Transit Speed & Reliability Annual Spot Improvements Report 2025

Published January 2026

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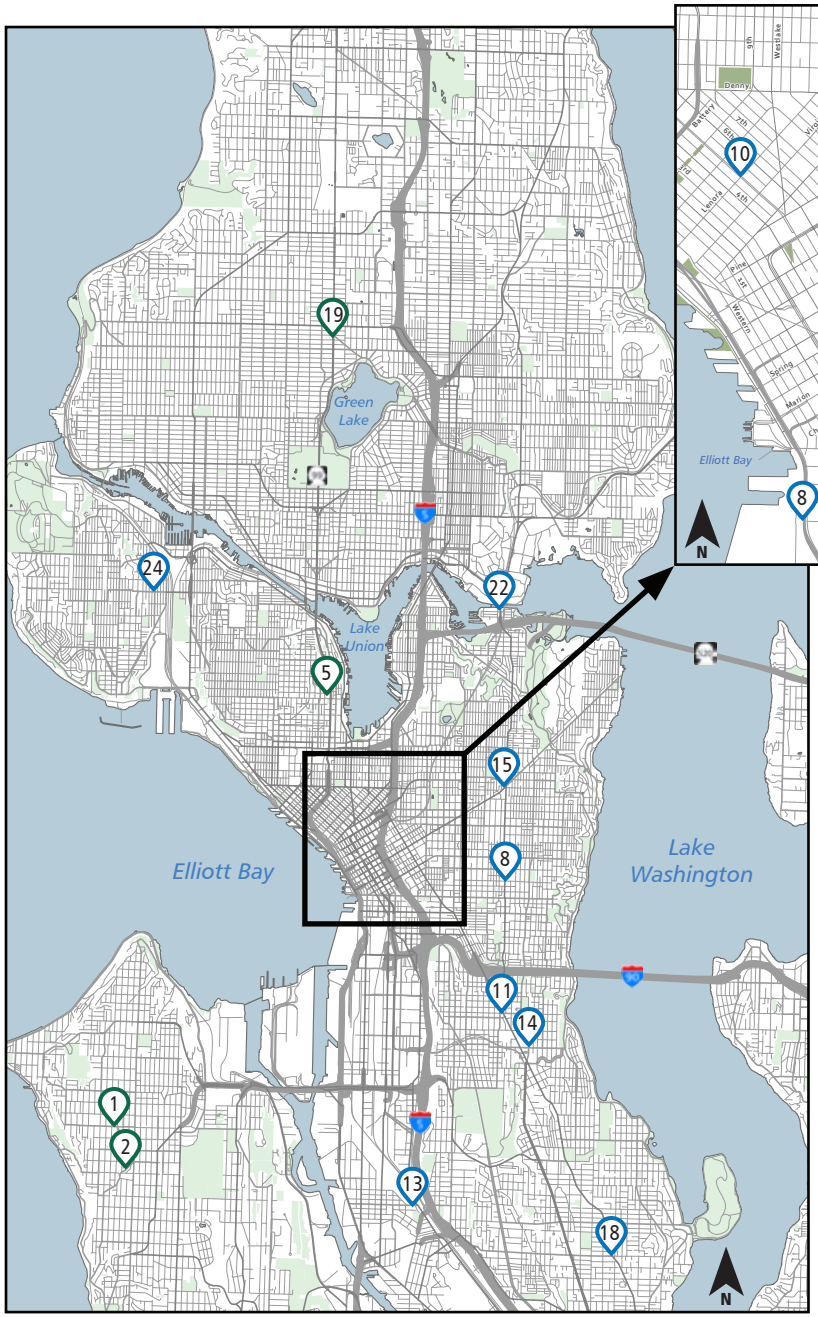
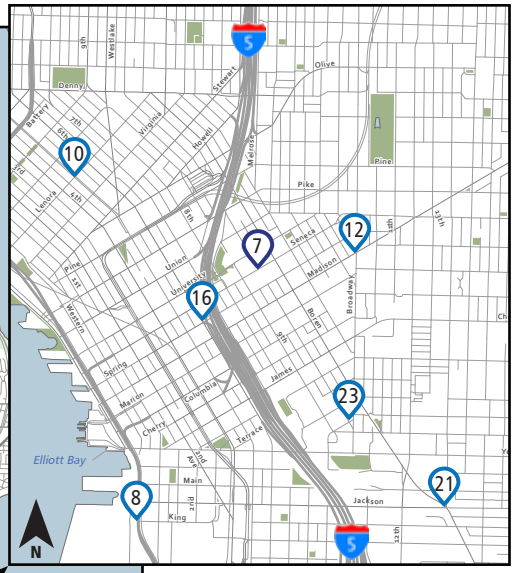
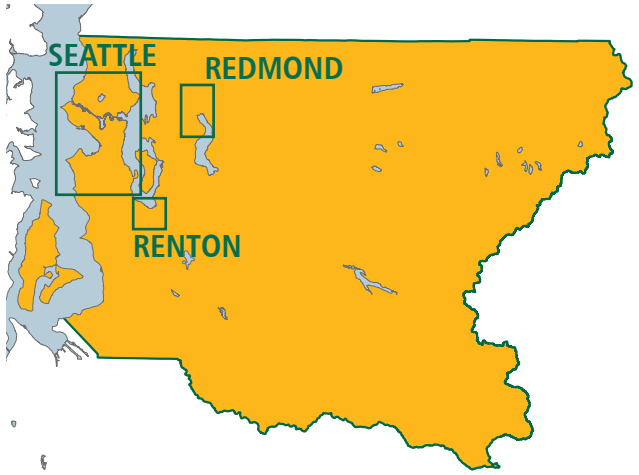
TABLE OF CONTENTS

