hamm Creek daylighting, other ecosystem services, or serve as a sports field.	▪ 44-71 acres of public space suitability ▪ Some reclaimed land would be suitable as linear parks along new streets, to widen the Duwamish River Trail, and/or generally along the new boulevard. ▪ Multi-use trail, strengthens walking and biking connections to existing and future parks and green spaces.	▪ 4-17 acres of public space suitability ▪ Limited opportunities to expand active green spaces ▪ New urban interchange presents opportunity to introduce passive green spaces or a sports field and support environmental remediation
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Better**
Opportunity to improve the useability of public space	▪ Potential ground floor commercial could activate routes on S Donovan St, S Cloverdale St and S Trenton St.	▪ A large, connected open space network is likely but may have less activated and human-oriented paths than Reroute + Reclaim.	▪ A large, connected open space network is likely but may have less activated and human-oriented paths than Reroute + Reclaim. ▪ Adjacent development could activate or expand parks such as South Park Playground.	▪ Limited opportunities for improvement. ▪ New public spaces would be adjacent to high-traffic roadway.
Evaluation	**Much Better**	**Better**	**Better**	**Same**

Submeasure	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Summary evaluation	**Much Better**	**Better**	**Better**	**Better**
	▪ Substantial opportunity for expanded open space at the community center open space hub ▪ Opportunity for large passive open space or sports field at former interchange ▪ More connections to and between west and east side parks and open space (6+ new crossings) ▪ Opportunity for all crossings to be activated and include high quality design Strong opportunity for linear or small parks on repurposed land	▪ Substantial opportunity for expanded open space at the community center open space hub ▪ Opportunity for large passive open space or sports field at former interchange ▪ Some connections between west and east side parks and open space (2+ new crossings) ▪ Opportunity for the three crossings near the community center hub to be activated and include high quality design Opportunity for linear or small parks on repurposed land	▪ Substantial opportunity for expanded open space at the community center open space hub ▪ Opportunity for large passive open space or sports field at former interchange ▪ Some connections between west and east side parks and open space (2+ new crossings) ▪ Opportunity for the three crossings near the community center hub to be activated and include high quality design Modest opportunity for linear or small parks on repurposed land	▪ The 8th Ave S lid provides an opportunity to improve crossing, particularly between Concord Elementary School and the Community Center hub. Because of continued exposure to vehicle traffic, this may not be a good gathering space ▪ Opportunity for large passive open space or sports field at former interchange, but smaller size and more disjointed than other options ▪ Some connections between west and east side parks and open space (2 new crossings) Limited opportunity for crossings to be activated

Public Health

Definition

The effect of the highway and other factors on the collective health of South Park residents.

Measurement Approach

Multiple factors contribute to overall public health and well-being, including indirect factors, such as active living and social connections, as well as direct factors like environmental risks to body systems and mental health. These factors are called "determinants of health" are influenced by urban design and the changes to SR 99 in the Potential Futures. The urban design-related determinants of health and their correlation with the health-related measures in this analysis are shown in Table 22.

Table 22: Health-Related Measures' Relationship to Health Drivers

	Urban design-related determinants of health					
Health-related measures	**Body systems/ environ. risks**	**Mental health**	**Safety**	**Active living**	**Social connections**	**Healthy food**
Air Pollution*	X	X				
Noise Pollution*	X	X				
Street Safety for Vulnerable Road Users*			X			
Access to Green Space		X		X	X	
Improved Walking and Biking Infrastructure	X	X		X	X	X
Public Transit Connections				X	X	X
Runoff Reduction & Water Quality Improvement	X					
Climate Resilience	X		X			
Available Green Space		X		X	X	
Affordability & Economic Opportunity		X	X	X	X	X

Measures noted with an asterisk (*) included analysis areas larger than the SR 99 Corridor Analysis Area. Air Pollution and Noise Pollution utilized the Regional Roads & Surrounding Areas Analysis Area and Street Safety for Vulnerable Road Users utilized the South Park Community Analysis Area.

This measure summarizes public health effects of the Potential Futures by averaging the scores from the health-relevant measures. There are no published thresholds of significance for a broad public health measure at this scale of analysis, and professional judgement has been used in developing the thresholds used for this report.

The evaluations of the composite evaluation score is translated as follows:

Much Worse	Worse	Same or No change	Better	Much Better
<-1.5	-1.5 to -0.5	+/- 0.5	+0.5 to +1.5	>+1.5

Current Conditions

The South Park area generally has worse health outcomes than the Seattle and King County average,[52] with more people reporting fair/poor health (4% more in South Park), frequent mental distress (5% more in South Park), disability (9% more in South Park), and asthma (4%). Public Health – Seattle & King County data shows that additional health outcomes or indicators worse in South Park than in King County or Seattle as a whole include leisure-time physical activity, obesity, hypertension, lung cancer, stroke, and diabetes. Table 23 shows the comparison between South Park and King County or Seattle. The cumulative effects of air and noise pollution, an inhospitable public realm, and lack of connectivity and transit to support active living, and lack of access to nature and recreational spaces are part of the conditions causing worse health outcomes. Changes to SR 99 in the Potential Futures have the potential to address some of the underlying causes of poor public health outcomes.

Table 23: Public Health Outcomes by Geography[53]

Topic/Indicator	South Park area[54] (CI[55]) (PHSKC CHI)	South Park – 1200 (CI) (CDC Places)	King County (PHSKC CHI) or Seattle (CDC Places)
General Health Status			
Life expectancy at birth (age)	N/A[56]	N/A	81.6 years
Fair or poor health ("general health" on CDC Places). Adults 18+ whose self-reported general health status is fair or poor (% of population)	15.3% (9.3%-24.2%)	21% (22.2% - 25.1%)	11.3%
Frequent mental distress. Adults 18+ who report 14+ poor mental health days during the past 30 days (% of population)	18.9% (10.3%-27.4%)	18.5% (17.4%-19.8%)	13.7% [15.6% (14.5%-16.6%) in Seattle]
Depression. Estimated prevalence of depression among adults aged 18 years and older (% of population)	N/A	25.7% (24.1%-27.5%)	25.1% (23.5%-26.8%) in Seattle
Frequent Physical Distress. Estimated prevalence of physical health not good for >=14 days among adults aged 18 years and older (% of population)	N/A	13.9% (12.9%-14.9%)	8.9% (8.2%-9.5%) in Seattle
Disability. Adults who report serious difficulty in hearing, seeing, deciding, walking, dressing, or errands (% of population)	27.6% (19%-38.2%)	29.3% (27.6%-31.1%)	18.9% [19.9% (18.6%-21.3%) in Seattle]

Topic/Indicator	South Park area [54] (CI [55]) (PHSKC CHI)	South Park – 1200 (CI) (CDC Places)	King County (PHSKC CHI) or Seattle (CDC Places)
Health Risk Factors			
No leisure-time physical activity. (% of population)	17.5% (11.2%-26.4%)	N/A	14.8%
Obese. BMI 30+ (% of population)	24.5% (16.4%-35.0%)	29.7% (27.4%-32.2%)	21.1% [23.0% (21.1%-25.0%) in Seattle]
Vegetables <1/day. (% of population)	18.6% (10.7%-30.6%)	N/A	17.9%
Chronic Diseases			
Coronary heart disease. (% of population)	5.2% (2.5%-10.3%)	5.0% (4.6%-5.5%)	4.1% [3.7% (3.4%-4.0%) in Seattle]
Diabetes prevalence. (% of population)	5.9% (3.0%-11.2%)	10.3% (9.5%-11.2%)	7.0% [6.2 (5.7%-6.8%) in Seattle]
Hypertension. (% of population)	28.1% (18.2%-40.7%)	N/A	25.0%
Current asthma. (% of population)	13.1% (8.2%-20.2%)	10.8% (10.0%-11.7%)	9%
COPD. Chronic obstructive pulmonary disease (COPD) is a common lung disease causing restricted airflow and breathing problems. It is sometimes called emphysema or chronic bronchitis.	N/A	5.3% (4.8%-5.7%)	3.2% (3.0%-3.5) in Seattle
Leading Causes of Death [57]			
Lung cancer (Death rate # per 100,000 people)	29.6 (23.8-38.8)	N/A	23.8
Stroke. Estimated prevalence of stroke among adults aged 18 years and older (% of population) (CDC Places)	3.1% (1.3%-7.2%)	3.2% (2.9%-3.4%)	2.2% [2.0% (1.9%-2.2%) in Seattle]
Stroke (Death rate # per 100,000 people) (PHSKC CHI)	36.6% (28.3%-47.0%)	N/A	30.1%
Diabetes (Death rate # per 100,000 people)	25.3% (18.6%-34.1%)	N/A	18.6%
Maternal and child health [58]			
Low birthweight – all births. (% of population)	7.0% (5.8%-8.2%)	N/A	6.8%

Evaluation

Table 24: Public Health Composite Evaluation

Public Health Topic	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Air Pollution	1	1	1	0
Noise Pollution	1	1	0	0
Street Safety for Vulnerable Road Users	1	0	-1	0
Access to Parks and Public Spaces	2	1	1	1
Improved Walking and Biking Infrastructure	2	1	1	0
Public Transit Connections	1	1	1	0
Runoff Reduction & Water Quality Improvement	2	2	2	0
Climate Resilience	2	2	2	0
Trees and Environmental Restoration	2	2	2	0
Ecosystems and Habitat	2	2	2	0
Affordability and Economic Opportunity Composite (i.e., stability and influence)	2	1	1	0
Average	**1.6**	**1.3**	**1.1**	**0.1**
Public Health Rollup Summary Evaluation	**Much Better**	**Better**	**Better**	**Same**
	▪ Substantial benefits across public health-related measures. ▪ Evaluated as well or better than other Potential Futures on each measure	▪ Benefits across most public health-related measures. ▪ Better evaluation than Wider Boulevard on several measures.	▪ Benefits across most public health-related measures. ▪ Evaluated lower than Narrower Boulevard on several measures	▪ Same evaluation on most public health-related measures. ▪ Minimal negative evaluations, but not highest rated Potential Future on any measure.

Affordability and Economic Opportunity Measures

Measures in this category evaluate different aspects of each Potential Future related to affordability and economic opportunity. These measures include:

- Affordable Housing
- Neighborhood Stability
- Local Business Growth
- Job Opportunities

Affordable Housing

Definition

How much reclaimed SR 99 right-of-way could support new housing with long-term affordability, using tools such as land trusts, public development authorities, or similar approaches that maintain stable housing costs over time.

Measurement

There are two submeasures for this measure:

1) The potential quantity of housing with long-term affordability
2) The quality of housing with long-term affordability on reclaimed land

There are no published thresholds of significance for these measures and professional judgement has been used in developing the thresholds used for this report.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Potential quantity of housing with long-term affordability	>25% decrease	10% to 25% decrease	+/- 10%	10%-25% increase	>25% increase
Quality of housing with long-term affordability on reclaimed land	Housing in close proximity to contaminated sites or within 200 feet of a major roadway (>30K ADT)	Housing within 200-500 feet of a major roadway (>30K ADT)	Housing within 500 feet of a moderate traffic (>20K ADT)	Housing more than 200 feet of a moderate traffic roadway (>20K ADT)	Housing more than 500 feet from a moderate traffic roadway (>20K ADT) and integrated with other community uses

Current Conditions

The value of a typical home in South Park has steadily increased in the past two decades, reaching peaks in 2024.[59] In South Park, median gross home rents are $1,795 per month and median home values are $619,800, which are 12 percent and 34 percent less, respectively, relative to Seattle.[60] However, the per capita income is also 31 percent less than the Seattle average.[61] While South Park may be deemed affordable to some Seattle residents, many South Park residents struggle to afford living in the neighborhood.

As of 2024, there are higher rates of home ownership than renters in South Park. This has shifted since 2020. The percentage of owner-occupied housing is higher than Seattle (44%).[62]

- Total Number of Owner-Occupied Housing Units: 841 (54%)
- Total Number of Renter-Occupied Housing Units: 708 (46%)

Housing cost burden is prevalent among renters in South Park with more than half of renters spending more than a third of their income on housing[63]:

- Number of Renter-Occupied Housing Units with Excessive Housing Costs (>30% of Income): 375 (53%)
- Number of Owner-Occupied Housing Units with Excessive Housing Costs (>30% of Income): 168 (20%)

There are planned investments toward affordable housing in South Park. In 2021, Seattle City Council approved the purchase of two parcels at 14th Ave S and S Henderson St for $3.65 million. The plan is to develop between 70 to 120 units of affordable housing, with an emphasis on family-sized units to accommodate multigenerational households. The project is in collaboration with the Duwamish Valley Affordable Housing Coalition and aims to improve housing affordability and stability in the community.[64] In 2022, the City announced a $22 million investment to support the creation of 267 new rent and income-restricted homes in the Northgate and South Park neighborhoods. This includes Sea Mar's South Park Family Housing project, which will provide 77 units focused on serving low-income families and individuals.[65]

Evaluation

The land suitability analysis in Table 25 provides an assessment of the buildout capacity from reclaimed land in each Potential Future.

Table 25: Buildout Capacity

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Housing Capacity				
Total unit capacity	Up to 400	Up to 260	Up to 210	0
As share of total current South Park units	26%	17%	14%	0%
Potential affordable units	120-400	80-260	60-210	0
Potential affordable units as share of cost-burdened units	21%-69%	14%-45%	10%-36%	0%

Reroute + Reclaim

This Potential Future has the most opportunity for reclaimed land. Some of this land could be repurposed for affordable housing within the South Park residential neighborhood.

Narrower Boulevard

Transforming SR 99 into a boulevard can unlock available land for additional housing. The effect, however, would depend on whether the new street design invites or limits residential development. Redesigning the current configuration of SR 99 to be more bicycle- and pedestrian-oriented could also make it more compatible with residential and mixed-use development than a limited-access highway. The improved walkability and livability could also make housing more attractive to developers and residents alike.

Wider Boulevard

Transforming SR 99 into a boulevard could unlock available land for additional housing. The effect, however, would depend on whether the new street design invites or limits residential development. Redesigning the current configuration of SR 99 to accommodate future transit (see Public Transit Connections) could drastically improve mobility and access to a variety of transportation choices and make higher-density housing more feasible (less land needed for parking). Housing built near frequent transit can also support lower transportation costs for residents, helping affordability overall.

Bridges + Trails

Based on the land suitability analysis, no reclaimed land has been identified as potential housing. Maintaining SR 99 largely as is but improving connectivity across it through additional crossings could have a modest, indirect effect on housing supply and quality. While this intervention does not unlock land directly, its effect is more catalytic than immediate. It improves access but leaves the barrier in place. Developers, for instance, may be more willing to invest in land that becomes more walkable to amenities or transit on the other side of SR 99. Improved pedestrian access may also over time lead to revitalization of parcels near crossings. However, existing noise, air quality, and visual effect from SR 99 remain deterrents for housing near the highway, unless major mitigations (i.e. sound walls or green buffers) are added.

Table 26: Affordable Housing Evaluation

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Potential Housing Quantity	+26% overall, +21% to +69% as share of cost-burdened units	+17% overall, +14% to +45% as share of cost-burdened households	+14% overall, +10% to +36% as share of cost burdened households	No change
Evaluation	**Much Better**	**Better**	**Better**	**Same**
Housing Quality	All new units >500 feet from high-traffic roadway, housing integrated with other uses.	All new units >500 feet from high-traffic roadway, housing integrated with other uses.	New units within 200 feet of high-traffic roadway, 4-lane boulevard more challenging to cross.	No new housing.
Evaluation	**Much Better**	**Much Better**	**Worse**	**Same**
Composite Evaluation	**Much Better**	**Much Better**	**Same**	**Same**
	▪ Most opportunity to repurpose large, contiguous acreage of reclaimed land for housing. ▪ Most opportunity to buffer freight activity and to create safe, walkable conditions	▪ Moderate usable acreage, with likely some fragmentation of reclaimed land for housing. ▪ Depends on street redesign, but bicycle and pedestrian improvements would be more supportive of residential/mixed-use development.	▪ Moderate usable acreage, with likely some fragmentation of reclaimed land for housing. ▪ Depends on street redesign, but accommodating future transit improvements would make higher-density housing more feasible.	▪ Could have modest, indirect effect on housing supply, but existing challenges (i.e. noise, air quality, visual effect of SR 99) remain deterrents.

Neighborhood Stability

Definition

Opportunities to protect residents from being forced to leave South Park due to rising costs and neighborhood changes.

Measurement

There are two submeasures for this measure:

1) Potential to increase affordability and economic opportunity
2) Potential to increase property values and rents, particularly for South Park renters and local businesses

There are no published thresholds of significance for these measures and professional judgement has been used in developing the qualitative thresholds used for this report.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Potential to increase affordability and economic opportunity	Significant reduction in affordable housing or economic opportunities	Slight reduction in opportunities for affordable housing or local economic benefit	No meaningful change in affordable housing or economic opportunity	Creates some realistic new opportunities for affordable housing or economic benefit for current residents	Substantial new opportunities for affordable housing, community-serving use and local economic benefits
Potential to increase property values and rents, particularly for South Park renters and local businesses	Substantial potential increase in property values from SR 99–related changes, with no potential protections	Potential increase in property values from SR 99-related changes, with limited potential protections	No meaningful change in property values or potential protections	Minimal potential increase in property values from SR 99-related changes, with some potential protections	Minimal potential increase in property values from SR 99-related changes with substantial protections

Current Conditions

South Park shows elevated displacement risk based on the City's updated displacement risk index[66] and other national screening tools, with higher risk relative to nearby areas such as Highland Park and Georgetown. This reflects a combination of factors including a high share of renter households, lower-income levels, and existing housing market pressures.

Recent public and private investment, including environmental cleanup and infrastructure improvements along the Duwamish corridor, has increased interest in the area. Without

coordinated housing and community investment strategies, additional investment could contribute to rising costs for residents and local businesses.

At the same time, South Park has relatively limited access to key opportunities such as jobs, schools, services, and open space. This creates a dual condition: the corridor presents a chance to improve access, health, and economic opportunity, while also requiring careful planning to maintain housing stability and support existing businesses as conditions change.

Future phases of work will evaluate how different approaches to the corridor affect property values, housing stability, and business continuity, and identify strategies that align investment with long-term community stability.

Evaluation

The outcomes for each Potential Future largely depend on accompanying policies, land use decisions, and governance. In addition to affordable housing, the reclaimed land can be repurposed for parks, community centers, cultural services, and local business spaces that serve and meet the needs of existing residents.

These changes could improve neighborhood connectivity, restore walkability, and expand access to jobs, schools, and services. Improved walking and biking conditions would expand lower-cost travel options, which can reduce household transportation costs over time.

At the same time, environmental restoration, increased access to open space, and improved walkability, access, and aesthetics can increase land values and attract new investments. Without coordinated housing, business, and community investment strategies, these changes could place upward pressure on rents and property values for existing residents and businesses.