SEATTLE

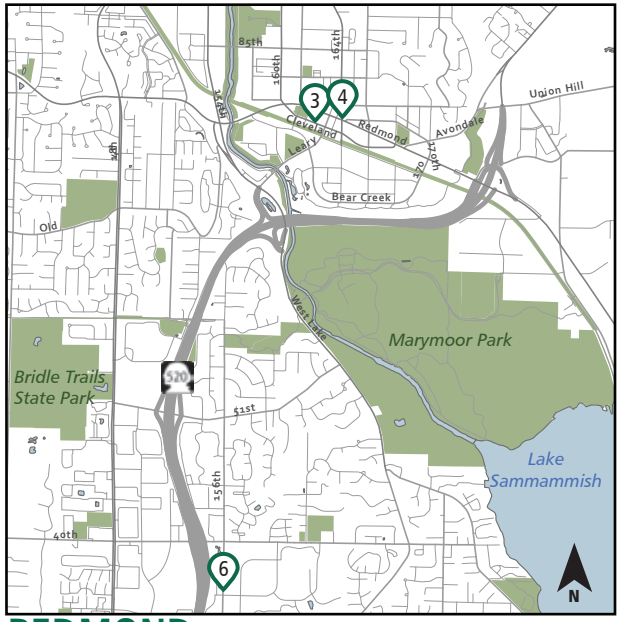




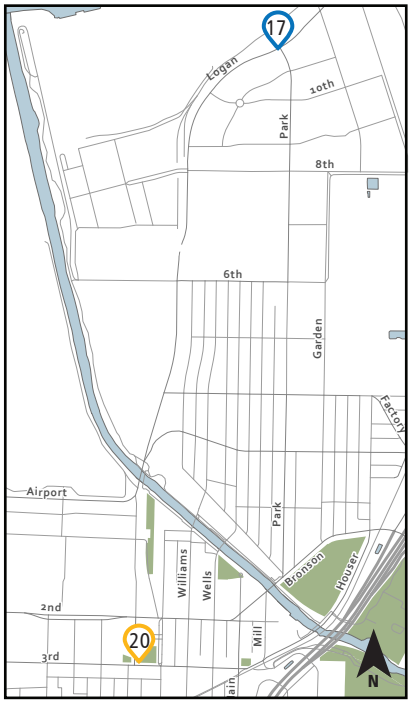
DOWNTOWN



KING COUNTY



REDMOND



RENTON

INTRODUCTION

This annual report describes the spot improvements implemented in 2025 by local jurisdictions on behalf of King County Metro's Speed & Reliability group. Spot improvements are low-cost capital investments aimed at improving traffic problems and operational issues that affect bus travel times and reliability. Spot improvement projects are pursued to improve existing transit service or to support planned service restructures. Spot improvements can range in complexity from less complex projects, such as traffic signal timing adjustments, to more-complicated projects requiring design and public outreach, such as new bus-only lanes. Some projects support the safer operation of buses on city-owned streets by minimizing potential conflict with other roadway users; this results in safer and more-reliable transit operation, and reduced operator stress. All benefits from spot improvements help Metro deliver higher-quality service at lower cost and will increase attraction to public transit as a travel mode of choice.

The Spot Improvement Program supports King County Metro Mobility Framework policy recommendations to implement investments that increase speed, reliability, and safety. Spot improvement projects utilize a set of transit supportive strategies identified in Metro's 2021 Transit Speed & Reliability Guidelines and Strategies. Examples of these transit supportive strategies are shown in the Speed and Reliability Toolbox Table on the following page, and the improvements featured in this report are grouped by strategy type.

In 2025, Metro's Speed & Reliability group's focus was on the planning for capital project investments to support the later stages of the East and Lynnwood Link Connections project, to prepare roadways and intersections to accommodate new bus routes that will be implemented when Sound Transit's 2 Line opens across the lake and when the Pinehurst Station opens. Also several projects have been in the works to support the South Link Connections Project, which will implement bus new routes in 2026.

Another significant effort in 2025 has been preparing for "Revive I-5" work that started in 2025 and will continue through 2027. With cooperation with WSDOT and SDOT, several improvements along Aurora Ave N (SR-99) have been implemented to help the E-Line, Metro's busiest route, maintain speedy and reliable operations along this corridor even as more traffic moves to this corridor.

The success of each implementation was made possible with the support of cities and their willingness to make operational changes to roadway infrastructure and traffic signal systems to benefit transit riders; many improvements provide benefits to other roadway users as well. In addition, several projects completed this year were made possible through funding by a WSDOT Regional Mobility Grant.

For additional information regarding this program, please contact Owen Kehoe at 206-477-5811 or via email at owen.kehoe@kingcounty.gov.

YEAR IN REVIEW

Spot Improvement program 2025 expenditures: $680,000 for investments to existing transit routes, and $907,000 for improvements on modified transit routes to support service restructures in anticipation for the opening of new RapidRide Lines as well as Sound Transit LINK feeder routes. The total cost of improvements is $1,587,000 to cover Metro staff time and reimbursed city costs to develop conceptual designs, develop final designs (when needed), construct improvements, as well as administer the spot improvement program as a whole.

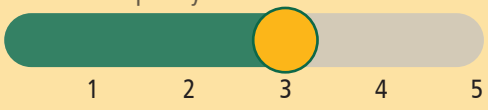
The **24** Spot improvement projects highlighted in this report benefited:

- **215,000 Weekday Riders**
- **37 Bus Routes**

Resulting in:

- **Approximately $390,000 in avoided additional operating cost annually that would otherwise be spent maintaining schedule reliability each year.**
- **Improved operational safety at 16 locations in 2025.**

Spot improvements can range in complexity depending on the level of jurisdictional coordination, public outreach, design work, and funding sources needed. The complexity of the projects presented in this report are rated on a 1-5 scale, a "1" being the least complex project, for example a signal timing adjustment, to "5" for the most complicated of the projects, such as new bus-only lanes.