Table 27: Neighborhood Stability Evaluation

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Potential for affordability and economic opportunity	▪ Potential for 120-400 affordable housing units on reclaimed land, which would support housing stability for qualifying residents ▪ New mixed-use space could support local business incubation and integration with the broader neighborhood.	▪ Potential for 80-260 affordable units on reclaimed land, which would support housing stability for qualifying residents. ▪ The new boulevard could support local business incubation.	▪ Potential for 60-210 affordable units on reclaimed land, which would support housing stability for qualifying residents ▪ New business opportunities along new boulevard.	▪ No new housing on reclaimed land ▪ Some new local business space could be possible, but would be located in areas farther removed from residential uses.
Evaluation	**Much Better**	**Better**	**Better**	**Same**

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Impacts on housing costs, rents, and local business stability	All Potential Futures, if not paired with housing, business, and community investment strategies, could increase pressure on rents and property values.			
Evaluation	**Worse**	**Worse**	**Worse**	**Worse**
Composite Evaluation	**Better**	**Same**	**Same**	**Worse**
	▪ Creates substantial new opportunities for affordable housing and/or community-serving uses in accessible locations and has strong potential for local economic benefit.	▪ Creates some new realistic opportunities for affordable housing or economic benefit for current residents. ▪ Depending on street design, may lead to noticeable increase in property values from SR 99-related improvements without clear protections.	▪ Creates some new realistic opportunities for affordable housing or economic benefit for current residents. ▪ Depending on street design, may lead to noticeable increase in property values from SR 99-related improvements without clear protections.	▪ No meaningful change in affordability or economic opportunity compared to today.

Local Business Growth

Definition

Opportunities to support new small businesses development, protect current locally-owned businesses from being displaced by rising costs or infrastructure construction and redevelopment, improve customer access to businesses, and effects on freight access.

Measurement

There are four submeasures for this measure:

1) Access to current small businesses, including the visibility and access to retail and service businesses (primarily along 14th Ave S)
2) Freight access, including efficiency of delivery and truck access
3) Business environment and safety, including local connectivity, neighborhood connections, and opportunities to improve lighting and personal safety
4) Opportunity for new business development, including potential space for new businesses

There are no published thresholds of significance for these measures and professional judgement has been used in developing the qualitative thresholds used for this report.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Access to small businesses	Substantial reductions in customer access	Reduced customer access or visibility	Minimal change	Moderate improvements in local street access to main corridors	Substantial improvements in walking, biking, and local street access to main corridors
Freight access	Substantial restrictions to freight access and routing	Restrictions to freight access and connectivity	No meaningful change	Some freight efficiency gains or new access	Substantial improvements to freight access
Business environment and safety	Significant deterioration in safety, access, or business viability	Loss of connectivity or deterioration in public realm	No meaningful change	Some new connections or modest safety/ environment improvements	Major new connections and substantial safety/ environment improvements
Opportunity for new businesses	>25% decrease in job opportunities	10% to 25% decrease in job opportunities	+/- 10% change in job opportunities	10% to 25% increase in job opportunities	>25% increase in job opportunities

Current Conditions

South Park is known for its deep cultural roots and a strong sense of community. It's also home to a diverse and resilient business landscape. South Park currently has a diverse economy, including industrial parks, a local business district, and Seattle's only working farm. Along its central corridors, more than 30 family-owned businesses operate across sectors such as food service, retail, auto repair, wellness, and creative industries.[67] Many of these businesses reflect the area's Latino heritage and have longstanding ties to the neighborhood. While South Park's small businesses contribute to a vibrant local economy, they face ongoing challenges—from affordability pressures to concerns around infrastructure limitations. There is limited recent data on business openings or closures, but the need for more coordinated support and protection for these businesses is widely acknowledged by neighborhood organizations and city departments. Currently, the City of Seattle provides a variety of grant and loan support (i.e. Tenant Improvement Program, Small Business Capital Access Program, Small Business Stabilization Fund) as well as technical and legal assistance to local businesses and community-serving corridors, though it is unclear about the level of engagement involving South Park businesses.

At the same time, South Park's identity as a working waterfront and industrial hub is a defining economic asset. Industrial businesses—such as Pacific Industrial Supply Co. and numerous logistics, fabrication, and marine service companies—benefit from the neighborhood's proximity to the Duwamish River, major freight routes, and SR 99. This dual identity—as both a small-business corridor and a vital industrial zone—positions South Park uniquely within Seattle's economy, and its future will depend on how investments prioritize both sides of the neighborhood's character. There are an estimated 226 businesses in South Park, including the surrounding industrial area around residential South Park.[68] The most common businesses in South Park include:

- 18 accommodation and food service businesses
- 14 transportation and warehousing businesses
- 25 construction businesses
- 30 manufacturing businesses
- 12 real estate/rental/leasing businesses
- 13 healthcare and social assistance businesses

Evaluation

Substantial changes to SR 99 could make South Park less attractive to industrial companies who rely on truck access in and out of South Park and for new industrial or manufacturing businesses to move into the industrial areas at the north and south ends of the neighborhood. Reroute + Reclaim would have the most substantial change that could result in altered truck access to South Park businesses. First/last mile access and routing are opportunities that have not been fully developed at this stage of analysis. Narrower

Boulevard, with potential freight restrictions on some roads, could also alter access. Wider Boulevard and Bridges + Trails would have limited effects on truck circulation and access.

Substantial changes to SR 99 could also improve connections to local businesses and make them more accessible and visible to community residents. More substantial changes that involve new public space or mixed-use development could increase visibility and quality of the public realm to increase community safety. Reroute + Reclaim and Narrower Boulevard would create more accessible, traffic calmed, and safe routes to current neighborhood businesses. Each has the potential for more substantial public space improvements. Wider Boulevard has some of the same features, but would have a 4-lane surface road along the SR 99 right-of-way. Bridges + Trails would have limited changes from current conditions.

If employment uses were prioritized on reclaimed land, each Potential Future could have different amounts of new jobs, as shown in Table 31. This analysis is based on City of Seattle-recommended zoning yields based on prevalent zoning categories on land surrounding SR 99. Exact capacity would depend on more detailed planning for the reuse of reclaimed land.

Table 28: Potential for New Employment Space

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Employment Capacity				
Potential new employment space	Up to 1.7M sf	Up to 1.2M sf	Up to 1.1M sf	Up to 0.6M sf
Potential new job capacity if employment uses were maximized	2,700	1,900	1,700	800
Potential new jobs as share of current South Park jobs	42%	30%	27%	13%

Table 29: Local Business Growth Evaluation

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Access to small businesses	▪ More accessible, traffic calmed, safe routes to current neighborhood businesses	▪ More accessible, traffic calmed, safe routes to current neighborhood businesses	▪ More accessible routes to current neighborhood businesses with heavier traffic boulevard along SR 99 right-of-way	▪ Minimal change to access to current neighborhood businesses
Evaluation	**Much Better**	**Much Better**	**Better**	**Same**
Freight access	▪ Some potential changes to access for neighborhood industrial businesses.	▪ Some potential changes to access with freight limitations on the access along boulevard within South Park	▪ Minimal changes to current freight access	▪ Minimal changes to current freight access
Evaluation	**Worse**	**Worse**	**Same**	**Same**

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Business environment and safety	▪ Substantially improved visibility and public amenities to support local businesses	▪ Substantially improved visibility and public amenities to support local businesses	▪ Improved visibility and access to support local businesses	▪ Minimal change to current business environment
Evaluation	**Much Better**	**Much Better**	**Better**	**Same**
Opportunity for new businesses	▪ Up to +42% potential job growth	▪ Up to +30% potential job growth	▪ Up to + 27% potential job growth	▪ Up to +13% potential job growth
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Better**
Composite Evaluation	**Better**	**Better**	**Better**	**Same**
	▪ Changes to truck access through South Park. ▪ Offers substantial reclaimed land that can be repurposed for retail, office, hospitality, and mixed-use development. ▪ Creation of new connections and environmental improvements create local conditions that could improve visibility for retail/service businesses and make it easier, safer, and more appealing to operate businesses in the area.	▪ Moderate land made available with this Potential Future can be repurposed to support mixed use retail/commercial and industrial uses. ▪ Reorienting SR 99 and other streets to support bicycle and pedestrian activity could make development for retail, restaurants, and other local-serving "main street" businesses more attractive. ▪ Restrictions on freight access on SR 99 through South Park could alter access for nearby manufacturing and industrial companies.	▪ Moderate land made available with this Potential Future can be repurposed to support mixed use retail/commercial and industrial uses. ▪ Maintains clear, sustained improvements to freight routes and delivery times ▪ Maintaining freight connections could make the corridor less attractive for local-serving retail, office, hospitality, and mixed-use development. ▪ Future bicycle and pedestrian improvements could offset some of the freight impacts and create an attractive environment for "main street" development.	▪ Reclaimed land is minimal as well as overall opportunity for generating new businesses . ▪ Current conditions makes the area less attractive for small businesses such as retail and restaurants.

Job Opportunities

Definition

Opportunities to create new jobs in South Park, including temporary jobs that support short-term employment during construction and permanent jobs that support long-term employment after construction, and connect residents with quality jobs.

Measurement

There are three submeasures for this measure:

1) Permanent job quantity, including how many jobs could be supported on reclaimed land
2) Short-term job quantity, including how many construction-related jobs could be created
3) Job quality, including the potential for living wage, safe, and sustainable jobs

There are no published thresholds of significance for these measures and professional judgement has been used in developing the qualitative thresholds used for this report.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Permanent job quantity	>25% decrease in jobs in South Park	10%-25% decrease in jobs in South Park	+/- 10% change in jobs in South Park	10-25% increase in jobs in South Park	>25% increase in jobs in South Park
Short-term job quantity	Substantial decrease in construction jobs	Decrease in construction jobs	No meaningful change	Moderate number of construction jobs	Substantial construction jobs
Job quality	Primarily low-wage, low-skill jobs	More low-wage, low-skill jobs	Minimal or no change	More living-wage, high-skill jobs in stable sectors	Primarily living-wage, high-skill jobs in stable sectors

Current Conditions

There are currently more than 6,400 jobs in the greater South Park area, which in addition to the neighborhood itself, also includes industrial lands that are part of Seattle's Duwamish manufacturing/industrial center (MIC). Most of these are in the industrial areas surrounding residential South Park, but the small businesses and small business owners create jobs and contribute to the local economy. The most common jobs include:

- 1,214 transportation and warehousing jobs
- 922 manufacturing jobs
- 667 construction jobs

Research suggests that infrastructure projects that incorporate bicycle and pedestrian elements create around 46 percent more jobs per dollar spent than road-only projects.[69]

Evaluation

Based on the land suitability evaluation, there are different opportunities for new jobs in each Potential Future. As shown in Table 30, Reroute + Reclaim would have the greatest potential for new jobs, with Narrower and Wider Boulevard both providing some substantial opportunities.

Table 30: Potential for New Jobs in each Potential Future

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Employment Capacity				
Potential new job capacity if employment uses were maximized	2,700	1,900	1,700	800
Potential new jobs as share of current South Park jobs	42%	30%	27%	13%

Each Potential Future would provide opportunities for construction-related jobs. Potential Futures with greater ability for reuse of reclaimed land would sustain construction-related jobs for longer. Bridges + Trails would involve major investments in the transportation infrastructure of SR 99 and connections across, but more limited potential for non-transportation construction jobs.

Quality of jobs would depend on the reuse of reclaimed land. Employment uses in South Park currently support a diverse range of jobs. Scenarios that would result in potentially greater volume of new employment uses, would result in more living wage jobs. Potential Futures that include a mix of public space, community-oriented and private uses would also likely result in more diversity of new job opportunities.

Table 31: Job Opportunities Evaluation

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Permanent job quantity	+42%	+30%	+27%	+13%
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Better**
Short-term job quantity	▪ Substantial construction jobs for both transportation and new uses for reclaimed land.	▪ Substantial construction jobs for both transportation and new uses for reclaimed land.	▪ Substantial construction jobs for both transportation and new uses for reclaimed land.	▪ Substantial construction jobs for new transportation infrastructure
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Better**

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Job quality	▪ Mix of construction and long-term jobs in multiple fields ▪ Changes to freight access patterns could affect industrial job opportunities	▪ Mix of construction and long-term jobs in multiple fields ▪ More bicycle and pedestrian activity could make development for retail, restaurants, and other local-serving "main street" businesses more attractive, and meaningfully generate more permanent job opportunities ▪ Restrictions to freight access along boulevard could affect industrial job opportunities	▪ Mix of construction and long-term jobs in multiple fields ▪ Opportunities for new local-serving "main street" businesses and employment throughout South Park	▪ Primarily transportation construction-related jobs
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Better**
Composite Evaluation	**Much Better**	**Much Better**	**Much Better**	**Better**
	▪ Offers substantial reclaimed land that can be repurposed for retail, office, hospitality, and mixed-use development, which can generate new, more permanent jobs.	▪ Restricting freight access along the SR 99 right-of-way through South Park could negatively affect nearby manufacturing and industrial companies, and could result in long-term job opportunity changes.	▪ Roadway reconfiguration could generate temporary construction jobs. ▪ Land repurposed for commercial, retail, or other local businesses can diversify and generate more job opportunities	▪ Reclaimed land is minimal as well as overall opportunity for generating new jobs.

Mobility & Connectivity Measures

Measures in this category evaluate different aspects of transportation changes associated with each Potential Future. These measures include:

- Regional Traffic
- Local Vehicular Traffic
- Neighborhood Reconnection
- Improved Walking and Biking Infrastructure
- Public Transit Connections
- Emergency and Disaster Response

Regional Traffic

Definition

Evaluation of how each Potential Future would affect trips on regional routes and in surrounding communities. The analysis area for this measure was the Regional Roads & Surrounding Areas Analysis Area, including SR 99 as well as the surrounding roads that would likely see larger changes in traffic patterns as a result of changes to SR 99.

Measurement Approach

There are two submeasures in this measure

1) How much daily traffic would increase on other regional routes (I-5, SR 509) from changes to SR 99
2) How much daily freight traffic would increase on alternate regional routes (I-5, SR 509) as a percentage of total traffic

There is no commonly applied federal, state, or regional standard that defines what size of change in vehicle or freight volumes should be considered acceptable, significant, or meaningful in a planning-level analysis.[70] The Federal Highway Administration (FHWA), American Association of State Highway Transportation Officials (AASHTO), WSDOT, and PSRC provide tools for measuring traffic changes, but none prescribe numerical thresholds for interpreting them. Within this context, the thresholds used in this report are not regulatory standards. They are a transparent, evidence-informed framework that allows readers to compare the four Potential Futures in a consistent and repeatable way. They reflect three considerations:

- Typical variability on regional highways,
- How roadway performance responds to percentage changes in demand, and
- The need for a simple, interpretable method for comparing scenarios at a planning level.

Additional detail on these thresholds is provided in the endnotes section. Future studies would be needed to assess regional traffic changes in more detail and develop appropriate mitigations, if needed, for changes to SR 99.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Total traffic on regional routes[71]	>10% increase	5-10% increase	+/- 5%	5-10% decrease	>10% decrease
Freight traffic as % of total traffic[72]	>2% increase	1-2% increase	+/- 1%	1-2% decrease	>2% decrease

Current Conditions

2050 Baseline conditions are outlined in Table 2 and Table 3. I-5 and SR 509 are routes that predominantly serve regional trips and would see changes in the Potential Futures.

Some travelers currently using SR 99 do so because their trips are generally better served by using SR 99 over other regional routes. Based on the existing conditions analysis, almost two-thirds of trips are coming from South King County or Pierce County and over half are headed to West Seattle or South Seattle. Table 32 shows three example trip patterns that illustrate potential origins and destinations that would currently use SR 99 and comparing the travel times on SR 99 with an alternate route based on the most popular origins and destinations for travelers on SR 99. Travel times were estimated using Google Maps for a typical weekday morning at 7am.

Table 32: Current Travel Time Comparisons

Example Origin-Destination	SR 99 Routing	SR 509 Routing (and comparison to SR 99 routing)	I-5 Routing (and comparison to SR 99 routing)
Sea-Tac Airport to Morgan Junction (West Seattle)	18-35 minutes *(via Tukwila International Boulevard (TIB), SR 99, and Highland Park Way)*	18-35 minutes *(via SR 518, SR 509, and Highland Park Way)* **+ *0 minutes***	22-40 minutes *(via S% 518, I-5, and Spokane St Viaduct)* **+ 4-5 minutes**
Kent Industrial District to SODO	24-50 minutes *(via SR 599, SR 99, and 1st Ave S)*	26-50 minutes *(via SR 518, SR 509, and 1st Ave S)* **+0-2 minutes**	22-50 minutes *(via I-5)* **0 to -2 minutes**
Tukwila to Georgetown	10-22 minutes *(via TIB, SR 99, and 1st Ave S Bridge)*	12-22 minutes *(TIB and E Marginal Way S)* **+0-2 minutes**	14-28 minutes *(via TIB and I-5)* ***+4-6 minutes***

SR 99 currently provides competitive travel times, however for each origin-destination pair, there is an alternative that doesn't currently have a time penalty. Since traffic patterns vary by time of day and day of week, each driver may make decisions and experience travel times differently. Each Potential Future may also affect these current travel times in different ways. Detailed travel time analysis of the Potential Futures has not been conducted as part of this phase of analysis.

SR 99 in the SR 99 Corridor Analysis Area is designated as a T-1 Freight Corridor in WSDOT's Feight and Goods Transportation System classification, carrying over 4 million tons of freight annually.

Evaluation

Forecast changes on regional routes are shown in Table 33.

Table 33: Regional Traffic Evaluation

Submeasure	2050 Baseline	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Daily Vehicles on SR 99, I-5, and SR 509	289,700	302,300	298,300	294,200	289,700
% Change in Daily Vehicles on SR 99, I-5, and SR 509		+4%	+3%	+2%	0%
Evaluation*		**Same**	**Same**	**Same**	**Same**
Freight as % of daily traffic on SR 99, I-5, and SR 509	4%	5%	5%	4%	4%
% Change in Freight on SR 99, I-5, and SR 509		+1%	+1%	0%	0%
Evaluation		**Worse**	**Worse**	**Same**	**Same**
Composite Evaluation		**Worse**	**Worse**	**Same**	**Same**
**Note: Daily traffic volumes provide a limited assessment of future conditions. Future studies will be needed to assess peak hour changes and potential mitigations needed as a result of traffic volume changes.*		▪ Slight increase in vehicles on regional routes ▪ Increase in trucks as share of traffic on regional routes	▪ Slight increase in vehicles on regional routes ▪ Increase in trucks as share of traffic on regional routes	▪ Slight increase in vehicles on regional routes ▪ No change to trucks as share of vehicles on regional routes	▪ Negligible change in vehicles and trucks on regional routes

Local Vehicular Traffic

Definition

How each Potential Future affects vehicular traffic on South Park arterials for local residents and businesses. The analysis area for this measure includes the SR 99 Corridor and the South Park Community.

Current Conditions

Traffic on local streets in South Park is a mix of traffic generated from people living and working in and around South Park and people travelling through the neighborhood on arterial streets. Travel time estimates for vehicle trips across South Park based on Google Maps indicate driving times of 5-7 minutes depending on location and time of day (see Table 34).[73]

Table 34: Typical driving travel times to destinations within South Park

Destinations	Via S Cloverdale St	Via 14th Ave S
Marra-Desimone Park to S Henderson and 14th Ave S	5-7 minutes	5-6 minutes
South Park Community Center to Concord Elementary	5-6 minutes	8-10 minutes
Duwamish Waterway Park to S 96th St and 8th Ave S	5-7 minutes	4-7 minutes

Travel times and routes are influenced by the limited number of connections across SR 99. Because local traffic and traffic moving through South Park must share the same limited connection points across SR 99, at some times, travel time can be highly variable and can be affected by conditions outside of the neighborhood.

Vehicle Miles of Travel (VMT) is a way to account for vehicular traffic across multiple streets. In South Park, streets like 5th Avenue S, 8th Avenue S, 14th Avenue S, S Kenyon St, S Cloverdale St, S 96th St, and SR 99 or its replacement form the local arterial network. There is no comprehensive way to measure all vehicles traveling in a neighborhood, so the PSRC regional travel demand model was used to estimate future baseline conditions. Outputs from the model estimate that in 2050, with no changes to the roadway network, there would be 251,000 daily VMT on these arterial streets within South Park, including SR 99. 18,900 (or 7.5%) is estimated to come from trucks. Exclude SR 99, total daily VMT in 2050 on surface streets is estimated to be 91,000, with 4,900 (or 5.4%) from trucks.

Measurement Approach

There are four submeasures in this measure:

1) Change in total VMT
2) Change in total VMT on surface streets
3) Change in freight VMT
4) Change in freight VMT on surface streets

FHWA, the US Environmental Protection Agency (EPA), WSDOT, and PSRC provide methods for measuring traffic, VMT, and emissions, but none prescribe numerical thresholds for interpreting neighborhood-level change. In practice, agencies typically report modeled volumes and rely on professional judgment to assess whether those changes meaningfully affect local circulation, exposure, or quality of life.[74] Because long-range predictions are inherently uncertain and can vary widely depending on assumptions about land use, routing, and network behavior, the project team developed thresholds that support clear, consistent comparison across the four Potential Futures.

Each submeasure is scored according to the following thresholds, which are explained further in the endnotes[75]:

Much Worse	Worse	Same or No Change	Better	Much Better
>25% increase	+10% to +25%	+/-10%	-10% to -25%	>25% decrease

Evaluation

The PSRC regional travel demand model was used to estimate changes in VMT by road segment for both total vehicles and freight. VMT provides a way to understand how vehicle volumes might change at a neighborhood scale under each Potential Future and how that would translate into the experience of vehicular traffic on neighborhood streets for South Park residents. As described in the introduction to this report, travel demand estimates were not prepared for individual locations or intersections within South Park during this phase. The distinction between total VMT and total VMT on surface streets provides two ways to view the data on VMT within the South Park Community Analysis Area. Total VMT on SR 99, which has effects on how people experience traffic in South Park even as it is primarily passing through the community. VMT on surface streets includes only surface roadways, which includes SR 99 replacements in the Boulevard Potential Futures, as South Park residents would experience these cars and trucks differently than vehicles passing through on a grade-separated road.

Given the differences in arterial network layout in each of the Potential Futures, some individual streets would experience more car and truck volume and some would experience less and the detail in travel demand model is best understood at the neighborhood scale. Further analysis of potential effects on local traffic will need to be developed in subsequent analysis phases.

The experience of South Park residents and businesses with local traffic can take several forms, from the potential for more vehicles and trucks on residential streets to the noise and air pollution that is aligned with VMT. This analysis reflects that there are different ways to understand the effects of the Potential Futures on local traffic. Table 35 below compares the percent change in total VMT and freight VMT on primarily residential-serving surface arterials within the South Park neighborhood.

Table 35: Percent Change in Residential Arterial VMT vs 2050 Baseline

Submeasure	2050 Baseline	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
1. Total Daily VMT Change	251,000	-159,600	-119,300	-63,100	-2,400
% change		-64%	-47%	-25%	-1%
Evaluation		**Much Better**	**Much Better**	**Better**	**Same**
2. Daily VMT Change on surface streets in South Park	91,000	+1,000	+13,000	+36,000	-4,000
% change		+1%	+14%	+40%	-4%
Evaluation		**Same**	**Worse**	**Much Worse**	**Same**
3. Total Daily Freight VMT Change	18,900	-14,300	-13,500	-8,000	0
% change		-76%	-71%	-42%	0%
Evaluation		**Much Better**	**Much Better**	**Much Better**	**Same**
4. Daily Freight VMT Change on surface streets in South Park	4,900	-300	-100	+2,200	-100
% change		-6%	-2%	+45%	-2%
Evaluation		**Same**	**Same**	**Much Worse**	**Same**
Composite Evaluation		**Better**	**Better**	**Same**	**Same**
		▪ Reduced car and truck traffic within South Park, particularly when accounting for total VMT	▪ Reduced overall car and truck traffic in South Park. ▪ Increase in total traffic when only considering surface streets	▪ Reduced overall car and truck traffic. ▪ Surface boulevard may increase the perception of car and truck traffic with large increase in total surface street traffic.	▪ Minimal changes in car and truck traffic within South Park

Neighborhood Reconnection

Definition

Improved pedestrian and bicycle access to parks and trails within South Park as well as the greater region through the removal of infrastructure barriers and new connections.

Measurement Approach

There are three submeasures for this measure:

1) Extent of barrier removal
2) New or improved direct links between disconnected areas
3) Integration with regional trails

There are no published thresholds of significance for these measures and professional judgement has been used in developing the thresholds used for this report.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Extent of barrier removal	Substantial increase in physical barriers	Moderate increase in physical barriers	Minimal change in barriers	Moderate reduction in physical barriers	Substantial reduction in physical barriers
New or improved direct links between disconnected areas	Removal of more than 1 connection across SR 99	Removal of 1 connection across SR 99	No change in number of connections	1-5 new connections across SR 99	> 5 new connections across SR 99
Integration with regional trails	Removes > 1 regional trail connection or makes more exposed to vehicle and freight traffic.	Removes 1 regional trail connection or makes more exposed to vehicle and freight traffic.	Minimal change in connections	Regional trail connections with some high-stress locations	High-quality regional trail connections along low-stress facilities

Current Conditions

Prior to the construction of SR 99, the South Park neighborhood featured a grid of streets that provided access throughout the neighborhood. Following the construction of the highway, there are 22 dead ends in South Park that terminate in SR 99. There are no north-south streets that connect across SR 99 and the only streets that are continuous in an east-west direction across the neighborhood are S Cloverdale St and S Henderson St (via the pedestrian overpass). People who are not adjacent to these streets have a much more circuitous path if they wish to travel between the two sides of the neighborhood across SR 99. This creates much longer travel routes by foot, bicycle, or wheelchair and discourages travel across the highway.

The Duwamish River Trail provides an important regional connection between South Park and West Seattle and beyond via connections to the multipurpose path along S Spokane St. However, connecting to the Duwamish River Trail, which ends at the intersection of S Kenyon St and 8th Ave S, is challenging from much of South Park.

Two stand-alone trail segments are situated between S Holden St and S Kenyon St west of SR 99, and between S Trenton St and S Henderson St east of SR 99. However, these segments do not adequately connect the neighborhood to the regional trail, nor do they provide safe crossings over SR 99.

King County plans to extend the 19.6-mile long Green River Trail to connect to the south end of South Park, approximately at 14th Ave S. After completion of this important extension, there would still be a gap in trails between the Green River Trail and Duwamish River Trail (see Figure 44). Figure 44 illustrates existing crossings of SR 99 in South Park.

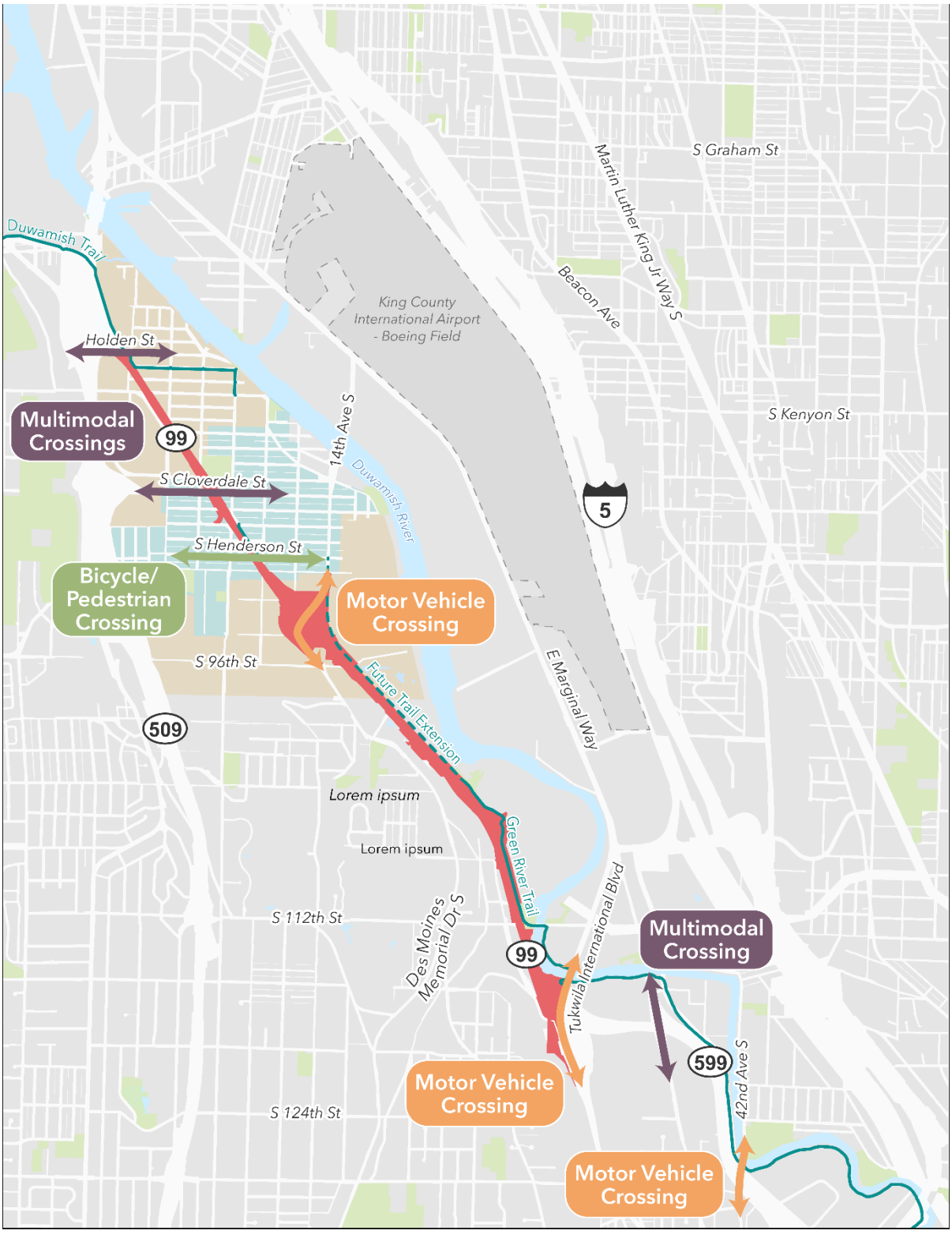


Figure 44: Existing Crossings of SR 99 and SR 599

Evaluation

This evaluation is based on the Potential Futures defined for this phase and described above. Other potential configurations can be explored as part of future phases of analysis and refinement. The configurations contained in this analysis were developed in collaboration with the Reconnect South Park Coalition as a starting point for analysis balancing the potential benefits of new connections with possible disbenefits of cut-through traffic on neighborhood streets.

Reroute + Reclaim

- At least six additional connections for non-motorized travel across the former SR 99 corridor would be implemented, including both east-west and north-south routes.
- All crossings would be at ground level and meet Americans with Disabilities Act (ADA) standards.
- Connections to the Duwamish River Trail and the future Green River Trail extension would be via many local, low volume streets that could be reconnected across the former SR 99 right-of-way.

Narrower Boulevard

- At least two additional connections across SR 99 would be implemented in this Potential Future, expanding access for active modes accessing destinations on either side of the road. Connections would support both east-west and north-south travel for people walking, biking, or rolling.
- Existing connections across SR 99 at S Cloverdale St and S Henderson St would be signalized and at grade, instead of grade separated, and meet ADA standards.
- A direct connection to the Duwamish River Trail and the Green River Trail would be along the boulevard. This connection would be adjacent to the 2-lane street.

Wider Boulevard

- At least two additional connections across SR 99 would be implemented in this Potential Future, expanding access for active modes accessing destinations on either side of the road. Connections would support both east-west and north-south travel for people walking, biking, or rolling.
- Existing connections across SR 99 at S Cloverdale St and S Henderson St would be signalized and at grade, instead of grade separated, and meet ADA standards.
- A direct connection to the Duwamish River Trail and the Green River Trail would be along the boulevard. This connection would be adjacent to the 4-lane street.

Bridges + Trails

- Two additional bicycle and pedestrian connections across SR 99 would be implemented under this Potential Future, including one north-south connection at 8th Ave S/S Donovan St and a connection along a reconstructed 14th Ave S/Des Moines Memorial Dr bridge.
- New and reconstructed crossings would meet ADA standards but would still require people to access a grade separated structure.

- The Duwamish River Trail would be extended along SR 99 to connect to the Green River Trail extension. The new trail would be adjacent to the freeway, with a landscaped buffer or noise wall. The trail would have less access to the residential neighborhood in South Park, since accessing the trail would require a grade separated crossing.

The evaluation summary is below.

Table 36: Neighborhood Reconnection Evaluation

Submeasure	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Extent of barrier removal	Full removal of SR 99 barrier	Full removal of SR 99 barrier	Full removal of SR 99 barrier, 4-lane street may create some physical and perceived barriers	No removal of barriers, new sound walls and plantings could increase perceived barriers
Evaluation	**Much Better**	**Much Better**	**Better**	**Same**
New connections	At least 6	At least 2	At least 2	2
Evaluation	**Much Better**	**Better**	**Better**	**Better**
Regional trail connections (Green River Trail + Duwamish River Trail)	Yes, separated from traffic	Yes, adjacent to 2-lane street	Yes, adjacent to 4-lane street	Yes, adjacent to 4-lane freeway
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Better**
Composite Evaluation	**Much Better**	**Much Better**	**Better**	**Better**
	▪ Removes the access barrier created by SR 99 ▪ Many active mode route options to access the regional trail system and for people to access neighborhood amenities and community hubs	▪ Adds new at-grade crossings to make traveling across South Park more direct ▪ Adds a new direct connection between the Duwamish River Trail and Green River Trail with frequent neighborhood access points	▪ Adds new at-grade crossings to make traveling across South Park more direct ▪ Adds a new direct connection between the Duwamish River Trail and Green River Trail with frequent neighborhood access points	▪ Adds a new grade separated, non-vehicle crossing of SR 99 ▪ Adds a new direct connection between the Duwamish River Trail and Green River Trail with several neighborhood access points

Improved Walking and Biking Infrastructure

Definition

Quality, safety, and comfort of walking, biking, and rolling environments within South Park and across SR 99.

Measurement Approach

There are three submeasures in this measure:

1) Infrastructure quality, including sidewalk connectivity and comfort, pedestrian and bicycle-scaled streets and lighting, ADA compliance
2) Safety, including traffic exposure, Crime Prevention Through Environmental Design (CPTED) principles, visibility, and directness of routes
3) Dedicated primary walking and biking routes, including comfort, traffic exposure, physical separation, and quality of surrounding environment

There are no published thresholds of significance for these measures and professional judgement has been used in developing the thresholds used for this report.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Infrastructure quality	Fragmented pedestrian routes with large gaps	Disconnected pedestrian routes with reduced comfort along major roadways	Minimal change	Mostly connected pedestrian routes along comfortable routes	Fully connected pedestrian routes with comfortable, human-scaled streets
Visibility and Safety	High exposure to traffic with poor visibility and lighting	Moderate exposure to traffic with limited pedestrian amenities and lighting	Minimal change	Pedestrian routes separate from high traffic volumes with good visibility and directness	Pedestrian connections that are direct, visible, with low traffic exposure
Comfort of primary pedestrian and bicycle routes	Increased traffic exposure with no buffer space or physical protection	Slightly increased traffic exposure with no physical protection	Minimal change	Physical protection from traffic noise and safety impacts provided with some buffer space	High-quality connections separate from traffic exposure

Current Conditions

There are currently no comfortable connections across SR 99 and limited comfortable connections in the broader South Park neighborhood. Neighborhood Greenways provide some connections within South Park (see Figure 34), but there are few ways to comfortably walk and bike on other streets within South Park. While larger streets within the residential and commercial areas of South Park (S Cloverdale St, 14th Ave S, 8th Ave S) tend to have sidewalks, they are in poor condition in some areas and many areas do not have pedestrian-scale lighting, which leads to dark areas that can feel physically insecure. Many streets in the industrial area and low-volume residential streets lack sidewalks all together.

According to Concord Elementary's 2024-2025 Safe Routes to School program, 7th Ave S and S Concord St are classified as "neighborhood streets," while S Henderson St is designated as a "healthy street" or "neighborhood greenway." In contrast, 8th Ave S is categorized as a "busy street (arterial)."

To reach Concord Elementary from the east side of SR 99, bicyclists and pedestrians cross SR 99 via either the underpass at S Cloverdale St or the existing pedestrian bridge at S Henderson St. There are no bicycle lanes along S Cloverdale St and the route lacks pedestrian-scale lighting in many locations.

S Holden St is a wide intersection with long crossings and many turning vehicles. S Cloverdale St has a narrow sidewalk and poor lighting conditions. The S Henderson St pedestrian bridge does not meet ADA standards and is covered by chain-link fence.

The short existing trail connection between S Henderson Street and S Donovan St is narrow and often overgrown with vegetation. This trail is referred to by South Park residents as the “scary trail”.

Evaluation

In each Potential Future there is the opportunity to build walking and bicycling infrastructure that can provide a better experience for active modes within South Park and connecting to the SR 99 right-of-way. These opportunities are largely concentrated around new or improved connections across SR 99. Personal safety and comfort for people walking or riding bikes can be provided through CPTED strategies, such as improving visibility and “natural surveillance”, and providing welcoming environments that are embraced by the surrounding community and deter unsafe behavior. This evaluation focuses on the physical quality of connections. The Street Safety for Vulnerable Road users measure assesses potential changes in collisions.

Reroute + Reclaim

- Removing the highway and rebuilding neighborhood streets would replace isolated, hidden areas with open, visible spaces. This would likely make people feel safer while walking or biking, especially where children travel to Concord Elementary or other community destinations.
- Bicycle and pedestrian connections would be added at multiple locations along the existing SR 99 alignment, providing new facilities with modern designs that provide

more comfortable conditions to link local streets and improve accessibility to community destinations.