CHALLENGES

STRATEGY	CONGESTION: INTERSECTION	CONGESTION: ROADWAY	CONGESTION: FREEWAY ON-RAMP	DELAY: SIGNAL	DELAY: RIGHT TURN	DELAY: LEFT TURN	DELAY: OTHER, TRAFFIC RELATED	OPERATIONS: INEFFICIENT ROUTE DESIGN	OPERATIONS: LEAVING BUS STOP	OPERATIONS: DWELL TIME	OPERATIONS: BUS ZONE CAPACITY	SAFETY: PEDESTRIANS	SAFETY: CYCLISTS	SAFETY: MOTORISTS	COST	COORDINATION
A. Street and Intersection Design																
Dedicated Bus Lane	◆◆◆	◆◆◆		◆◆◆	◆◆◆	◆◆◆		◆◆	◆◆	◆◆◆	◆◆		◆	◆◆	$ - $$$$	High
Queue Bypass (Short Bus Lane)	◆◆◆	◆◆	◆◆		◆◆	◆◆	◆◆	◆◆	◆◆			◆	◆		$ - $$$$	High
Roadway Channelization	◆			◆	◆◆	◆◆		◆	◆			◆	◆	◆	$	Low/Medium
Turn Radius Improvements		◆			◆◆	◆◆									$$$	Medium
Speed Hump Modifications							◆◆								$ - $$	Low
B.Bus Stops and Routing																
Bus Stop Location	◆			◆				◆	◆◆	◆	◆	◆◆	◆◆		$$ - $$$	Medium
Route Design	◆	◆		◆				◆◆◆	◆	◆	◆				$$	High
Bus Stop Lengthening									◆	◆◆	◆◆◆				$$	High
Bus Bulbs									◆	◆◆	◆◆				$$ - $$$	High
Boarding Islands									◆	◆◆	◆◆		◆◆		$$ - $$$	High
C. Traffic Regulations																
Turn Restrictions/Exemptions	◆			◆	◆◆	◆◆	◆	◆	◆			◆	◆	◆	$	Low
Parking Removal/ Alterations		◆◆							◆◆						$	Low
D. Signals																
Passive Traffic Signal Retiming	◆◆	◆		◆◆	◆	◆		◆◆				◆	◆	◆	$ - $$	Low
Transit Signal Priority (Active)	◆◆◆			◆◆◆	◆◆◆	◆◆◆	◆◆◆	◆◆◆							$ - $$	Low
Signal Phase Modification	◆◆	◆		◆	◆		◆◆					◆			$ - $$$	Low-Medium
New Signal Installation	◆◆	◆		◆	◆		◆◆					◆			$ - $$$$	Low-Medium
Queue Jumps	◆◆◆	◆◆	◆◆		◆◆	◆◆		◆◆	◆◆			◆	◆		$ - $$$	Medium

$: UNDER $50,000
$$: $50,000-$100,000
$$$: $100,000-$250,000
$$$$: OVER $250,000

Benefits: ◆ LOW ◆◆ MEDIUM ◆◆◆ HIGH

2025 SPOT IMPROVEMENTS IN KING COUNTY

Cleveland St & 164th Ave NE

Aurora Ave N & Green Lake Dr N

23rd Ave & E Jefferson St

Alaskan Way S & S King St

1 SW OREGON ST & 44TH AVE SW

Level of Complexity

3

Street and Intersection Design

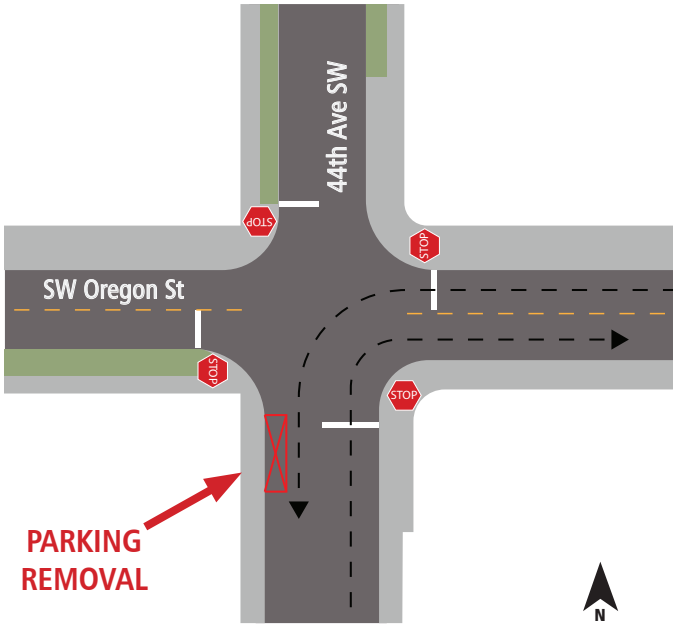
PROBLEM STATEMENT

Operators on routes in the West Seattle Junction make a left turn from Oregon St SW onto 44th St SW and the opposing right turn in the opposite direction. This movement was identified as a safety concern for operators traveling westbound on SW Oregon St who were having difficulty completing the left turn onto 44th Ave SW, particularly when an oncoming bus was making the opposing movement as there is not enough clearance for the opposing movements to occur simultaneously. Sightlines from westbound SW Oregon St downhill west of 44th can also make visibility of oncoming traffic difficult.

IMPROVEMENTS MADE

To better accommodate coaches through this intersection, SDOT added a 4-way stop to the intersection. Additionally, to support transit maneuvers, parking restrictions were implemented, removing two spaces on the southwest corner of 44th and Oregon.

These parking restrictions and new stop controls allow buses to make safe, consistent turns, improving speed, reliability, and safety in this high trafficked area.



PROJECT

METRO ROUTES

22, 50, 57, 128

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Jonathan Dong (SDOT)

SEATTLE

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

This improvement provides enhanced safety for Operators, passengers, and general purpose traffic

ROUTE BENEFIT

18 Buses Per Hour During Peak Periods

DAILY PASSENGER BENEFIT (=1000 RIDERS)

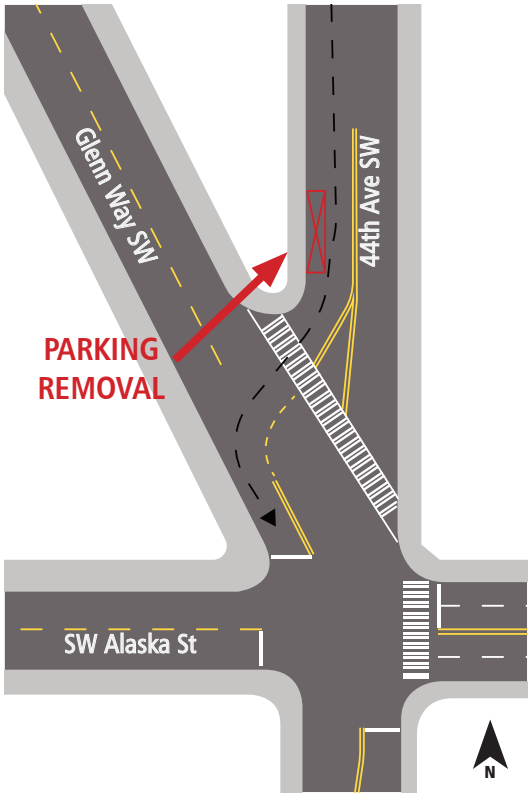
7,000 Daily Riders

Level of Complexity

3

Street and Intersection Design

GLENN WAY SW & 44TH AVE SW 2



PROBLEM STATEMENT

In the Alaska Junction, Operators must navigate a five-way stop where 44th Ave SW meets Glenn Way and SW Alaska St. Coaches must make a veered left onto Glenn Way from 44th Ave SW to immediately set up for a left turn to Alaska Way SW. Operators were encountering difficulty getting into proper set up, and were frequently unable to get a clear sightline. This location was identified as a safety concern following two collisions at the intersection.