- With the removal of SR 99, the existing underpass at S Cloverdale St and the overpass at S Henderson St would both be converted into neighborhood streets. Both conversions provide the opportunity to improve the design and quality of the pedestrian and bicycle environment.
- New connections for people walking and biking would be on comfortable routes with lower traffic volumes, including south of South Park, where the Green River Trail extension would be more comfortable than currently planned.

Narrower Boulevard

- Replacing the highway with a street would improve visibility and lighting, helping people feel safer through the use of CPTED strategies to improve personal safety, such as clearly enhanced visibility and better wayfinding.
- Walking and bicycling along the boulevard within South Park would be relatively low-stress since freight traffic would be restricted and speeds and volumes would be relatively low.
- Connections to key community destinations, such as Concord Elementary, would be more direct and comfortable from both sides of SR 99 with reconnected streets.
- The Narrower Boulevard would form two at-grade intersections at S Cloverdale St and S Henderson St, eliminating the existing underpass and overpass. The intersections would potentially create better visibility to improve personal safety. This would be the same as the Wider Boulevard scenario.
- The new boulevard would provide the opportunity to create a new multimodal connection through the neighborhood connecting the Duwamish River Trail and Green River Trail extensions. The connection along the boulevard would be designed for all ages and abilities and provide upgraded lighting and visibility, eliminating the issues with the current trail between S Henderson St and S Donovan St.

Wider Boulevard

- Replacing the highway with a wide street would improve visibility and lighting, helping people feel safer through the use of CPTED strategies to improve personal safety, such as clearly enhanced visibility and better wayfinding. Because the road would still carry four lanes of traffic, some areas could still feel exposed or unsafe, especially for those walking alone or at night.
- Connections to key community destinations, such as Concord Elementary, would be more direct and comfortable from both sides of SR 99 with reconnected streets.
- The Wider Boulevard Potential Future would still be considered for regional travel, which would result in higher vehicle volumes, more noise, and more interaction between vehicles and vulnerable roadway users.

- The boulevard would form two at-grade intersections at S Cloverdale St and S Henderson St, eliminating the existing underpass and overpass. The intersection would potentially create better visibility and more direct access to improve personal safety. New intersections would be designed with modern lighting and crosswalks to facilitate travel.
- The new boulevard would provide the opportunity to create a new multimodal connection through the neighborhood connecting the Duwamish River Trail and Green River Trail extensions. The connection along the boulevard would be designed for all ages and abilities and provide upgraded lighting and visibility, eliminating the issues with the current trail between S Henderson St and S Donovan St.

Bridges + Trails

- A dedicated overpass above SR 99 would be constructed, along with a spacious lid at 8th Ave S/S Donovan St, providing a more direct route from the east side of SR 99 and creating alternative safe routes to Concord Elementary.
- Potential CPTED strategies could create broader open spaces for pedestrians and bicyclists to cross the freeway, enhancing visibility and improving personal safety.
- The new trail extension along SR 99 would complement the trail connections in South Park and provide an off-street north-south connection. Any new trail extension along SR 99 would be wider and have new, more context-sensitive landscaping. However, compared to the boulevard options or travel options on local streets in Reroute + Reclaim, freeway-adjacent trails still can feel isolated and lacking in "eyes on the street".
- The existing pedestrian bridge at S Henderson St would also be rebuilt and widened to enhance walking and biking experiences and meet ADA standards.
- In this Potential Future, the cloverleaf interchange would be reconstructed as an urban interchange with pedestrian and bicycle facilities crossing SR 99. This would still be a less comfortable connection than in other Potential Futures.
- South of South Park, this Potential Future would not result in changes to the Green River Trail connection, which would still be adjacent to higher velocity traffic.

The evaluation summary is shown in Table 37 below.

Table 37: Improved Walking and Biking Evaluation

Submeasure	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Infrastructure quality	▪ Fully connected, high quality pedestrian routes	▪ Connected pedestrian network with high-quality design. ▪ Route directness would be affected by locations to safely cross boulevard	▪ Connected pedestrian network with high-quality design. ▪ Route directness would be affected by locations to safely cross boulevard	▪ Some improvements to walking and biking route quality, with continued challenges for directness of route.
Evaluation	**Much Better**	**Better**	**Better**	**Better**
Visibility and Safety	▪ Direct, comfortable routes, with low traffic exposure	▪ Direct, comfortable routes with limited traffic exposure	▪ Direct, comfortable routes with some traffic exposure along boulevard	▪ Minimal change
Evaluation	**Much Better**	**Much Better**	**Better**	**Same**
Comfort of primary pedestrian and bicycle routes	▪ High quality connections separated from traffic exposure	▪ Physically protected connections with some buffer space	▪ Physically protected connections with some traffic exposure	▪ Limited separation and protection from traffic along primary routes with no increase in exposure
Evaluation	**Much Better**	**Better**	**Better**	**Same**
Composite Evaluation	**Much Better**	**Better**	**Better**	**Same**
	▪ Rebuilt street connections would have modern sidewalk and bicycle facility designs and improved lighting	▪ Active mode facilities along the boulevard would meet current design standards and feature good visibility and lighting ▪ New connections to the boulevard would have comfortable sidewalk and bicycle accommodations ▪ Lower traffic volumes along the boulevard would create a more comfortable walking, rolling, and bicycling environment	▪ Active mode facilities along the boulevard would meet current design standards and feature good visibility and lighting ▪ New connections to the boulevard would have comfortable sidewalk and bicycle accommodations ▪ Higher traffic volumes along the boulevard would create a less comfortable walking, rolling, and bicycling environment	▪ New, large crossing of SR 99 at 8th Ave S/S Donovan St ▪ New trail along SR 99 will be wider and feature better visibility than the current trail segment ▪ Improved interchange at 14th Ave S to connect people walking, biking, and rolling across SR 99, but would still require navigating some traffic entering or exiting the freeway

Public Transit Connections

Definition

Opportunities for more comfortable access to transit and new transit connections.

Measurement Approach

There are two submeasures for this metric:

1) Access to Transit: Access quality, safety, comfort, and ADA accessibility of transit stops.
2) Opportunities for Transit Improvement: potential effects on bus routing, connections, and travel time reliability.

There are no published thresholds of significance for these measures and professional judgement has been used in developing the thresholds used for this report.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Access to Transit	Increased access gaps and inhospitable transit conditions	Less direct access with transit conditions exposed to increased traffic	Minimal change	Direct, comfortable pedestrian access routes with comfortable and safe transit stops	High-quality access routes and amenities for transit customers
Opportunities for Transit Improvement	Less direct routing, longer wait times, and fewer destinations	Indirect routing, longer wait times, and limited destinations	Minimal change	More direct routing, and potential for new destinations	High frequency, direct routes serving new destinations

Current Conditions

No buses currently run on SR 99 through South Park (see Figure 45). King County Metro Route 132 connects north/south from Downtown Seattle and SODO through South Park crossing the 1st Ave S Bridge and connecting to S Cloverdale St, and 14th Ave S before continuing on Des Moines Memorial Dr.

King County Metro Route 60 connects from Capitol Hill, Beacon Hill, and Georgetown before crossing the South Park Bridge, and connecting along S Cloverdale St to White Center. There is no current King County Metro bus service south of S Cloverdale and west of SR 99.

Current bus stops are mainly located along S Cloverdale St, 8th Ave S, and 14th Ave S. During the AM period, according to King County Metro scheduled time points, bus trips take approximately 15 minutes from South Park to Burien, 20 minutes to Westwood Village in West Seattle, 30-60 minutes to Downtown Seattle, and 40-50 minutes to Capitol Hill.

Metro also operates its on-demand transit service, Metro Flex, within South Park, Highland Park, High Point, and Delridge between 6am-11pm seven days a week. Metro Flex allows users to use an app or phone center to request a point-to-point ride within the service area, similar to services like Uber or Lyft.

The existing Tukwila International Boulevard Station is approximately 4.5 miles from South Park but is not directly connected by bus routes. Sound Transit plans to add an infill light rail station along the existing 1 Line at E Marginal Way, funded through the Sound Transit 3 program, that would be approximately 2 miles from South Park and could be accessible to South Park with new transit connections. A station is also planned at Delridge as part of the West Seattle Link Extension that would be approximately 3.5 miles from South Park.

King County Metro has some plans for additional service connecting to South Park in its Metro Connects long-range plan (King County Metro Connects routes 3040/3041), but there is not a current timeline for implementation.

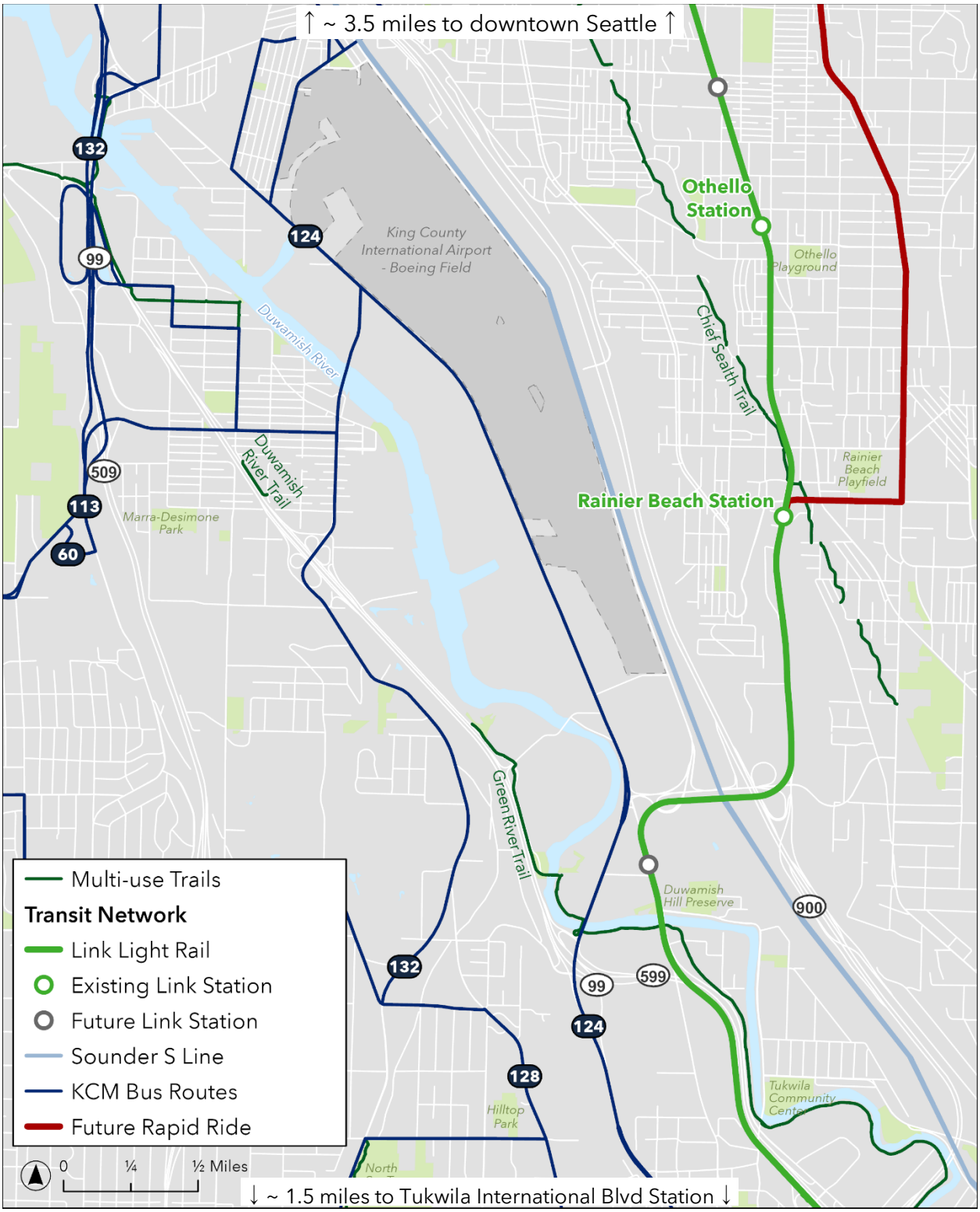


Figure 45: Current Transit Serving South Park with Major Planned Expansions and Current Multi-Use Trails

Evaluation

Table 38: Public Transit Connections Evaluation

Submeasure	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Access to Transit	▪ A more connected street grid allows for more convenient access to transit. ▪ Reconnecting the grid of streets could enhance Metro Flex service in South Park by making connections faster or more direct. ▪ Transit stops would have lower traffic exposure and improved comfort and safety.	▪ The additional at-grade crossings of the boulevard would provide more direct and comfortable access to transit.	▪ The additional at-grade crossings of the boulevard would provide more direct and comfortable access to transit.	▪ Although the overall effect remains minimal, the enhancement in multimodal access could improve transit accessibility.
Evaluation	**Better**	**Better**	**Better**	**Same**
Opportunities for Transit Improvement	▪ Reuse of reclaimed land may present opportunities for new east/west and north/south transit connections that serve the western and southern parts of the South Park neighborhood that are not currently served by King County Metro service. ▪ Future routing could cross SR 99 along 8th Ave S to provide a more direct route to the eastern part of the neighborhood.	▪ Allows for alternative bus routing options through South Park along the boulevard. Reuse of reclaimed land could also support new or expanded transit services. Routing and connections would need to be developed further in partnership with King County Metro.	▪ Allows for alternative bus routing options through South Park along the boulevard. Reuse of reclaimed land could also support new or expanded transit services. Routing and connections would need to be developed further in partnership with King County Metro.	▪ No changes to King County Metro bus service are anticipated.
Evaluation	**Better**	**Better**	**Better**	**Same**

Submeasure	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Composite Evaluation	**Better**	**Better**	**Better**	**Same**
	▪ Better access to transit via expanded grid of streets ▪ More direct routing for Metro Flex	▪ Additional transit routing options along boulevard ▪ Additional crossings of the boulevard could make access to transit more convenient	▪ Additional transit routing options along boulevard ▪ Additional crossings of the boulevard could make access to transit more convenient	▪ Minimal change from current conditions ▪ Additional crossings of SR 99 could make access to transit more convenient

Emergency and Disaster Response

Definition

Address community needs to minimize obstacles for emergency vehicle response and provide smooth movement during a disaster.

Measurement Approach

There are two submeasures for this measure:

1) Barriers to emergency response and opportunities for barrier removal
2) Resilience and redundancy in emergency and disaster response

There are no published thresholds of significance for these measures and professional judgement has been used in developing the thresholds used for this report.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Barriers to emergency response	Addition of 2+ barriers to emergency response	Addition of 1 barrier to emergency response	Minimal change	Removal of 1 barrier to emergency response	Removal of 2+ barriers to emergency response
Resilience and redundancy	More circuitous response routes with less resilient infrastructure	More circuitous response routes	Minimal change	1-2 new response routes	>2 new response routes and limited risk of infrastructure failure

Current Conditions

Typical emergency response to serve homes, community uses, and job sites in South Park is primarily a function of the local transportation network. In major disasters, such as an earthquake, regional highways can serve a role for recovery and logistical support.

For typical emergency response, Seattle Fire Station 26 is located at S Cloverdale St and 8th Ave S, which is one block away from the SR 99 on-ramp on S Cloverdale St. This is a central

location that provides emergency response to all of South Park. Disconnected streets caused by SR 99 can mean that emergency vehicles have to take longer routes to get to emergencies within South Park. Secondary fire response in Seattle comes from Seattle Fire Station 11 at 16th Ave SW and SW Holden St and Seattle Fire Station 27 on Ellis Ave S near E Marginal Way S. Puget Sound Fire Station #53 at S 115th St and 42nd Ave S serves Tukwila. Analysis of current emergency response routing and potential changes has not been done at this level of assessment. Future phases of analysis may investigate this in more detail.

SR 99 is part of the National Highway System but is not identified in WSDOT's Seismic Lifeline map[76] that designates routes that provide access to important facilities across the state and would be a priority for access and repair following a seismic event.

SR 99 is not called out in any specific hazard mitigation strategies, according to the Washington State Enhanced Hazard Mitigation Plan.[77]

SR 99 does provide redundancy in the regional freeway network. If an incident were to occur on other major roads, like I-5, SR 99 can serve as a relief route for some trips. This assessment has not analyzed the role SR 99 plays during incidents on other routes, but this could be an area for further investigation in future phases.

Evaluation

For all Potential Futures, SR 99 in South Park would not be considered part of WSDOT's Seismic Lifeline Route.

Table 39: Emergency and Disaster Response Evaluation

Submeasure	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Barriers to emergency response	▪ More direct routes within South Park would enable efficient emergency response within the neighborhood.	▪ More routes would be available for emergency response within South Park.	▪ More routes would be available for emergency response within South Park.	▪ Current circuitous response routes would remain unchanged for vehicles, but new pedestrian bridges provide connections for non-vehicular response routing.
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
Resilience and redundancy	▪ Without the grade separated freeway, there would be fewer barriers to response, and infrastructure would be more resilient than today. S Cloverdale St	▪ All connections across the new boulevard would be at grade, eliminating potential seismic risks of collapsed structures on the road, improving potential use of S	▪ All connections across the new boulevard would be at grade, eliminating potential seismic risks of collapsed structures on the road, improving potential use of S	▪ Grade separated overpasses could be potential risks in a major seismic event, similar to current conditions, even if rebuilt to current standards.

Submeasure	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
	would be more usable in a major seismic emergency without the current overhead structure of SR 99. ▪ Eliminating a roadway connection to Tukwila International Boulevard could reduce some redundancy of routes for emergency response, but the increased resilience of infrastructure within South Park would make this less needed.	Cloverdale St in an emergency.	Cloverdale St in an emergency.	
Evaluation	**Better**	**Better**	**Better**	**Same**
Composite Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
	▪ Increased ability to circulate within South Park to respond to emergencies ▪ Risk of structure collapse in seismic event eliminated	▪ Increased ability to circulate within South Park to respond to emergencies ▪ Risk of structure collapse in seismic event eliminated	▪ Increased ability to circulate within South Park to respond to emergencies ▪ Risk of structure collapse in seismic event eliminated	▪ No change to existing emergency response circulation within South Park ▪ Seismic vulnerability of existing structures addressed, but some risk of collapse in major earthquake would remain

Healthy Environment Measures

Measures in this category evaluate different aspects of the environmental changes in each Potential Future. These measures include:

- Runoff Reduction & Water Quality Improvement
- Climate Resilience
- Trees and Environmental Restoration
- Ecosystems and Habitat Restoration

Runoff Reduction & Water Quality Improvement

Definition

Qualitative evaluation of the potential for nature-based stormwater infrastructure to reduce pollutant loads, manage runoff volume, prevent untreated discharges into the Duwamish River, and mitigate localized flooding and combined sewer overflows.

Measurement Approach

There are three subfactors under this measure:

1) Change in pollution-generating impervious surface area (PGIS)[78]
2) The extent to which stormwater could be treated on site through stormwater management infrastructure
3) Potential change in untreated stormwater discharge to Duwamish River

There is no commonly applied federal, state, or regional standard that defines what size of change in impervious surface should be considered acceptable, significant, or meaningful in a planning-level analysis. Additional detail on the analysis thresholds for impervious surface evaluation is provided in the endnotes section.[79]

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Change in Pollution Generating Impervious Surface area	>+10% in impervious surface	+5% to +10% in impervious surface	+5% to -5% impervious surface	-5% to -10% impervious surface	>-10% in impervious surface
Extent of on-site stormwater treatment	Substantial reduction in treatment potential	Reduction in treatment potential	No new stormwater infrastructure or treatment	Partial stormwater management or treatment	Widespread stormwater management and treatment

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Potential change in untreated discharge into Duwamish River	Substantial increase in untreated discharge	Increase in untreated discharge	No change	Reduction in untreated discharge within 200-500 feet of Duwamish River or wetlands	Reduction in untreated discharge within 200 feet of Duwamish River or wetlands

Current Conditions

The right-of-way (ROW) within the SR 99 Corridor (including additional roadway areas, like W Marginal Pl S) is approximately 117 acres of land area. Within that land area, there are approximately 53 acres (45%) of existing impervious road surface that generates stormwater effluence and 64 acres (55%) of existing landscaped areas, including roadway medians, constructed wetlands, and vegetated areas. The ROW can contain pollutants such as petroleum-based fluids, heavy metals, tire wear particles and microplastics, trash, and debris that are known to impair water quality. Surface water from precipitation or flooding events flow to various storm drains throughout the ROW. The sheet flow is conveyed via Reinforced Concrete Pipes to the north and south ends of the subject area. Drainage from the SR 99 Corridor connects to a stormwater main which outfalls to a detention pond north of Holden St between SR 509 and W Marginal Way S, which eventually drains into groundwater and the Duwamish River.

In the southern segment of the SR 99 Corridor, stormwater from the highway drains directly to the Duwamish River, with as little as 20 feet between the pavement edge and the riverbank and effectively no riparian buffer or opportunity for filtration. The river flows into the Lower Duwamish Waterway, a federally designated Superfund site where active sediment cleanup is underway.[80]

Evaluation

Each Potential Future would result in different changes to the transportation network and the impervious surface coverage within the study area. Table 40 reflects only the transportation-infrastructure component of this change – roadway and sidewalk surfaces removed and constructed. It does not model redevelopment of reclaimed land. Portions of reclaimed land developed for housing, industrial, or commercial uses would introduce some new impervious surface, subject to on-site stormwater management requirements for new development. The net reduction in final conditions would be somewhat smaller than shown here depending on future land use decisions.

Table 40: Estimated net Change in Pollution Generating Impervious Surface

	Current Conditions	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Total Right-of-Way (Acres)	**117**				
Future Street Right-of-Way (acres) (note: includes both pervious and impervious area)		**17**	**38**	**46**	**100**
Existing Impervious (Acres)	**52.7**				
Roadway Removal (acres)		**-49.4**	**-46.0**	**-46.0**	**-9.7**
Roadway Removal		*-36.3*	*-36.3*	*-36.3*	*NA*
Cloverleaf Removal		*-9.7*	*-9.7*	*-9.7*	*-9.7*
TIB Ramp Removal		*-3.4*	*NA*	*NA*	*NA*
Roadway Construction (acres)		**7.8**	**21.6**	**29.1**	**10.4**
Roadway construction		*4.3*	*17.3*	*24.8*	*8.8*
Sidewalk + Trail construction		*3.5*	*4.3*	*4.3*	*1.5*
Net Change in Impervious (Acres)		*-41.6*	*-24.4*	*-16.9*	*0.7*
Net Change in Impervious %		***-79%***	***-46%***	***-32%***	***1%***
Net Change in PGIS (acres)		*-45.1*	*-28.7*	*-21.2*	*-0.8*
Net Change in PGIS %		***-86%***	***-54%***	***-40%***	***-2%***

Table 41: Healthy Environment Evaluation

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Impervious Surface Reduction	-86%	-54%	-40%	-2%
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
On-Site Treatment Opportunities	▪ Reclaimed ROW creates contiguous areas for large-scale detention, infiltration basins, and daylighting opportunities, some of which would need to be incorporated into new uses for reclaimed land. ▪ Potential for integrated water quality treatment	▪ ROW design allows infiltration zones to manage localized flooding and reduce combined sewer overflow (CSO) risks. ▪ Boulevard allows integration of bioswales, vegetated	▪ ROW design provides opportunities for retrofit GSI (bioretention planters, tree wells, permeable sidewalks), to manage localized flooding and reduce CSO risks. ▪ Boulevard allows	▪ Landscape buffer along SR 99 and reconstructed overpasses provides minor water quality benefits, but treatment footprint is minimal. ▪ Maintains current reliance on centralized pumping/treat

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
	wetlands or stormwater parks, creating redundancy beyond reliance on the South Park Pump Station.	swales, and tree trenches at multiple intervals.	integration of bioswales, vegetated swales, and tree trenches at multiple intervals.	ment, with minimal runoff reduction or CSO mitigation.
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
Potential Change in Untreated Discharge to Duwamish	▪ Widespread green infrastructure (bioswales, rain gardens, tree canopy) would intercept and treat stormwater at source points. ▪ Substantial reduction of untreated discharges within 200 ft of the Duwamish River, improving water quality and aquatic habitat.	▪ Significant reduction of untreated discharges directly adjacent (<200 ft) to the Duwamish River. ▪ Decentralized treatment reduces pollutant loads (oil, heavy metals, microplastics) before runoff enters storm conveyance.	▪ Significant reduction of untreated discharges directly adjacent (<200 ft) to the Duwamish River. ▪ Decentralized treatment reduces pollutant loads (oil, heavy metals, microplastics) before runoff enters storm conveyance.	▪ Runoff continues to sheet flow into existing storm drains tied to the Pump Station. ▪ No substantial reduction in untreated discharges; pollutants continue to enter conveyance with limited interception.
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
Composite Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
	▪ Provides the most transformative improvement, converting large roadway areas into green space with widespread stormwater treatment. ▪ Strong reductions in pollutant loads and runoff volumes improve both water quality and public health.	▪ Significant GSI integration in a smaller roadway footprint leads to high water quality benefits and meaningful reductions in untreated discharges.	▪ Significant GSI integration in a smaller roadway footprint leads to high water quality benefits and meaningful reductions in untreated discharges.	▪ Maintains current conditions, with limited opportunity for meaningful runoff reduction or pollutant load reduction.

Climate Resilience

Definition

Qualitative evaluation of climate resiliency via urban heat islands, flooding risks, and vehicle emissions reductions.

Measurement Approach

There are three submeasures for this measure:

(1) Urban Heat Island mitigation effect, through roadway surface removal and potential for new tree canopy cover, especially in high-need areas
(2) Flooding and stormwater resilience
(3) Support for emissions reduction through land use and mode shift

There are no published thresholds of significance for these measures and professional judgement has been used in developing the thresholds used for this report. Additional information is included in the endnotes section. [81]

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Urban Heat Island Mitigation	>40% decrease in canopy and increase in pavement	20%-40% decrease in potential canopy and increase in pavement	+/- 20% in potential canopy and pavement	20%-40% increase in potential canopy and decrease in pavement	>40% increase in potential canopy and decrease in pavement
Flooding and stormwater resilience	Reduces infiltration or increases vulnerability	Adds hardscape in flood prone areas without mitigation	No meaningful change	Improves drainage or elevates infrastructure	Removes exposure or adds infiltration in flood-prone zones.
Emissions reduction	Substantial reduction in support for non-auto modes; more single-use areas	Slight reduction in support for non-auto modes; more separated land uses	Minimal or no change	Support for potential mode shift away from vehicles	Substantial potential shift in mode choice away from vehicles

Current Conditions

Extreme precipitation, extreme heat, and sea level rise are the primary climate hazards with substantial effects to SR 99 and the surrounding community. Cascading effects, which are compounding events caused by primary hazards, can result in issues such as riverine flooding, increased exposure to vector-borne diseases, and other public health concerns.

Climate change is expected to increase exposure to flooding, heat, and environmental conditions that affect health and economic stability in South Park.

- Urban Heat Islands (UHI) and extreme heat: With its built out environment and lower tree canopy than other parts of Seattle and the region, South Park can experience higher temperatures, especially during extreme heat events. In 2020, data collected across King County during an extreme heat event showed that South Park had some of the highest temperatures in Seattle.[82]
- Flood risk: Flood risk is particularly high in South Park due to groundwater shoaling, wave action from storm events, and stormwater system backups. Stormwater-related flooding presents the greatest risk to mobility in South Park, as system backups would inhibit roadway operations. Future sea level rise and extreme precipitation is anticipated to exacerbate the frequency and severity of flood risk. Eastern portions of SR 99 (S Monroe St & 7th Ave S) currently experience localized flooding under 100-year flood scenarios. Northern industrial area (S Austin St & 5th Ave S) experiences flooding under 500-year scenarios.
- Extreme precipitation: South Park is expected to experience increasing frequency and severity of storms. The most substantial variation in precipitation is dependent on seasons, so summer is expected to become drier whereas winter, fall, and spring are expected to become wetter.[83] This will likely lead to increasing capacity constraints on the existing stormwater system, increasing the risk of Combined Sewer Overflows (CSOs) as the drainage and wastewater conveyance systems are overwhelmed by heavy rains.
- Sea level rise: Sea levels will likely rise another 1-ft by mid-century.[84] Storms and seasonal high tide will likely increase water levels 1 to 4 feet[85] [86]; the impact of high tide levels on South Park would increase since the Duwamish River is a tidally-influenced river.[87] The industrial area north of South Park (S Austin St & 5th Ave S) is most vulnerable to riverine flooding exacerbated by sea level rise and storms.

Evaluation

The Urban Heat Island and flooding submeasures below reference impervious surface figures that reflect changes to transportation infrastructure only, as described in the Runoff Reduction & Water Quality Improvement section. Redevelopment of reclaimed land would reduce the net pavement decrease somewhat, affecting the magnitude but not the direction of these outcomes.

Table 42: Climate Resilience Evaluation

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Urban Heat Island Mitigation	▪ 79% decrease in impervious surface ▪ 59-100 acres of new open space potential ▪ Tree canopy opportunity on new neighborhood streets	▪ 46% decrease in impervious surface ▪ 48-79 acres of new open space potential	▪ 32% decrease in impervious surface ▪ 44-71 acres of new open space potential	▪ 1% increase in impervious surface ▪ 4-17 acres of new open space potential ▪ Some potential for new tree canopy in landscaped buffers along SR 99
Evaluation	**Much Better**	**Much Better**	**Better**	**Same**
Flooding and stormwater resilience	▪ Approx. 42-acre reduction in impervious surfaces ▪ Infiltration opportunities with reclaimed land ▪ New pervious areas distributed throughout community	▪ Approx. 24-acre reduction in impervious surfaces ▪ Infiltration opportunities with reclaimed land ▪ Boulevard would include landscaped areas and flood resilience design elements	▪ Approx. 17-acre reduction in impervious surfaces ▪ Infiltration opportunities with reclaimed land ▪ Boulevard would include landscaped areas and flood resilience design elements	▪ Approx. 1-acre increase in impervious surface coverage with continuous trail and new bridge structures. ▪ Roadway elevation reduces risk but could increase flood risk under SR 99 at S Cloverdale St
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
Potential for Emissions Reduction	▪ Substantial potential for mode shift through comfortable non-auto connections and mixed-use land use.	▪ Potential for mode shift through comfortable non-auto connections and mixed-use land use.	▪ Potential for mode shift through comfortable non-auto connections and mixed-use land use. ▪ Opportunity for new transit routing with direct connections to regional network.	▪ Slight potential for mode shift with new connections across SR 99.
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Composite Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
	▪ Substantial benefits for Urban Heat Island, flooding and resilience ▪ Subtantial mode shift potential to reduce emissions through land use and improved access	▪ Substantial benefits for Urban Heat Island, flooding and resilience ▪ Mode shift potential to reduce emissions through improved access	▪ Moderate benefits for Urban Heat Island, flooding and resilience ▪ Mode shift potential to reduce emissions through improved access	▪ Maintains current conditions, with limited opportunity for meaningful heat mitigation, flood resilience, or emissions reduction.

Trees and Environmental Restoration

Definition

Available land for green spaces, tree canopies, floodable open space, stormwater parks, green stormwater infrastructure, and urban gardens.

(Note: this measure is different from the Access to Parks and Public Spaces measure, which is focused on publicly accessible spaces for active and passive recreation).

Measurement Approach

This measure has two submeasures:

1) Passive green space: Opportunities for unprogrammed, "rewilded" spaces.
2) Tree canopy: Opportunities for increasing tree canopy.

There are no published thresholds of significance for these measures and professional judgement has been used in developing the thresholds used for this report.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Passive green space	Significant loss in area and/or conversion to pavement	Loss or fragmentation of existing green spaces	<10 acres added	10-30 acres of passive green space	>30 acres dedicated to passive green space
Tree canopy	Major canopy removal without replacement	Tree loss with minor replacement	Up to 5,000 new trees	5,000-15,000 new trees	> 15,000 new trees

Current Conditions

The study area is located within two census tracts (112, 264) that contain roughly 29 acres of tree canopy located within a 300-feet buffer of SR 99.[88] This comprises 1-2% percent tree canopy compared to the rest of the census area.[89] Green spaces such as grassy open space, right-of-way (ROW) buffers, parks, and natural areas occur on private property and buffer

zones in between properties near the project area. The Block Groups that make up most of residential South Park has lost approximately 3 percent of tree canopy since 2016. [90]

Around 15 percent of South Park is covered with tree canopy, which is comparable to other highly urbanized and industrial areas like downtown, SODO, and Georgetown but lower than other more residential neighborhoods and about half of the City's 2037 goal of 30 percent tree canopy cover. King County does not make tree canopy data available through online resources, so comparable current conditions are not currently available. The County's 30 Year Forest Plan does note that Tukwila has a 24 percent citywide canopy (as of 2017). [91] If all of the current SR 99 right-of-way were to be planted intensively at 60-100 square feet per tree it could yield up to 73,000 new trees.

Coniferous trees provide greater environmental benefits because they tend to maintain their canopy year-round, helping to slow down and reduce stormwater runoff and absorb more carbon dioxide and air pollutants. However, conifers struggle to grow in many locations, such as street right-of-way or small yards, due to their long lifespan and greater size. This is true of South Park which does not have any large (more than 30 in diameter) trees to provide these benefits.

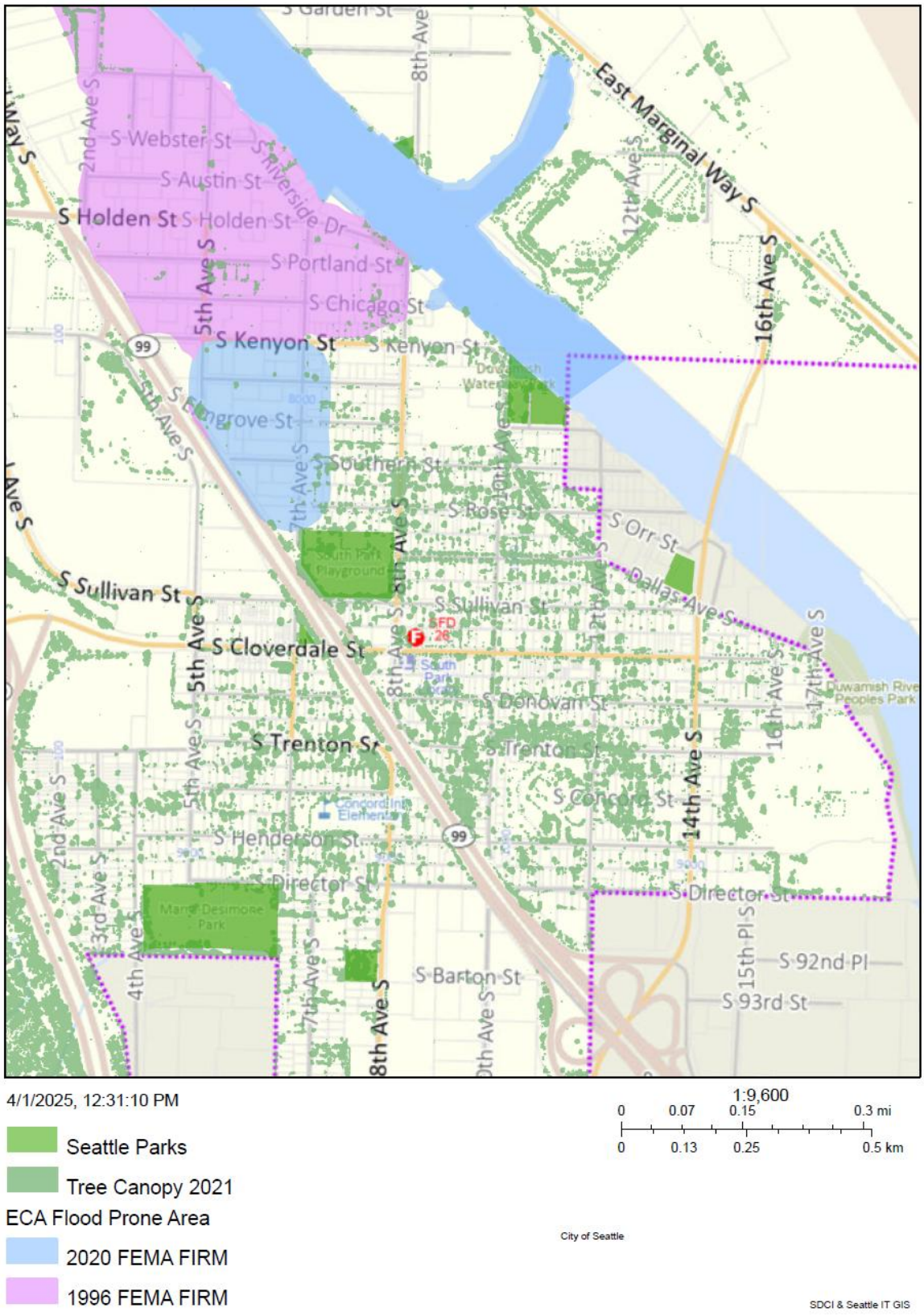


Figure 46: Green Space and Flood Zones in South Park

Evaluation

Table 43: Trees and Environmental Restoration Evaluation

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Increase in passive green space	59-100 acres	48-79 acres	44-71 acres	4-17 acres
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
Tree canopy potential	Opportunity for up to 25K trees	Opportunity for up to 21K trees	Opportunity for up to 19K trees	Opportunity for up to 2K trees
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
Composite Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
	▪ The most significant increase in accessible open space per capita across all Potential Futures ▪ Increased public access to high-quality green space can measurably improve physical and mental health outcomes ▪ The large area enables meaningful integration of GSI (e.g., floodable meadows, bioretention basins, and infiltration galleries), enhancing flood resilience, groundwater recharge, and urban biodiversity	▪ The narrower cross-section frees up more area within the corridor for expanded medians, bioswales, shade trees, and small public spaces ▪ Better balance between transportation and open space—enabling more vibrant, shaded, and pedestrian-friendly corridors while accommodating freight and transit	▪ Most green space is linear and dispersed, which limits potential for large contiguous park areas ▪ Although less than Reroute + Reclaim, this alternative can still deliver notable co-benefits through GSI, shade trees, pollinator habitat, and improved streetscape aesthetics—especially if layered with complete street principles	▪ By replacing a cloverleaf with an urban interchange and adding trails, this alternative enhances walkability and provides greenway-style open space. While not contiguous, the green areas still add meaningful passive use value ▪ The overall acreage is the lowest of all options, and much of the land remains adjacent to high-volume roadways ▪ Without broader corridor greening, this alternative alone has limited impact on air quality, shade coverage, or green space

Ecosystems and Habitat Restoration

Definition

Opportunities to integrate habitat restoration into reclaimed land and other project areas to enhance biodiversity and ecosystem resilience.