IMPROVEMENTS MADE

SDOT implemented parking restrictions on 44th Ave SW approaching the stop at Glenn Way SW. The removal of two parking spaces provides adequate space for Operators to properly set up the coach before making the sharp turn onto Glenn Way SW.

PROJECT

SEATTLE

METRO ROUTES

50, 128

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Jonathan Dong (SDOT)

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

This improvement provides enhanced safety for Operators, passengers, and general purpose traffic

ROUTE BENEFIT

6 Buses per hour during PM Peak

DAILY PASSENGER BENEFIT (=1000 RIDERS)

6,000 Daily Riders

3 REDMOND WAY & 164TH AVE NE

Level of Complexity

1

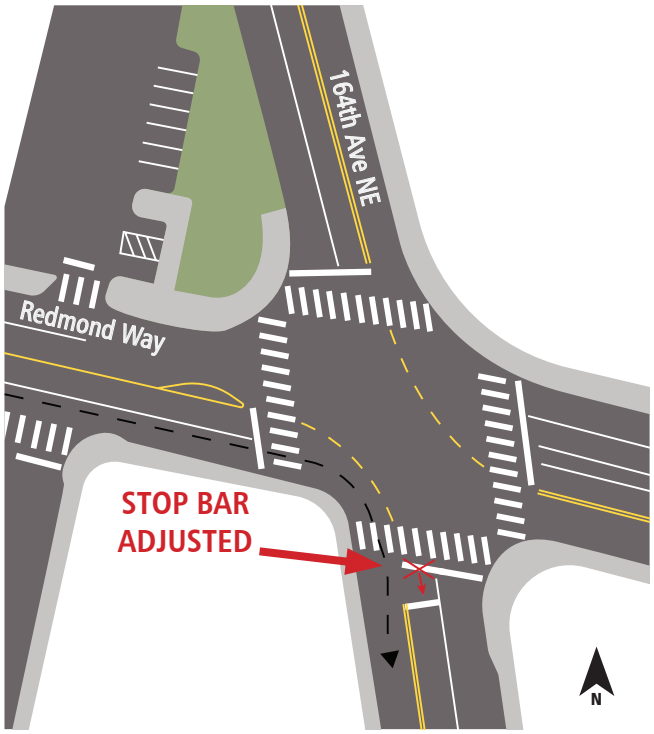
Street and Intersection Design

PROBLEM STATEMENT

As part of the East Link restructure, a new bus route – the 222 – was planned to connect the Cottage Lake and Overlake area to the new Redmond light rail station. Buses would not be able to complete the westbound right turn without crossing over the existing pavement markings.

IMPROVEMENTS MADE

In order to accommodate the operation of the Route 222 as part of the East Link Restructure effort, the northbound left stop bar was set back at Redmond Way and 164th Ave NE in order to provide adequate space for buses to complete their turn.



Eastlink Service Restructure

PROJECT

METRO ROUTES

222

PROJECT PARTNERS

Redmond WASHINGTON

ACKNOWLEDGMENTS

Isabel Diaz, Paul Cho (City of Redmond)

REDMOND

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

This improvement upgraded safety for the new Route 222 ahead of the East Link Restructure

ROUTE BENEFIT

3 Buses Per Hour

DAILY PASSENGER BENEFIT (=1000 RIDERS)

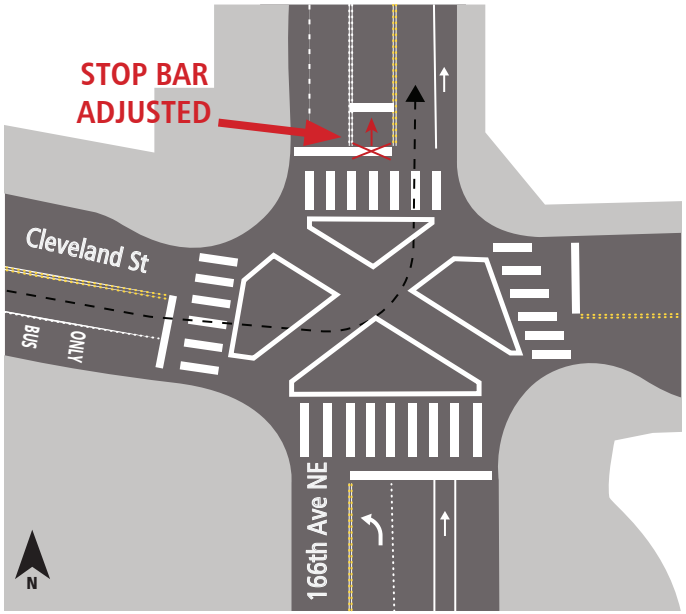
617 Daily Riders

Level of Complexity

2

CLEVELAND ST & 166TH AVE NE 4

Street and Intersection Design



PROBLEM STATEMENT

As part of the East Link restructure, a new bus route – the 222 – was planned to connect the Cottage Lake and Overlake area to the new Redmond light rail station. Buses would not be able to complete the left turn from Cleveland St to 166th Ave NE.

IMPROVEMENTS MADE

The existing intersection at Cleveland Ave and 166th Ave NE was rebuilt as part of the Downtown Redmond Link extension. The southbound left stop bar was set back in order to accommodate Route 222 buses making the left turn from Cleveland Ave onto 166th Ave NE.

Eastlink Service Restructure

PROJECT

REDMOND

METRO ROUTES

222

PROJECT PARTNERS

Redmond WASHINGTON

ACKNOWLEDGMENTS

Isabel Diaz, Paul Cho (City of Redmond)

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

This improvement upgraded safety for the new Route 222 ahead of the East Link Restructure

ROUTE BENEFIT

3 Buses Per Hour

DAILY PASSENGER BENEFIT (=1000 RIDERS)

617 Daily Riders

5 AURORA AVE N (PROSPECT ST TO LYNN ST)

Level of Complexity

2

Street and Intersection Design

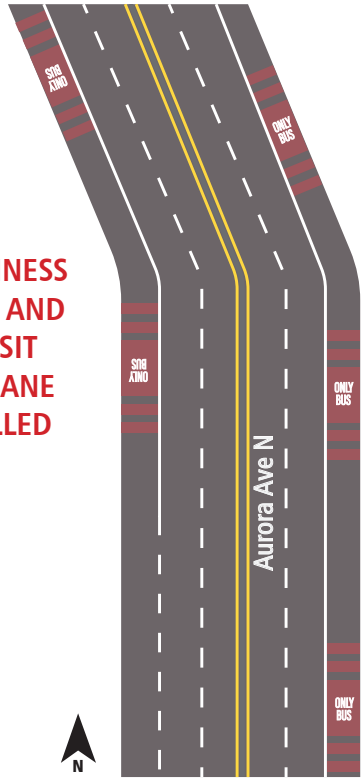
PROBLEM STATEMENT

Northbound buses were experiencing delay in this location which led to a decrease in reliability for the E Line and Route 5. During the COVID-19 pandemic, collaboration between Metro and SDOT identified northbound BAT lanes as an improvement to increase transit speed and reliability.