Measurement Approach

There are three submeasures for this measure:

1) Extent of potential contiguous habitat restoration
2) Location of potential habitat restoration relative to existing shoreline habitat
3) Barrier removal, such as opportunities for fish passage, daylighting creeks or other barriers limiting wildlife passage

There are no published thresholds of significance for these measures and professional judgement has been used in developing the thresholds used for this report.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Extent of potential contiguous habitat restoration	>2 acre reduction	1-2 acre reduction	+/- 1 acre change	1-2 acre increase	>2 acre increase
Location of potential habitat restoration	Isolated and fragmented habitat	Minor isolation and fragmented habitat	Minimal change	Integrated, connected habitats	Substantial new habitat connections
Opportunity for habitat barrier removal	Creation of new substantial barriers	Creation of new minor barriers	Minimal change	Removal of minor barriers	Removal of substantial barriers

Current Conditions

South Park is located along the Lower Duwamish Waterway, a federally designated Superfund site and one of the region's highest-priority areas for habitat restoration. This working river has been heavily altered by industry, infrastructure, and pollution, but it remains ecologically vital—especially for Chinook Salmon, a keystone species whose presence supports an entire food web, from orcas in Puget Sound to eagles, otters, and other wildlife that depend on healthy aquatic ecosystems.

Salmon recovery is central to multi-agency efforts to clean up and restore the Duwamish. Projects like the Duwamish River People's Park have already begun reconnecting shoreline habitat and improving water quality, but much of the river remains fragmented. Restoring and expanding these areas can benefit the broader ecosystem, including birds, amphibians, and pollinators. In turn, healthier ecosystems can provide cleaner air and water, greater flood resilience, and more access to nature for South Park residents. Two barriers to fish passage within the SR 99 Corridor Analysis Area exist – one in Hamm Creek near the Duwamish River and another in an unnamed tributary of Hamm Creek directly west of SR 99. Both of these

locations are on WSDOT's Injunction Barrier List, which is used to inventory and prioritize the correction of fish passage barriers[92].

A critical habitat is a geographic area that contains physical or biological attributes that typically support endangered and threatened species.[93] Critical habitats are designated by the U.S. Fish and Wildlife Service (USFWS) and are important in conserving habitat and species for the benefit of current and future generations. According to the USFWS Information for Planning and Consultation (IPaC) database, although there are no critical habitats overlapping and surrounding the project area, there are threatened and/or endangered species that are known to exist in the general vicinity of the project area. The Duwamish River, for example, hosts numerous protected fish species that are threatened or endangered such as bull trout and the marbled murrelet. Other bird, reptile, and insect species include the Yellow-billed Cuckoo, Northwestern Pond turtle, Monarch butterfly, and Suckley's Cuckoo bumble bee.

Habitat connectivity

Habitat connectivity through regional greenways or waterways is also a key component to increasing habitat quality and biodiversity. According to the USFWS critical habitat mapper, the Duwamish River adjacent to the project area is a major connection to upper watershed stream habitat in the Cascade Mountains and greater Puget Sound area. Chinook salmon can also be found in the Duwamish. There are various wetland features surrounding the project area, including freshwater ponds, estuarine and marine wetlands, freshwater emergent wetlands, and freshwater forested/shrub wetlands.[94] Although the shoreline is developed, conservation and restoration efforts are guided by shoreline management designations. This includes activities for residential shorelines, high intensity shorelines, and aquatic shorelines. Under existing conditions, there are no connections from the Duwamish River to the wetland habitat located at the "cloverleaf" intersection. The wetland habitat can be restored to enhance environmental conditions for bird and insect species to thrive.

Hamm Creek is currently piped through the SR 99 corridor. There is an opportunity to restore this fish habitat, removing fish barriers, and connecting the habitat farther upstream.

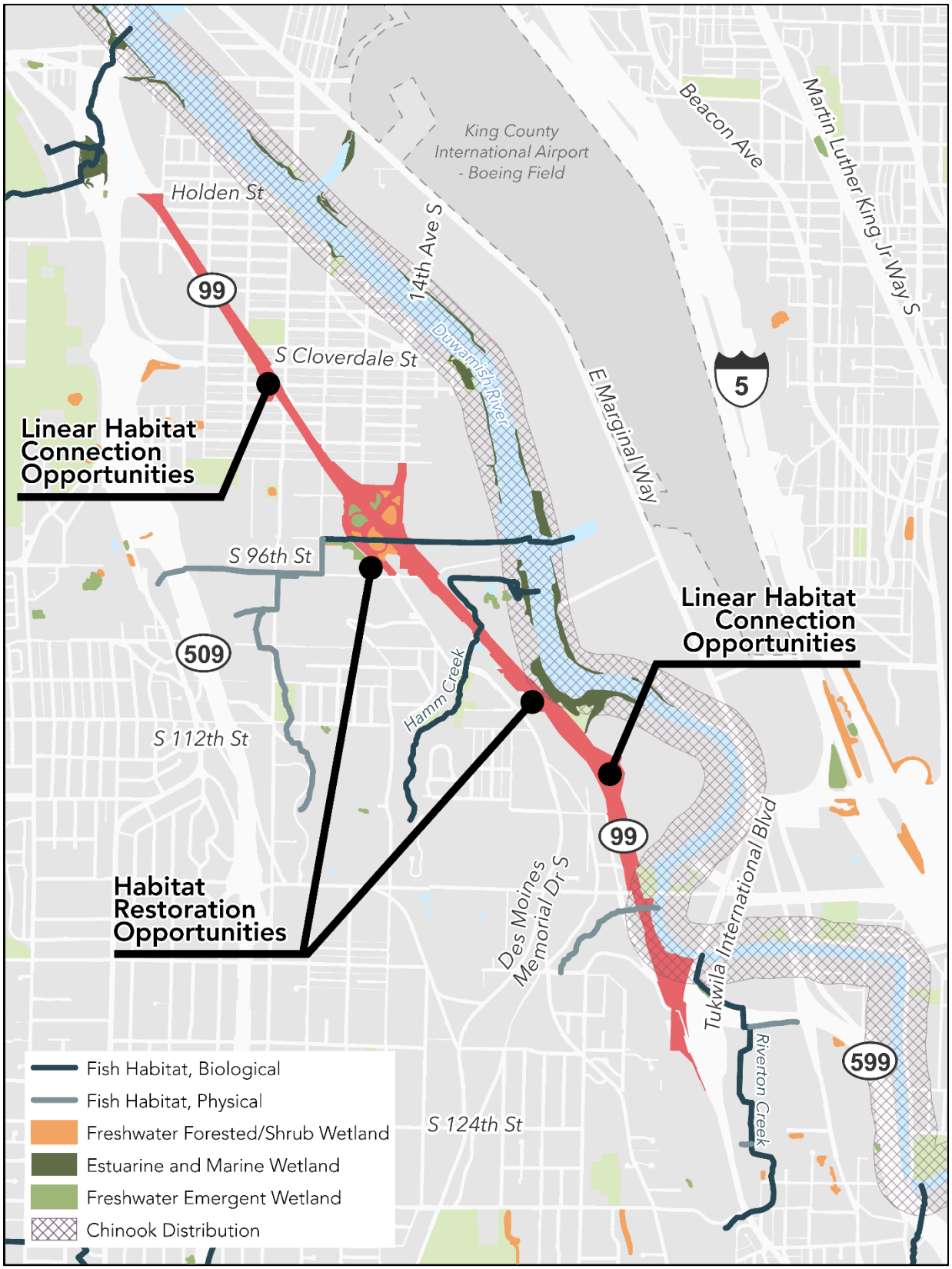


Figure 47: Environmentally Sensitive Areas and Habitat

Evaluation

Table 44: Ecosystems and Habitat Restoration Evaluation

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Extent of potential contiguous habitat restoration	▪ Reclaims the most potential land for native habitat restoration, with the potential to support diverse plant communities ▪ South of South Park, substantial opportunities for habitat restoration and connections all along the Duwamish River, including restoration of Hamm Creek. ▪ At least 59 acres of new open space, with substantial contiguous habitat opportunities	▪ Provides potential space for linear habitat connections within the SR 99 right-of-way for habitat-enhancing plantings, primarily located in medians, planter strips, and stormwater features ▪ South of South Park, there would be opportunities for habitat restoration with the conversion of SR to a narrow surface roadway similar to the current footprint of W Marginal Pl ▪ At least 48 acres of new open space in relatively contiguous habitat configurations.	▪ Potential space for linear habitat connections within the SR 99 right-of-way for habitat-enhancing plantings, primarily located in medians, planter strips, and stormwater features ▪ South of South Park, there would be some opportunities for habitat restoration ▪ At least 44 acres of new open space.	▪ Limited opportunity for new habitat restoration area. Green space would be primarily within the redesigned interchanges and adjacent to trail infrastructure, which is similar to current conditions ▪ Habitat would be non-contiguous and surrounded by transportation infrastructure
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
Location of habitat restoration	▪ Strong opportunities for ecological connectivity by linking the existing wetland complex at the former cloverleaf intersection with a freshwater pond and marsh system to the	▪ The narrower cross-section allows for the creation of a potential greenway corridor, improving habitat connectivity and supporting the movement of	▪ Ecological connectivity is limited, as the available habitat areas are narrow, linear, and fragmented by multi-lane traffic, reducing their effectiveness for supporting wildlife	▪ Habitat connectivity is low due to the continuous operation of SR 99 and the disjointed layout of green spaces. Wildlife movement remains highly constrained.

	north, as well as the Duwamish River and the western greenway trail corridor—forming a continuous habitat corridor that supports species movement and ecosystem health.	pollinators and birds across the corridor. New connections to the shoreline could be created with the incorporation of W Marginal Place into SR 99.	movement and long-term habitat viability. New connections to the shoreline could be created with the incorporation of W Marginal Place into SR 99.	
Evaluation	**Much Better**	**Much Better**	**Better**	**Same**
Potential barrier removal	▪ Opportunity to remove barriers with improvements to Hamm Creek.	▪ Opportunity to remove barriers with improvements to Hamm Creek.	▪ Opportunity to remove barriers with improvements to Hamm Creek.	▪ No opportunities for infrastructure barrier removal.
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
Composite Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
	▪ Offers restoration at scale, reconnecting fragmented ecological systems in a highly urbanized area and improving stormwater filtering, air quality, and climate regulation	▪ Provides localized ecosystem services like pollination and stormwater uptake but lacks scale and structure for broader habitat restoration	▪ Provides greater potential for corridor-style habitat and species movement than the Wider Boulevard, but still lacks the scale of Reroute + Reclaim to support high-functioning habitat patches	▪ Provides incremental ecological value through vegetated buffers and trailside plantings, but does not support meaningful species migration or habitat patch development at scale

Cost & Feasibility Measures

Measures in this category evaluate different aspects of the implementation of each Potential Future. These measures include:

- Net Public Value
- Construction Disruption
- Regulatory Feasibility

Net Public Value

Definition

The potential costs and value of each Potential Future to the public

Measurement Approach

There are three submeasures for this measure:

1) Public and community value, including the potential for revenue from reclaimed land, potential for productive public uses of land, and indirect benefits of improved public health
2) Operations & Maintenance (O&M) costs for public agencies
3) Capital cost, including the scale of up-front cost for transportation infrastructure and environmental remediation.

There are no published thresholds of significance for these measures and professional judgement has been used in developing the thresholds used for this report.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Public and community value	Substantial reduction in land opportunity and expansion of current right-of-way; much worse public health outcomes	Reduced land opportunity and limits on value potential outside of current right-of-way; worse public health outcomes	No meaningful change	Some reclaimed land and opportunities for new revenue streams; better public health outcomes	Substantial reclaimed land in well-located areas and potential for reliable revenue streams; much better public health outcomes
Operations & Maintenance costs	Greatly increases ongoing public costs	Increases ongoing public costs	No meaningful change	Reduces ongoing public costs	Substantially reduces ongoing public costs
Up-front Capital cost	Requires substantially more investment than rehabilitation	Requires moderately more investment than rehabilitation	Similar investment to rehabilitation	Requires moderately less investment than rehabilitation	Requires substantially less resources than rehabilitation of existing facility

Current Conditions

SR 99 presents existing operations and maintenance costs to WSDOT, including for landscape maintenance, bridge maintenance, and pavement maintenance. WSDOT has estimated that maintenance and preservation costs statewide have a 10-year need of $3 billion and that current statewide investment in preservation is 40 percent of what is needed to preserve assets in a state of good repair. [95]

Existing seismic vulnerabilities of the SR 99 bridge over S Cloverdale St eventually will necessitate investments that have not yet been planned or programmed, so costs are not known at this stage.

The existing pedestrian bridge over SR 99 along S Henderson St does not meet ADA standards. Reconstruction has not been planned or programmed.

No revenues are generated from the SR 99 right-of-way.

Evaluation

Public and community value

Although no determinations of uses for reclaimed land have been made, the land suitability analysis identifies a range of uses in each Potential Future. More land opportunity would result in more opportunities for public revenue streams. Policy considerations around affordable housing, land trusts, or public space could affect the scale of revenue streams. Reduction in ongoing public health costs, as described in the Public Health measure above would also contribute to the public and community value.

Table 45: Public and Community Value Evaluation

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Land reuse opportunity	Up to 41 acres	Up to 31 acres	Up to 27 acres	Up to 13 acres
Reclaimed land location	Contiguous areas in heart of South Park neighborhood and adjacent to industrial areas	Opportunities along new boulevard and adjacent to industrial area south of South Park	Opportunities along new boulevard and adjacent to industrial area south of South Park	Opportunities around industrial area south of South Park and reconfigured cloverleaf interchange
Public Health benefits	Much Better	Better	Better	Same
Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**

Operations & Maintenance Costs

O&M costs can be divided into two categories: transportation infrastructure costs and public space management costs. Each Potential Future has needed investments for ongoing O&M to provide lasting community value. For transportation agencies, O&M costs are related to infrastructure needs, and generally more complex infrastructure, like bridges, require more ongoing O&M investment. Streets, particularly those used by heavy vehicles like trucks and buses, also require ongoing investment to maintain a state of good repair. Potential Futures

that shift traffic from SR 99 are anticipated to see truck and vehicle volume increases on roads already constructed for heavier vehicles, like SR 509, I-5, and East Marginal Way. For public spaces, O&M costs are tied to the scale of space and the programming, with more habitat areas requiring less ongoing O&M than active programming like parks and community spaces.

Table 46: Operations & Maintenance Costs Evaluation

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Transportation Agency O&M	▪ 11.1 net lane mile reduction ▪ No bridges or structures ▪ New trail	▪ 2.5 net lane mile reduction ▪ No bridges or structures ▪ New trail ▪ New traffic signals	▪ No change to net lane miles ▪ No bridges or structures ▪ New trail ▪ New traffic signals	▪ 2 new + 2 reconstructed bridge structures ▪ New trail ▪ Maintenance of existing freeway
Other public agency O&M	▪ O&M for at least 59 acres of public land ▪ O&M for new parks and public spaces	▪ O&M for at least 48 acres of public land ▪ O&M for new parks and public spaces	▪ O&M for at least 44 acres of public land ▪ O&M for new parks and public spaces	▪ O&M for at least 4 acres of public land ▪ O&M for new lid space
Evaluation	**Better**	**Better**	**Same**	**Worse**

Up-Front Capital Cost

Concept-level, order of magnitude costs have been developed for each Potential Future. These costs are intended to provide comparative information on the Potential Futures and not a detailed estimate at this stage.

Costs for rehabilitation assume the eventual rehabilitation or replacement of the 14th Ave S overpass, the S Henderson St Bridge, the SR 99 overpass over S Cloverdale St, and pavement rehabilitation along SR 99. No cost estimates for these eventual needs have been developed by WSDOT.

As described in the methodology section, no roadway improvements outside of South Park have been developed. If mitigations outside of South Park were needed in any Potential Future, there could be capital cost burdens associated with them that may refine the analysis presented here.

Costs for construction of transportation infrastructure and environmental remediation of reclaimed land have been assessed at a sketch level for this analysis. Until more detailed engineering and plans for reuse of land are developed, these costs are shown as order of magnitude values:

- $ = up to $100M
- $$ = $100-300M

- $$$ = $300-500M
- $$$$ = >$500M

Table 47: Up-Front Capital Cost Evaluation

	Baseline Rehabilitation Costs	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Transportation infrastructure costs	$$	$	$	$	$$
Soil remediation	-	$$	$$	$$	$
Evaluation		**Worse**	**Worse**	**Worse**	**Worse**

Table 48: Cost & Feasibility Evaluation

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Public & Community Value Evaluation	**Much Better**	**Much Better**	**Much Better**	**Same**
O&M Costs Evaluation	**Better**	**Better**	**Same**	**Worse**
Up-Front Capital Cost Evaluation	**Worse**	**Worse**	**Worse**	**Worse**
Composite Evaluation	**Better**	**Better**	**Same**	**Worse**
	▪ Opportunity for substantial public and community value ▪ Low ongoing O&M costs for transportation infrastructure, with increased O&M costs for public space ▪ Moderate transportation infrastructure and soil remediation costs	▪ Opportunity for substantial public and community value ▪ Moderate ongoing O&M costs for transportation infrastructure with low ongoing O&M costs for public space ▪ Moderate transportation infrastructure and soil remediation costs	▪ Opportunity for substantial public and community value ▪ Slightly increased ongoing O&M costs for transportation infrastructure with low ongoing O&M costs for public space ▪ Moderate transportation infrastructure and soil remediation costs	▪ Little opportunity for new public and community value ▪ Higher ongoing O&M costs with new bridges ▪ Substantial transportation infrastructure costs, with some soil remediation costs.

Construction Disruption

Definition

The extent and duration of reconstruction and disruption for residents and businesses.