IMPROVEMENTS MADE

A new northbound BAT lane, and associated signage was installed from Prospect Street to Lynn Street as part of the SDOT and Metro effort to prioritize critical bus routes. These new BAT lanes are part of a multi-phase approach to improving Aurora Avenue and will be an important tool for keeping buses moving during the "Revive I-5" construction work.

NB BUSINESS ACCESS AND TRANSIT (BAT) LANE INSTALLED



PROJECT

METRO ROUTES

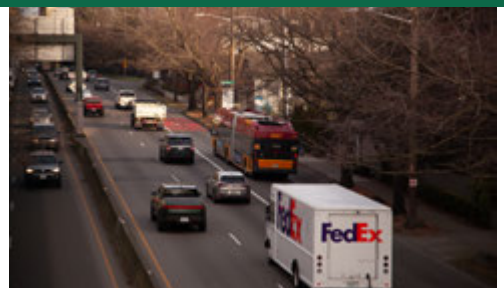
5, 28X, E Line

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Christine Alar (SDOT)



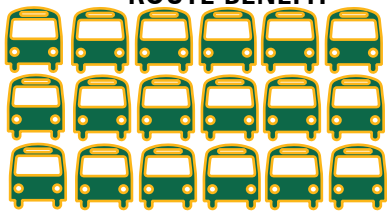
SEATTLE

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

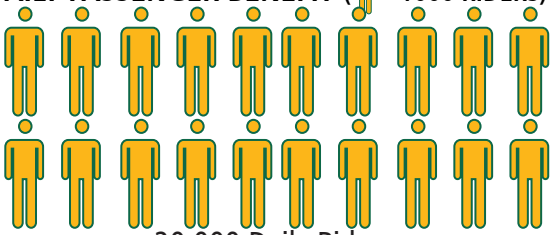
40 Seconds
Savings per trip in the PM peak period between March and October 2025

ROUTE BENEFIT



18 Buses Per Hour during PM Peak

DAILY PASSENGER BENEFIT (=1000 RIDERS)



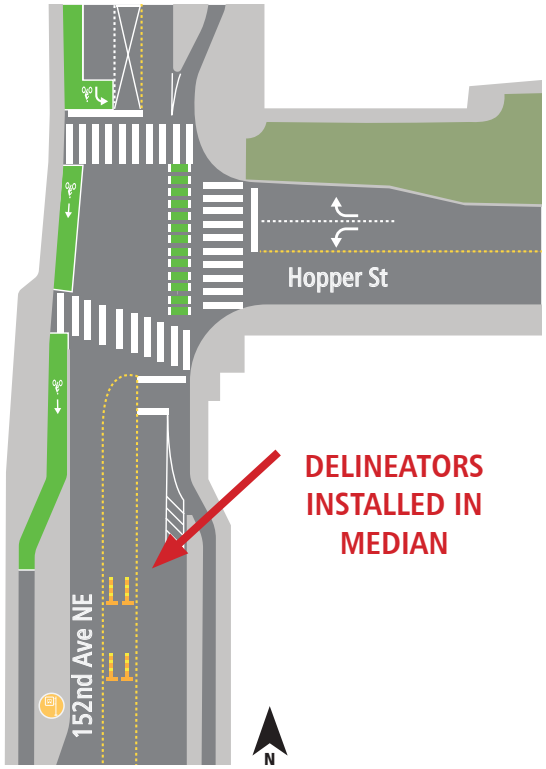
20,000 Daily Riders

Level of Complexity

1

152ND AVE NE AT HOPPER ST (OVERLAKE P&R) 6

Street and Intersection Design



Eastlink Service Restructure

PROBLEM STATEMENT

Operators reported a safety concern when serving the bus zones at Overlake Park and Ride. When stopped, vehicles would frequently use the left turn and hatched median lane to pass from the left side. This maneuver creates a safety issue for passengers alighting from the bus, and for Operators pulling away from the zone.

IMPROVEMENTS MADE

City of Redmond added delineators in the median so that vehicles can no longer pass stopped buses. This improvement reduces the potential for collisions and creates a safer pedestrian environment for riders crossing at the nearby crosswalk when boarding or alighting the bus.

PROJECT

REDMOND

METRO ROUTES

222, 223

PROJECT PARTNERS

Redmond WASHINGTON

ACKNOWLEDGMENTS

Isabel Diaz (City of Redmond)

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

8 Seconds

Savings per trip between August and October 2025

ROUTE BENEFIT

5 Buses Per Hour

DAILY PASSENGER BENEFIT (=1000 RIDERS)

1,600 Daily Riders

7 9TH AVE & SENECA ST

Level of Complexity

1

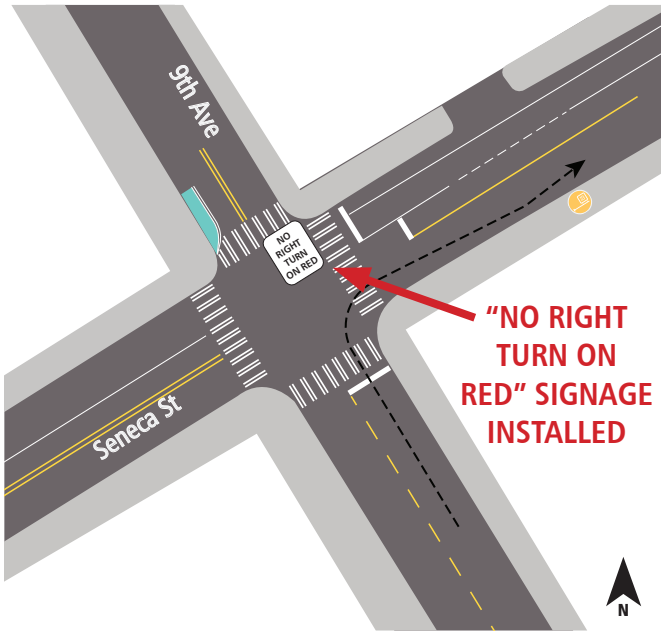
Traffic Regulations

PROBLEM STATEMENT

Operators make a right turn from 9th Ave to Seneca St and serve the bus stop on Seneca St, east of 9th Avenue. General purpose vehicles making right turns from northbound 9th Avenue to eastbound Seneca St during the red light phase do not have a clear view of a bus stopped in the zone. This caused a safety concern that a collision may occur when operators pull away from the bus zone while right turning traffic was attempting to turn onto Seneca St at the same time.