Measurement Approach

There are three submeasures included in this measure:

1) Physical scale of disruption
2) Duration of disruption for major construction phases
3) Local access effects during construction

There are no published thresholds of significance for these measures and professional judgement has been used in developing the thresholds used for this report.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Physical scale of disruption	New construction throughout South Park along SR 99 right-of-way	Primarily site-specific or localized construction effects	Minimal disruption and no meaningful change	NA	NA
Duration of disruption for major construction phases	> 2 years of major construction activities	< 2 years of major construction activities	No meaningful change	NA	NA
Local access effects during construction	Substantial disruptions	Moderate disruptions	No meaningful disruptions	NA	NA

Current Conditions

There is no active construction today on SR 99, but South Park has experienced construction-related effects of projects outside of the community. The effects of South Park Bridge reconstruction (2010-2014) and West Seattle Bridge rehabilitation (2020-2022) have been felt within South Park. More recently, construction on the 1st Ave S Bridge has reduced vehicle capacity crossing the Duwamish River, and the effects have been felt within the South Park neighborhood.

During these periods of construction disruption, residents and businesses experience increased congestion and traffic delays, traffic detours, and reduced customer access.

Evaluation

Reroute + Reclaim

Reroute + Reclaim would be the least disruptive to traffic, although construction activities would occur throughout the SR 99 right-of-way from Tukwila International Boulevard to S Holden St.

Major construction disruptions would be limited to the time and phasing necessary to close off each terminus. Demolition and remediation activities would likely take multiple years. It is anticipated all streets could remain open during construction. Some temporary road closures at each terminus could be necessary to complete work. Reconstruction of local streets and construction for the reuse of reclaimed land would be ongoing, but more limited in duration and effect.

Wider and Narrower Boulevard

A Boulevard option (either the Wider or Narrower approach) would have substantial construction disruptions in duration and the area under construction. All of SR 99 would need to be removed and reconstructed. This could be done by closing off all lanes in one direction and shifting all SR 99 traffic in order to remove and rebuild one direction at a time or reducing traffic to one lane each direction. Due to the potential alignment of a Boulevard, some full closures could be necessary. It is anticipated that construction of a Boulevard could take multiple years. Construction phasing and effects would depend on refined approaches and the tradeoffs to traffic effects and construction timeline.

During construction, some disruption to local access could be possible and would need to be determined if planning and design were to proceed.

Bridges + Trails

Bridges + Trails would be moderately disruptive to traffic.

Bridges + Trails would have minor roadway reconstruction of SR 99 from S Henderson St to 14th Ave S to narrow the existing center median, shift the roadway, and create space for sound walls, landscaped buffers, and a multi-use trail between the roadway and the neighborhood. This would not be anticipated to have major disruptions to access, but could take some time.

Bridges + Trails includes costs for creating new and reconstructed pedestrian overpass connections at S Henderson St, a new lid at 8th Ave S and S Donovan St, and reconstructing the SR 99 bridge over S Cloverdale St to widen pedestrian and bicycle access and to address seismic vulnerabilities. The cloverleaf at 14th Ave S and Des Moines Memorial Dr would be reconstructed into an urban interchange with bicycle and pedestrian connections, more direct ramps, and to meet current standards.

There would be some disruptions to traffic while constructing the bridges and reconstructing the roadway. The lid would require occasional full closures of SR 99 for girder setting but the majority of traffic could be maintained. The pedestrian bridges would require shoulder closures and lane shifts during construction. This option carries the largest risk for the construction timeline due to the structural elements and unknown soil quality at the site.

Table 49: Construction Disruption Evaluation

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Physical scale of construction	▪ Construction throughout the SR 99 Corridor	▪ Construction throughout the SR 99 Corridor	▪ Construction throughout the SR 99 Corridor	▪ Construction limited to the cloverleaf interchange area
Evaluation	**Much Worse**	**Much Worse**	**Much Worse**	**Same**
Duration of disruption	▪ Construction could be staged with limited effects at any time. ▪ Total construction duration likely to be more than 2 years	▪ Construction duration over 2 years ▪ Reuse of reclaimed land may be challenging to time with transportation construction	▪ Construction duration over 2 years ▪ Reuse of reclaimed land may be challenging to time with transportation construction	▪ Construction duration likely less than 2 years.
Evaluation	**Worse**	**Much Worse**	**Much Worse**	**Worse**
Local access effects during construction	▪ Construction could be sequenced to limit local access disruptions, but would still affect local circulation	▪ Local access likely to be affected substantially during roadway construction	▪ Local access likely to be affected substantially during roadway construction	▪ Local access during construction could be disrupted, particularly during interchange reconstruction
Evaluation	**Worse**	**Much Worse**	**Much Worse**	**Same**
Composite Evaluation	**Worse**	**Much Worse**	**Much Worse**	**Same**
	▪ Construction disruption primarily consists of demolition and reconstruction of neighborhood streets ▪ Reconstruction of streets should be coordinated as much as possible with reuse of reclaimed land	▪ Construction disruption could be multiple years depending on how traffic is maintained, followed by reuse of reclaimed land	▪ Construction disruption could be multiple years depending on how traffic is maintained, followed by reuse of reclaimed land	▪ Construction disruption could have some full closures of SR 99 associated with new bridge construction. ▪ Modification of SR 99 could take a long time but maintain traffic during most construction

Regulatory Feasibility

Definition

Potential implementation challenges for each Potential Future.

Measurement Approach

There are two submeasures for this measure:

1) Policy support for Potential Future from goals of local, regional, and statewide plans
2) Regulatory and permitting complexity

There are no published thresholds of significance for these measures and professional judgement has been used in developing the thresholds used for this report.

Submeasure	Much Worse	Worse	Same or No Change	Better	Much Better
Policy support	Directly undermines stated goals	Somewhat contradicts key policy goals	Neither supports nor contradicts policy goals	Supports key policy goals	Strongly supports multiple policy goals
Regulatory and permitting complexity	Involves multiple complex regulatory and permitting processes	Involves some regulatory and permitting processes that could be complex	No major permitting or regulatory challenges anticipated	NA	NA

Current Conditions

PSRC's Vision 2050 sets the regional vision for transportation and land use in the Puget Sound Region.[96] The policies and actions in the plan work to:

- Increase housing choices and affordability
- Provide opportunities for all
- Sustain a strong economy
- Significantly reduce emissions
- Keep the region moving
- Restore Puget Sound health
- Protect a network of open space
- Grow in centers and near transit
- Act collaboratively and support local efforts

PSRC's SoundCast travel demand model has been used by cities in the region to develop Comprehensive Plans. The same model was used to develop the travel demand forecast in this study. Future changes to SR 99 could result in changes to transportation analyses during future Comprehensive Plan update cycles and for individual projects in the vicinity.

Washington State has established transportation system policy goals in state law (RCW 47.04.280):

(a) Preservation: To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services, including the state ferry system;
(b) Safety: To provide for and improve the safety and security of transportation customers and the transportation system;
(c) Stewardship: To continuously improve the quality, effectiveness, resilience, and efficiency of the transportation system;
(d) Mobility: To improve the predictable movement of goods and people throughout Washington state, including congestion relief and improved freight mobility;
(e) Economic vitality: To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy;
(f) Environment: To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment.

The City of Seattle's Comprehensive Plan[97] and Seattle Transportation Plan[98] establish policy goals for the portion of the study area within the City of Seattle. Draft Comprehensive Plan goals include:

- Expanding housing affordability and opportunities across the city
- Focus growth and investment in complete, walkable communities
- Meet the challenges of climate change for a resilient future
- Coordinate use of public space to support mobility, sustainability, and community-oriented infrastructure
- Foster healthy aquatic systems for all residents, fish, and wildlife

Seattle Transportation Plan goals include:

- Prioritize safety for travelers in Seattle
- Work with the community to address transportation-related concerns
- Provide reliable and affordable travel options to help people and goods get where they need to go
- Reimagine city streets as inviting places to spend time and play
- Improve city transportation infrastructure and prepare it for the future

WSDOT owns the entire right-of-way currently, which is contained within the City of Seattle, unincorporated King County, and the City of Tukwila. SR 99 is part of the National Highway System (NHS), as are other regional roads in the vicinity, including SR 509, I-5, E Marginal Way, 14th Ave S (north of S Cloverdale St), and SR 599. [99] De-designation of SR 99 would require amending RCW 47.17.160 and coordination with the Washington State Transportation Commission. [100]

Redesignation or removal from the NHS would require consistency with regional and State transportation plans and concurrence from the Federal Highway Administration. Changes to the NHS must follow the Federal regulations in 23 CFR 470 Appendix D. [101] WSDOT has a form and process that must be completed by all affected local jurisdictions. WSDOT's process is outlined in Figure 48. [102]

Some or all Potential Futures would need to go through an Access Revision Request (ARR). [103]

The process for changes to SR 99 is complex and potentially lengthy. This analysis is an initial step to inform a community-driven vision for SR 99. Future phases of analysis may need to explore in more detail the potential policy alignment and implications for the reuse of current WSDOT ROW that was acquired for transportation purposes.

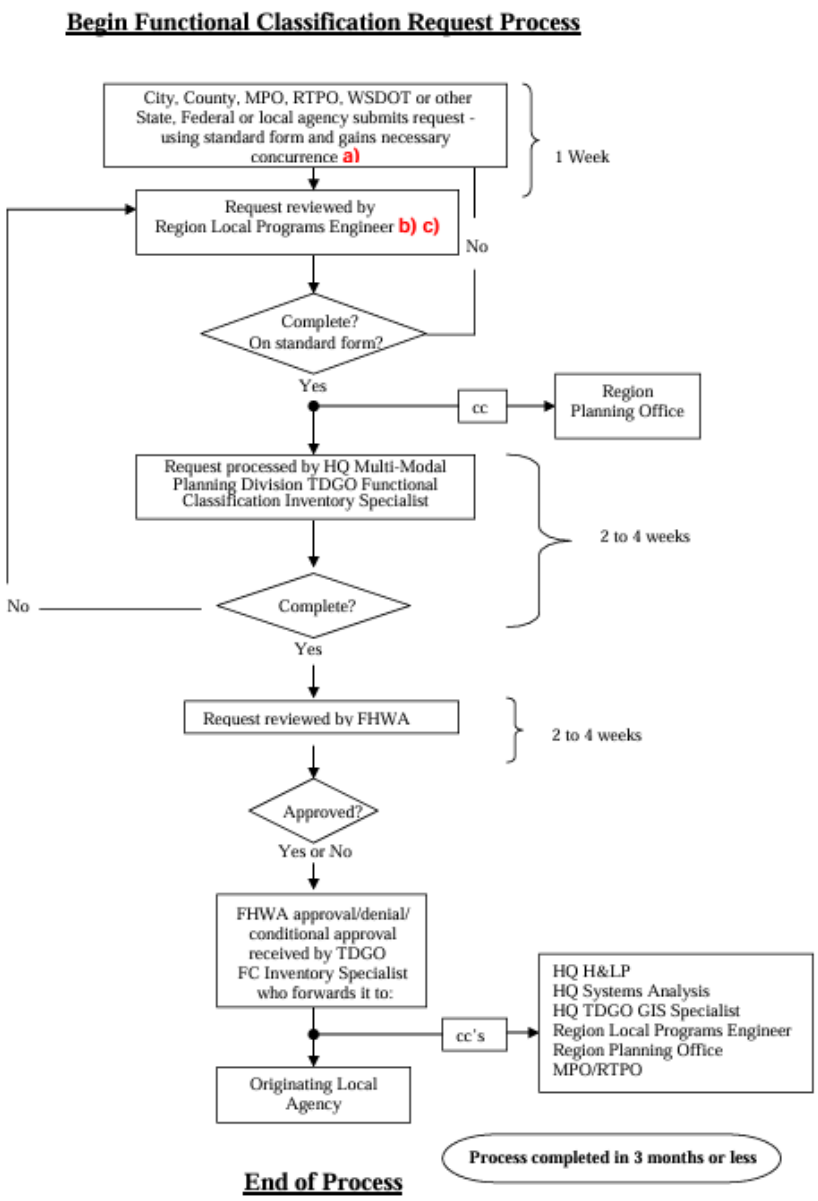


Figure 48: WSDOT Functional Classification Request Process

Evaluation

Reroute + Reclaim

The vision in this Potential Future is directly aligned with policy documents, including the reduction in emissions, environmental stewardship, support for multi-modal transportation outcomes, and improved transportation safety.

Reroute + Reclaim would no longer meet the criteria for inclusion as part of the NHS. Changes to NHS designation would require additional time for the required approvals by regional, State, and Federal agencies. The scale of potential change would likely require more involved review under the National Environmental Policy Act (NEPA) and State

Environmental Policy Act (SEPA) that could also add length and complexity to approval processes. At this early stage of community-centered exploration, it is not clear which agency would lead the implementation of this Potential Future. A local agency may need to take on a lead implementation role, and it is not clear which agency would be in that role at this stage. For this and other Potential Futures with more substantial opportunities to reuse existing transportation ROW for community uses, it is also not certain which agency within the City of Seattle would take on a lead role.

Narrower Boulevard

There is strong alignment between the vision in this Potential Future and guiding policy documents. Multi-modal transportation networks, environmental stewardship, and opportunities for new housing are all aligned with adopted policy frameworks.

Narrower Boulevard would likely no longer meet the criteria for inclusion as part of the NHS. Changes to NHS designation would require additional time for the required approvals by regional, State, and Federal agencies. The scale of potential change would likely require more involved review under NEPA and SEPA that could also add length and complexity to approval processes. WSDOT may not be the appropriate agency to lead design and construction of this Potential Future or ongoing ownership of the SR 99 replacement. Transfer of ownership and responsibilities may need to be factored into the implementation timeline.

Wider Boulevard

There is alignment between the vision in this Potential Future and guiding policy documents. Multi-modal transportation networks, environmental stewardship, and opportunities for new housing are all aligned with adopted policy frameworks.

Wider Boulevard would likely continue to meet the criteria for inclusion as part of the NHS. If the road remains part of the NHS, WSDOT may be the most appropriate agency to lead implementation. SDOT may also be an appropriate agency to lead implementation. The scale of potential change could require some complexity of review under NEPA and SEPA, but potential changes to traffic volumes and environmental resource areas would not be substantial. Still, this Potential Future could carry some permitting complexity.

Bridges + Trails

"Bridges + Trails" has minimal alignment with existing policies. There are limited opportunities for new development to support land use goals, limited mode shift opportunities to meet emissions reduction goals, and limited environmental stewardship opportunities.

This Potential Future would maintain NHS designation, and would likely have relatively straightforward environmental review processes under NEPA and SEPA because little would change from current conditions.

ROW needs for new connections across SR 99 in Bridges + Trails would need to be further evaluated with additional design and could be a challenge for implementing these connections.

Bridges + Trails could be implemented by WSDOT or SDOT and the SR 99 right-of-way would likely remain in WSDOT ownership.

Table 50: Regulatory Feasibility Evaluation

	Reroute + Reclaim	Narrower Boulevard	Wider Boulevard	Bridges + Trails
Policy support	▪ Direct policy alignment in local, regional, and state policy documents	▪ Strong policy alignment in local, regional, and state policy documents	▪ Moderate alignment with local, regional, and state policy documents	▪ Minimal alignment with existing policy goals at local and regional levels.
Evaluation	**Much Better**	**Much Better**	**Better**	**Same**
Regulatory complexity	▪ Significant and lengthy environmental review and regulatory processes for implementation	▪ Significant and lengthy environmental review and regulatory processes for implementation	▪ Moderate environmental review and regulatory processes anticipated	▪ Environmental review processes needed, but less likely to be lengthy
Evaluation	**Much Worse**	**Much Worse**	**Worse**	**Same**
Composite Evaluation	**Same**	**Same**	**Same**	**Same**
	▪ Requires redesignation from NHS and transfer of ownership of all SR 99 ROW (transportation and non-transportation)	▪ Requires redesignation from NHS ▪ ROW ownership for transportation could be transferred from WSDOT if not maintained on NHS	▪ Potential for maintenance as part of NHS ROW ownership for transportation uses could be maintained with WSDOT or transferred	▪ Maintain NHS designation ▪ Maintain WSDOT ownership of transportation ROW ▪ Potential for additional ROW needs and ownership of additional connections would need to be evaluated

Endnotes

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[2] Washington Highway News, July-August 1959. https://cdm16977.contentdm.oclc.org/digital/collection/p16977coll1/id/3493/.
[3] Seattle City Clerk's Office Records. https://www.seattle.gov/cityclerk.
[4] Puget Sound Regional Archives. https://www.sos.wa.gov/archives/explore-our-collection/branches/puget-sound-regional-branch.
[5] American Association of State Highway Officials, June 24, 1969.
[6] City of Seattle Planning Commission: Planning for Industry, 1954. https://archives.seattle.gov/digital-collections/index.php/Detail/objects/235843.
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[8] Seattle Daily Times, July 10, 1957. https://seattletimes.newsbank.com/
[9] House Bill Report 5376, 2004. https://lawfilesext.leg.wa.gov/biennium/2003-04/Htm/Bill%20Reports/House/5376.HBR.htm.
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[16] Ibid.
[17] SR 99 data from Washington State Department of Transportation (WSDOT), CDR Loop Data, 2024. https://tracflow.wsdot.wa.gov/loopdata/loop_data_map/. For comparable street traffic volumes, see SDOT 2025 Traffic Report: https://www.seattle.gov/documents/Departments/SDOT/About/DocumentLibrary/Reports/2025_Traffic_Report.pdf
[18] StreetLight Data uses smartphone data to provide mobility information. It is best used as a tool for comparative assessment of travel patterns, and not for absolute numbers of people making specific trips. Various assessments of StreetLight and other "big data" sources are available, including https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=1028&context=cutr_nicr.
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[21] Puget Sound Regional Council (PSRC), Soundcast User's Guide, December 12, 2018. https://github.com/psrc/soundcast/wiki/Overview.
[22] PSRC, Vision 2050: A Plan for the Central Puget Sound Region, October 2020. https://www.psrc.org/planning-2050/vision-2050.
[23] PSRC, Data Guide for Land Use Vision – Implemented Targets. https://www.psrc.org/sites/default/files/2023-05/luv-it-data-guide.pdf.
[24] PSRC, Regional Transportation Plan 2022 – 2050, May 22, 2022. https://www.psrc.org/planning-2050/regional-transportation-plan.
[25] WSDOT, CDR Loop Data, 2024. https://tracflow.wsdot.wa.gov/loopdata/loop_data_map/.
[26] Permanent traffic recorders on I-5 near the study area did not have classification volume data for a consistent time as other data collection. 2% is a standard assumption when no other data is available. Truck percentages from the closest locations to S Thistle St on I-5 (Tacoma and Shoreline) show total average daily heavy vehicle percentage between 5-7%. Future projections of heavy vehicles diversion patterns would have the same relative change regardless of current conditions. Future phases of analysis will gather additional data to refine potential changes to heavy vehicle traffic patterns.
[27] Seattle GeoData, 2022 Traffic Flow Counts, updated July 14, 2025. https://data-seattlecitygis.opendata.arcgis.com/datasets/2022-traffic-flow-counts.
[28] King County, Traffic Counts, 2019. https://gismaps.kingcounty.gov/trafficcounts/.
[29] **Air Pollution evaluation thresholds:** Three principles guided the development of these thresholds:

1. **±5% represents normal variability or below-detection change.**
   The Environmental Protection Agency's (EPA) MOVES sensitivity and uncertainty guidance shows that changes below roughly 5% in emissions or activity variables often fall within model noise and should be interpreted cautiously. Similarly, Centers for Disease Control and Prevention (CDC) and EPA environmental public-health tracking methods note that single-digit percent changes in exposure indicators are often below reliable detection thresholds at the neighborhood scale.[2] For these reasons, ±5% is classified as "No Change".
2. **5–10% reflects a noticeable but moderate change.**
   EPA's Integrated Science Assessments for $PM_{2.5}$ and NO_2, Federal Highway Administration's (FHWA) near-roadway research, and California Air Resources Board (CARB) community air-protection guidance all indicate that 5–10% changes in emissions or activity can begin to produce measurable shifts in near-roadway or community exposure—especially where baseline concentrations are already elevated. These bodies of work do not prescribe numerical thresholds, but they consistently identify this range as the point where changes move past background variability. This supports using +5.1% to +10% and –5.1% to –10% as "Worse" and "Better."
3. **Changes greater than ±10% represent a substantial shift in exposure.**
   Multiple lines of evidence—including FHWA near-roadway studies, Health Effects Institute accountability research, WHO burden-of-disease methods, and CARB community-scale guidance—show that double-digit percentage changes in emissions or exposure are more likely to produce meaningful, population-relevant shifts in pollution levels or health-risk indicators. These findings support classifying >+10% as "Much Worse" and <–10% as "Much Better."