IMPROVEMENTS MADE

To address the safety concerns, Metro worked with SDOT to ensure the intersection was signed as No Right Turns On Red. This signage ensures operators serving the bus zone on Seneca St can safely pull back into traffic without a vehicle turning into their blind spot.



PROJECT

METRO ROUTES

2, 193, 630

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Jonathan Dong, Fred Perez (SDOT)
Central Base Safety Committee (KCM)

SEATTLE

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

This improvement upgraded safety for routes serving the Virginia Mason Hospital

ROUTE BENEFIT

10 Buses Per Hour during AM Peak

DAILY PASSENGER BENEFIT (=1000 RIDERS)

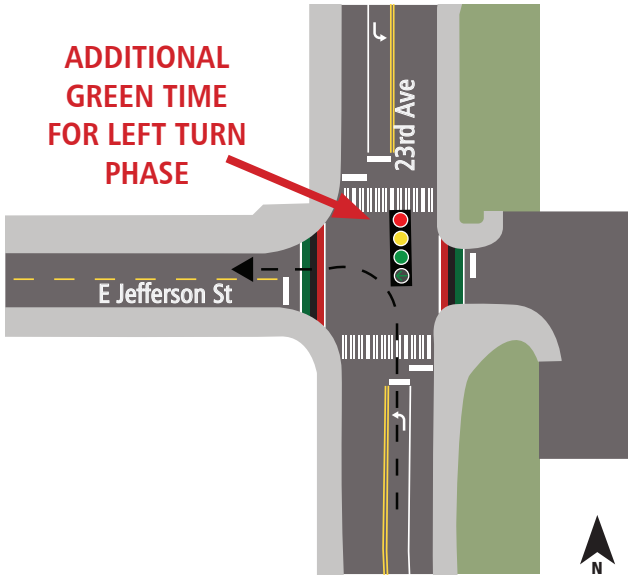
4,500 Daily Riders

Level of Complexity

2

Signals

23RD AVE & E JEFFERSON ST 8



PROBLEM STATEMENT

Operators reported delay when attempting to make the northbound left turn from 23rd Ave to E Jefferson St, particularly for trips happening in the overnight and early-morning time periods. Investigation showed that buses were frequently waiting for the left turn signal to turn green at this location.

IMPROVEMENTS MADE

To address the delay for left turning buses, SDOT made signal adjustments along the 23rd Ave corridor to address signal offsets for more efficient signal operations. Addressing signal offsets allows operators, particularly in the overnight periods, to make the left turn during a green phase while not negatively impacting northbound and southbound operations of the Route 48.

PROJECT

SEATTLE

METRO ROUTES

3, 4

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Laura Wojcicki, Andrew Natzel (SDOT)

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

19 Seconds

Savings per trip during the overnight period between August and October 2025

ROUTE BENEFIT

3 Buses Per Hour during Overnight Period

DAILY PASSENGER BENEFIT (=1000 RIDERS)

8,000 Daily Riders

9 ALASKAN WAY S & S KING ST

Level of Complexity

2

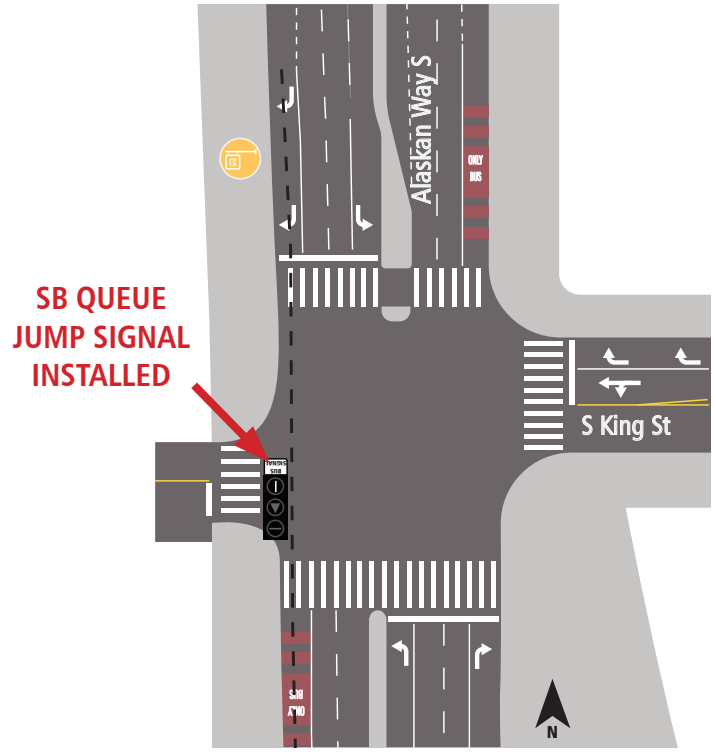
Signals

PROBLEM STATEMENT

Buses had a difficult time merging into general traffic south of the Alaskan and King St. Intersection after serving the bus zone at Alaskan Way and Jackson St in the southbound direction. This merge also presented a safety concern as vehicles would be confined between the end of the bus lane and the curb taper with no room to move over.

IMPROVEMENTS MADE

A SB queue jump was installed to allow for buses to have more time to reenter traffic, the intersection timing was also updated to reflect the new queue jump. Additionally, work was performed later in 2025 to improve the operation of the queue jump.



PROJECT

METRO ROUTES

21E, 56, 57, 113, 125, C Line, H Line

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Laura Wojcicki (SDOT)

SEATTLE

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

This improvement upgraded safety for all traffic

11 Seconds

Savings per trip between October 2024 and 2025

ROUTE BENEFIT

20 Buses Per Hour during Peak Periods

DAILY PASSENGER BENEFIT (=1000 RIDERS)

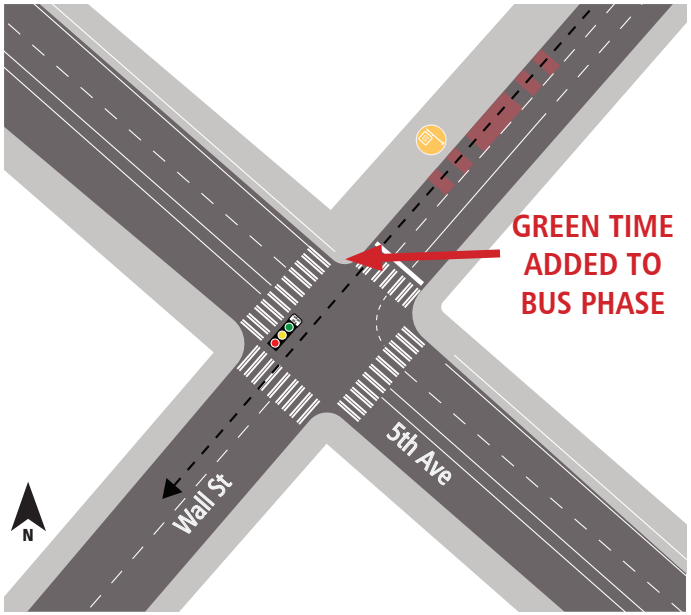
17,800 Daily Riders

Level of Complexity

1

Signals

5TH AVE & WALL ST 10



PROBLEM STATEMENT

Operators of the Routes 5, 28 and E Line serve a near-side bus stop on Wall St at 5th Avenue. The far-side of the intersection only has two receiving lanes, and buses must merge after serving the bus stop. To support bus operations, a transit queue jump helps operators begin the movement before general purpose traffic receives a green light. Operators reported issues with the queue jump at the intersection of 5th Ave and Wall St and highlighted unsafe merging conditions on the far-side of the intersection.

IMPROVEMENTS MADE

SDOT increased the amount of green time given to the queue jump phase prior to the start of the general purpose green phase. Operators are now able to move through the intersection and safely merge into the appropriate travel lane after serving the bus stop on 5th Ave & Wall St.

PROJECT

SEATTLE

METRO ROUTES

5, E Line

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Andrew Natzel (SDOT)

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

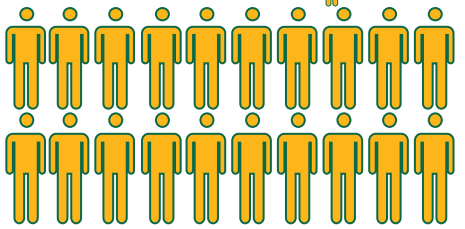
9 Seconds

Savings per trip between October 2024 and 2025

ROUTE BENEFIT

15 Buses Per Hour during Peak Periods

DAILY PASSENGER BENEFIT (=1000 RIDERS)



20,000 Daily Riders

11 RAINIER AVE S & S GRAND ST

Level of Complexity

1

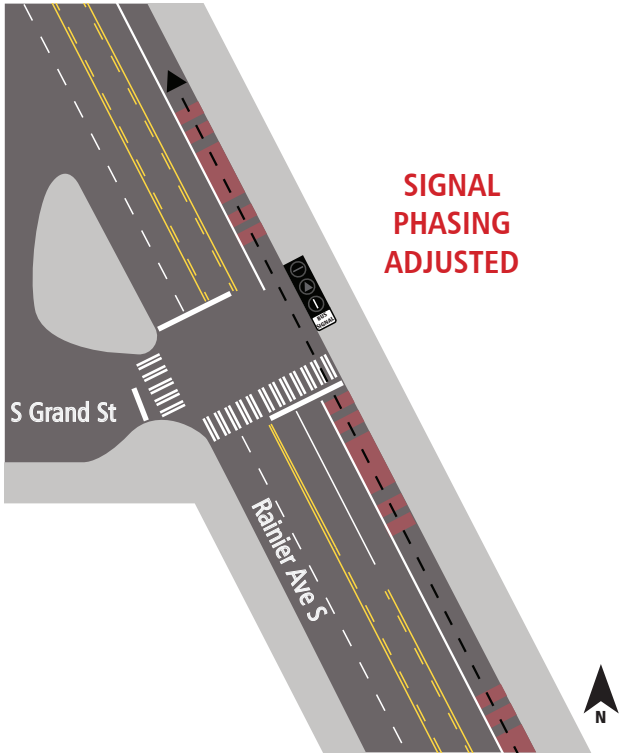
Signals

PROBLEM STATEMENT

Recent SDOT improvements along Rainier Ave S included a new pedestrian signal at S Grand St. The signal allows pedestrians to get across Ranier Ave S, but was being called on a regular basis, instead of when pressed, as originally planned. Additionally, once triggered, the pedestrian phase was too long which caused delay for the through movement on Rainier Ave S.

IMPROVEMENTS MADE

SDOT worked to improve the connection and signal timing of this light to better prioritize through movements on Rainier Ave S unless the pedestrian phase was activated through the push button. This improvement reduced the frequency of false calls for the pedestrian phase, and improved travel time for the Route 7.



PROJECT

METRO ROUTES

7, 9X, 106

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Laura Wojcicki (SDOT)

SEATTLE

TRANSIT BENEFITS

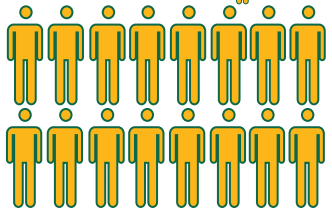
OPERATIONAL IMPROVEMENTS

37 Seconds
Savings per trip in the PM peak period between March and October 2025

ROUTE BENEFIT

13 Buses Per Hour during Peak Periods

DAILY PASSENGER BENEFIT (=1000 RIDERS)