[30] City of Seattle, South Park Neighborhood Profile, February 2019. https://www.seattle.gov/documents/Departments/OPCD/OngoingInitiatives/OutsideCitywide/OutsideCitywideSouthParkNeighborhoodProfile.pdf.
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[32] City of Seattle, 2020 Equitable Development Community Indicators Report, September 2020. https://www.seattle.gov/Documents/Departments/OPCD/Demographics/communityindicatorsreport2020.pdf.

[33] City of Seattle, South Park Neighborhood Profile, February 2019. https://www.seattle.gov/documents/Departments/OPCD/OngoingInitiatives/OutsideCitywide/OutsideCitywideSouthParkNeighborhoodProfile.pdf.

[34] **Noise Pollution evaluation thresholds:** Three principles guided the development of these thresholds:

1. **±20% represents changes that are not perceptible or reliably meaningful.** Even a 20% change in traffic volume typically produces less than 1 dBA difference in sound levels—well below the 3 dBA threshold of human perceptibility identified by FHWA and the International Organization for Standardization. EPA and WHO guidance similarly note that very small (sub-1–2 dBA) changes are unlikely to produce meaningful health or community-level impacts. Therefore, ±20% was defined as "Neutral or No Change."
2. **20–49% change reflects the range where noise exposure may become perceptibly better or worse.** While still modest, changes of this magnitude can be noticeable under some circumstances, particularly near sensitive land uses and at higher baseline noise levels. FHWA, ISO, and WHO materials all indicate that this range can begin to influence perception and annoyance. This supports classifying 20–49% increases or decreases as "Worse/Better."
3. **≥50% represents a substantial, meaningful change in exposure.** A 50% decrease in noise-weighted traffic volume would be large enough to be perceptible and to meaningfully shift exposure for homes, schools, and parks close to high-volume roadways. Conversely, increases of 50% or more represent substantial added exposure. FHWA's doubling rule, ISO 1996 perceptibility thresholds, and WHO exposure-response analyses all support using large categorical thresholds for interpreting substantial change.

[35] U.S. Department of Transportation, National Transportation Noise Map, May 16, 2025. https://www.bts.gov/geospatial/national-transportation-noise-map. Modeled average noise (dBA) based on road, freight, passenger rail and aviation noise over a 24-hour period and does not determine actual current noise pollution exposure or noise levels at any specific location or time of day.

[36] Seattle & King County Public Health, South Park Community Center Open Space Design Plan: Rapid Health Impact Assessment Findings & Recommendations, October 13, 2016. https://cdn.kingcounty.gov/-/media/king-county/depts/dnrp/waste-services/wastewater-treatment/program/lower-duwamish/docs/south-park-commmunity-center-hia.pdf.

[37] U.S. Department of Transportation, National Transportation Noise Map, May 16, 2025. https://www.bts.gov/geospatial/national-transportation-noise-map. Modeled average noise (dBA) based on road, freight, passenger rail and aviation noise over a 24-hour period and does not determine actual current noise pollution exposure or noise levels at any specific location or time of day.

[38] U.S. EPA, EPA Identifies Noise Levels Affecting Health and Welfare, April 2, 1974. https://www.epa.gov/archive/epa/aboutepa/epa-identifies-noise-levels-affecting-health-and-welfare.html.

[39] World Health Organization, Environmental Noise Guidelines for the European Region, January 30, 2019. https://www.who.int/europe/publications/i/item/9789289053563.

[40] The New York Times, Noise Exposure Health Impacts, June 9, 2023. https://www.nytimes.com/interactive/2023/06/09/health/noise-exposure-health-impacts.html?searchResultPosition=1.

[41] Seattle & King County Public Health, Community Health and Airport Operations Related Noise and Air Pollution: Report to the Legislature in Response to Washington State HOUSE BILL 1109. https://apps.leg.wa.gov/ReportsToTheLegislature/Home/GetPDF?fileName=Community%20Health%20and%20Airport%20Operations%20Related%20Pollution%20Report_c7389ae6-f956-40ef-98a7-f85a4fab1c59.pdf.

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[43] Newbury JB, Heron J, Kirkbride JB, et al., Air and Noise Pollution Exposure in Early Life and Mental Health From Adolescence to Young Adulthood, 2024. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2819070#google_vignette.
[44] Seattle Department of Transportation, Vision Zero. https://www.seattle.gov/transportation/projects-and-programs/safety-first/vision-zero.
[45] Seattle Department of Transportation, Traffic Volume and Crash Data. https://www.seattle.gov/transportation/permits-and-services/interactive-maps/traffic-volume-and-crash-data.
[46] American Association of State Highway and Transportation Officials, Highway Safety Manual Part C – Predictive Method. https://www.highwaysafetymanual.org/Pages/tools.aspx.
[47] Safety features would have to be evaluated as part of further development of plans and jurisdictional control. WSDOT does not currently operate any red light cameras.
[48] Seattle Department of Transportation, South Park Healthy Street, June 2025. https://www.seattle.gov/transportation/projects-and-programs/programs/healthy-streets/south-park-healthy-street.
[49] Ibid.
[50] Seattle Parks Foundation, South Park Green Space Vision Plan, June 2014. https://www.seattle.gov/documents/Departments/Environment/EnvironmentalEquity/South-Park-Green-Space-Vision-Plan_6.17.14_Final-with-Appendix.pdf.
[51] Ibid.
[52] Public health data is not available consistently at the same geographies. Some data is available for King County (PHSKC CHI) and some is available for the city of Seattle (CDC Places). The appropriate comparison is provided here and in Table 21).
[53] Seattle & King County Public Health, Community Health Indicators. https://kingcounty.gov/en/dept/dph/about-king-county/about-public-health/data-reports/population-health-data/community-health-indicators; CDC, PLACES: Local Data for Better Health, October 2024. https://www.cdc.gov/places/tools/data-portal.html. Note that CDC Places health data references BRFSS 2022 or 2021, Census 2020 population counts or census county population estimates of 2022, and ACS 2018-2022.
[54] South Park area includes South Beacon Hill, Georgetown, and South Park.
[55] CI = 95% confidence interval range. If the confidence interval overlaps with the King County or Seattle average, the value is considered "no different" than the average. If it does not overlap, it is considered "significantly higher" or "significantly lower" than the average.
[56] Data suppressed but appears to be in 2nd highest (2nd worst) quarter.
[57] Heart disease, all cancers, colorectal cancer, Alzheimer's disease, chronic lower respiratory disease, and chronic liver disease had lower death rates in the South Park area than the King County average. Breast cancer and influenza/pneumonia had suppressed data.
[58] Other indicators, such as very low birthweight, late or no prenatal care, cesarean births, and smoking during pregnancy were on par with King County average.
[59] 2020 – 2024 5-year American Community Survey (ACS), Selected Housing Characteristics. https://data.census.gov/table/ACSDP5Y2022.DP04?q=DP04&g=1400000US53033011200_160XX00US5363000.
[60] 2020 - 2024 5-year ACS, accessed via https://seattlecitygis.maps.arcgis.com/apps/dashboards/f1d03858ab394ba0ba77d09e49d1e0da.
[61] Ibid.
[62] Ibid.
[63] Ibid.

[64] South Seattle Emerald, More Affordable Housing Coming to South Park, July 14, 2021. https://southseattleemerald.org/2021/07/14/more-affordable-housing-coming-to-south-park.
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[67] Only in South Park, About Only in South Park. https://onlyinsouthpark.org/about/.
[68] U.S. Census Bureau, County Business Patterns: 2022, June 27, 2024. https://www.census.gov/data/datasets/2022/econ/cbp/2022-cbp.html.
[69] See Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts (2011) available here: https://headwaterseconomics.org/wp-content/uploads/trails-library/Trail_Study_163-U.S-Pedestrian_Bicycle_Infrastructure_National_Employment_Impacts.pdf
[70] LOS is a standard metric used by WSDOT to assess operational performance on individual facilities and intersections, but it does not establish thresholds for acceptable regional traffic change at a planning level. As such, LOS analysis is deferred to a later, project-level analysis rather than being applied in this comparative scenario evaluation.
[71] **Regional Traffic evaluation thresholds:** The FHWA Traffic Monitoring Guide documents that major freeways typically fluctuate by 3–5 percent under normal daily or seasonal conditions, meaning changes within ±5 percent fall within expected variability and can be reasonably classified as "No Change." Above that range, multiple sources show that performance becomes more sensitive. The Highway Capacity Manual (HCM), 7th Edition (2022) identifies that 5–10 percent increases in traffic can influence the volume-to-capacity ratio and degrade travel-time reliability on constrained corridors, supporting the use of this band as a "Noticeable Change." Changes above 10 percent are considered "Substantial". The use of percentage-based ranges also aligns with PSRC's modeling practice in the Regional Transportation Plan Supplemental Environmental Impact Statement, which evaluates corridor-level mobility impacts using relative (percent) differences rather than fixed volume thresholds. Taken together, these sources provide a basis for applying the thresholds used in this analysis.
[72] **Regional Freight Traffic evaluation thresholds:** The FHWA Freight Management and Operations Handbook shows that even small (1–2 percent) changes in the truck share of traffic can influence corridor performance because heavy vehicles require greater headway and reduce effective capacity more quickly than passenger vehicles. The HCM similarly identifies that a 1–2 percent increase in truck share can translate to a 3–6 percent increase in effective demand once heavy-vehicle adjustment factors are applied—large enough to affect reliability on constrained corridors and a noticeable change for users. The WSDOT Design Manual identifies freight volumes as a sensitivity factor in traffic operations and mobility performance, recognizing that modest shifts in truck percentages can affect reliability. Changes above 2 percent relative truck share can be considered "Substantial". Taken together, these sources provide a basis for applying the thresholds used in this analysis.
[73] Travel times generated from Google Maps typical driving times.
[74] A more detailed intersection-level LOS and delay analysis was not developed for this assessment. More detailed analysis of this type would be developed as part of a future phase of study and refinement.
[75] **VMT evaluation thresholds:** Three factors guided the development of these thresholds:

1. Normal variability and model sensitivity.
The FHWA Traffic Monitoring Guide documents that daily volumes on urban streets—including arterials—commonly fluctuate by up to ~10 percent due to normal variation. At changes below this level, people are unlikely to perceive a meaningful difference in local traffic conditions. This supports using ±10 percent as the "No Change" range.

2. When changes become perceptible in the neighborhood.
FHWA's noise guidance and EPA's MOVES sensitivity analysis indicate that noticeable

differences in noise, air pollution, and exposure typically require 10–20 percent changes in traffic activity. The HCM also shows that multimodal comfort and speed–flow relationships on local streets usually shift only after moderate volume changes. These findings support classifying 10–25 percent changes as "Noticeable."

3. When traffic changes produce measurable exposure or operational effects. Research used by EPA, the Centers for Disease Control (CDC), and the California Office of Policy and Research (OPR) VMT framework indicates that decreases or increases of 20–25 percent or more can meaningfully alter emissions, noise exposure, or neighborhood-level traffic experience. These findings align with using >25 percent as a "Substantial Change" in local VMT.

[76] Washington Spatial Data, WSDOT – Seismic Lifelines, updated October 7, 2025. https://geo.wa.gov/datasets/WSDOT::wsdot-seismic-lifelines/explore?location=47.441270%2C-120.879102%2C8.

[77] Washington Emergency Management Division, Washington State Enhanced Hazard Mitigation Plan, October 1, 2023. https://mil.wa.gov/asset/651ec296d76a9/2023_WA_SEHMP_final_20231004.pdf.

[78] Pollution-generating impervious surface (PGIS) area includes roadways and other areas subject to vehicular use, including roadways. Sidewalks and trails are not considered PGIS.

[79] **Impervious surface evaluation thresholds:** Two principles guided the development of these thresholds:

1. **Minimal impervious surface quantity can change watershed biology:** EPA notes that changes to watershed characteristics can occur with as little as 10% impervious surface. Even small changes in impervious surface areas can affect multiple aspects of the natural world. +/- 5% is a threshold within which no change would be noticeable.
2. **Larger reductions in impervious surface can have multiple benefits:** The Low Impact Development Technical Guidance Manual for Puget Sound notes that using stormwater retention strategies and 40-50 percent open space preservation in higher density areas can restore hydrologic conditions to pre-development conditions. Greater than 10% increase or decrease in impervious surface would begin to yield substantial benefits for environmental quality.

[80] Seattle Times, Full Cleanup Begins at Lower Duwamish Superfund Site, December 11, 2024. https://www.seattletimes.com/seattle-news/climate-lab/full-cleanup-begins-at-lower-duwamish-superfund-site/.

[81] **Urban Heat Island Mitigation thresholds:** While there are no national standards, research indicates that tree canopy >40% provides substantial benefit for reducing temperatures. Because there is almost no tree canopy within the SR 99 ROW today, this has been set as the threshold for providing substantial benefit.

[82] Seattle & King County, Heat Watch Report, 2020. https://your.kingcounty.gov/dnrp/climate/documents/2021-summary-report-heat-watch-seattle-king-county.pdf.

[83] City of Seattle, Preparing for Climate Change Comprehensive Report, August 2017. https://www.seattle.gov/documents/Departments/Environment/ClimateChange/SEAClimatePreparedness_August2017.pdf.

[84] University of Washington, Projected Sea Level Rise for Washington State – A 2018 Assessment, July 2018. https://cig.uw.edu/wp-content/uploads/sites/2/2019/07/SLR-Report-Miller-et-al-2018-updated-07_2019.pdf.

[85] Seattle Public Utilities, South Park Sea Level Rise Adaptation Vision Summary, January 21, 2021. https://www.seattle.gov/documents/Departments/OSE/Duwamish/South%20Park%20Sea%20Level%20Rise%20Adaptation%20Strategy%20-%20Final%20Summary%20%282%29.pdf.

[86] University of Washington, Projected Sea Level Rise for Washington State – A 2018 Assessment, July 2018. https://cig.uw.edu/wp-content/uploads/sites/2/2019/07/SLR-Report-Miller-et-al-2018-updated-07_2019.pdf.
[87] U.S. Geological Survey, Future Coastal Groundwater Hazards in the Puget Sound Region, Washington, U.S.A., April 27, 2024. https://doi.org/10.5066/P946YX5G.
[88] Seattle GeoData, Seattle Tree Canopy 2021, updated June 13, 2023. https://data-seattlecitygis.opendata.arcgis.com/datasets/SeattleCityGIS::seattle-tree-canopy-2021/about.
[89] King County, Tracts with Percentage of Tree Canopy, updated June 23, 2025. https://kingcounty.maps.arcgis.com/home/item.html?id=341c3dd445ff43fd9645dd47a1fe0ae5
[90] Seattle GeoData, Seattle Tree Canopy 2016 2021 Block Groups, May 30, 2023. https://services.arcgis.com/ZOyb2t4B0UYuYNYH/arcgis/rest/services/Tree_Canopy_Block_Groups_2016_2021/FeatureServer.
[91] King County, 30-year Forest Plan, February 2021. https://your.kingcounty.gov/dnrp/library/water-and-land/forestry/30-year-forest-plan/30-year-forest-plan-03-2021.pdf.
[92] Washington Spatial Data, WSDOT – Fish Passage Injunction Barrier List – Current, updated May 5, 2026. https://geo.wa.gov/datasets/WSDOT::wsdot-fish-passage-injunction-barrier-list-current/about.
[93] U.S. Fish & Wildlife Service, Critical Habitat, March 2017. https://www.fws.gov/sites/default/files/documents/critical-habitat-fact-sheet.pdf.
[94] U.S. Fish & Wildlife Services, National Wetlands Inventory Mapper, accessed March 5, 2025. https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.
[95] WSDOT, 2025-27 Capital Improvement and Preservation Program Executive Summary, September 2024. https://wsdot.wa.gov/sites/default/files/2024-10/2025-27CIPPExecutiveSummary.pdf.
[96] PSRC, Vision 2050: A Plan for the Central Puget Sound Region, October 2020. https://www.psrc.org/planning-2050/vision-2050.
[97] City of Seattle, One Seattle Plan, September 2025. https://www.seattle.gov/opcd/one-seattle-plan.
[98] Seattle Department of Transportation, Seattle Transportation Plan: A Vision for the Future of Transportation in Seattle, May 2024. https://www.seattle.gov/transportation/about-us/seattle-transportation-plan.
[99] The National Highway System is a series of roadways important to the nation's economy, defense and mobility.
[100] RCW 47.17.160, State Route No. 99. https://app.leg.wa.gov/rcw/default.aspx?cite=47.17.160
[101] 23 CFR Part 470 – Highway Systems. https://www.ecfr.gov/current/title-23/chapter-I/subchapter-E/part-470.
[102] WSDOT, Guidelines for Amending Functional Classification in Washington, October 2013. https://wsdot.wa.gov/sites/default/files/2021-08/GuidelinesForAmendingFunctionalClassification_WSDOT.pdf; WSDOT, Begin Functional Classification Request Process Flow Chart, March 2016. https://wsdot.wa.gov/sites/default/files/2021-08/FunctionalClassFlowchart.pdf.
[103] See additional detail on the Access Revision Request process here: https://wsdot.wa.gov/publications/manuals/fulltext/m22-01/550.pdf.