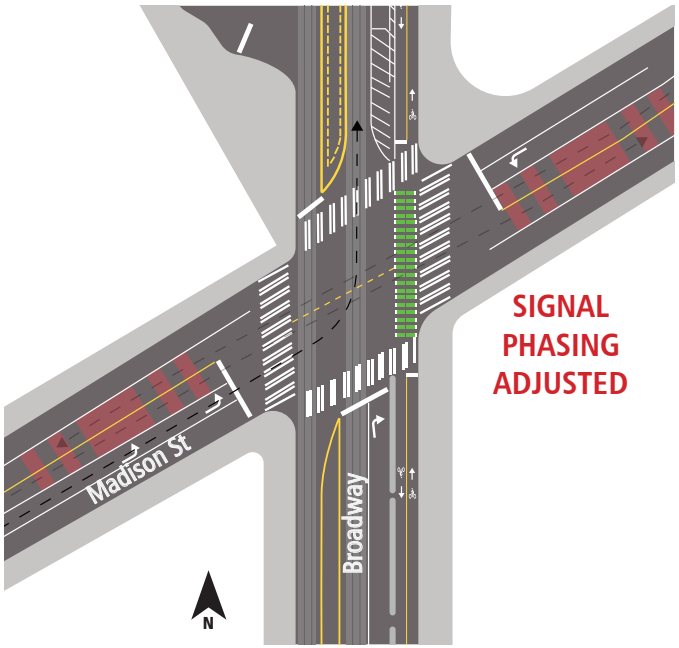
16,000 Daily Riders

Level of Complexity

3

Signals

MADISON ST AND BROADWAY 12



SIGNAL PHASING ADJUSTED

PROBLEM STATEMENT

Narrow lanes on the west leg of Madison and Broadway did not provide enough room if there was a G Line bus in the center lane, and a Route 60 bus next to it in the eastbound left turn lane. The narrow nature of the lanes at this location created safety concerns, and made it difficult for Operators of the Route 60 to get into position to make the left turn, adding transit delay to the intersection.

IMPROVEMENTS MADE

SDOT changed the signal phase order for the eastbound and westbound left turns. Now, the through traffic goes first, then the left turners follow. This allows G Line buses to get through the intersection before Operators of the Route 60 buses arrive at the intersection, which allows Route 60 buses to make the left turn from the middle lane with less transit delay.

PROJECT

SEATTLE

METRO ROUTES

60, G Line

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Laura Wojcicki, Andrew Natzel (SDOT)

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

This improvement upgraded safety for all traffic

15 Seconds

Savings per trip between May and October 2025

ROUTE BENEFIT

15 Buses Per Hour during Peak Periods

DAILY PASSENGER BENEFIT (=1000 RIDERS)

13,000 Daily Riders

13 AIRPORT WAY S & S LUCILE ST

Level of Complexity

2

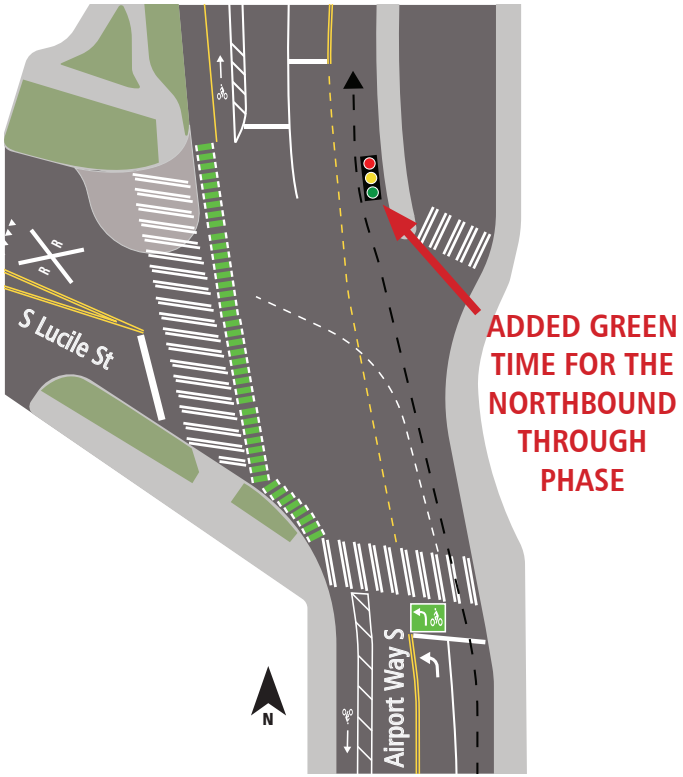
Signals

PROBLEM STATEMENT

SDOT completed a substantial intersection redesign at Airport Way S and S Lucille St, adding new bike lanes and removing a slip lane for southbound right turning traffic. The new configuration led to substantial queuing in the northbound direction approaching Lucile St, which caused the Route 124 to frequently miss the green light. As a result, operators would have to wait an additional cycle before moving through the intersection.

IMPROVEMENTS MADE

SDOT provided an additional four seconds of green time for the northbound through movement. This additional green time provides a benefit to all road users, allowing both general purpose traffic and transit service to move through the intersection with greater ease.



PROJECT

METRO ROUTES

124

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Andrew Natzel (SDOT);
Ryerson Base Safety Committee (KCM)

SEATTLE

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

5 Seconds
Savings per trip in the AM peak period between May and August 2025

ROUTE BENEFIT

4 Buses Per Hour during Peak Periods

DAILY PASSENGER BENEFIT (=1000 RIDERS)

3,000 Daily Riders

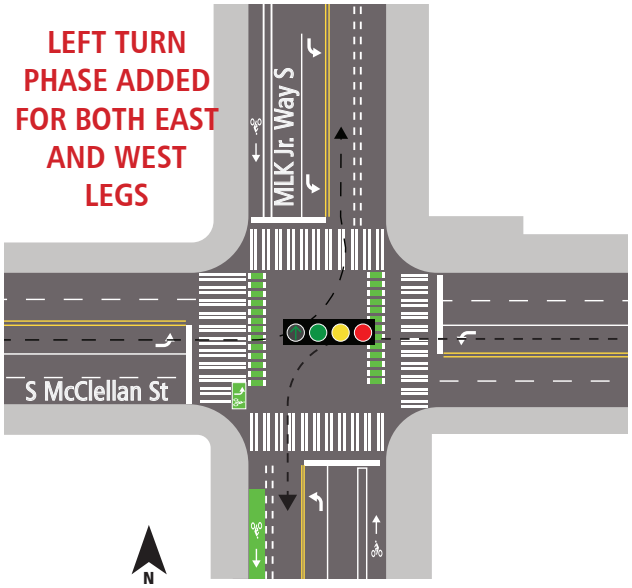
Level of Complexity

2

Signals

MARTIN LUTHER KING JR. WAY S & S MCCLELLAN ST

14



PROBLEM STATEMENT

Routes 8 makes an eastbound left turn and the Route 14 makes a westbound left from McClellan St to MLK Jr. Way. The left turning movements were unprotected here, requiring operators to wait for a gap in traffic, frequently leading to delay.

IMPROVEMENTS MADE

Protected eastbound and westbound left turn phases were installed as part of the SDOT MLK Jr. Way protected bike lane project. Additional timing adjustments were performed in order to maximize the amount of time for the east and west movements at the intersection.

PROJECT

SEATTLE

METRO ROUTES

8, 14

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Bruce Newman (SDOT)

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

30 Seconds
Savings per trip in the AM and PM peaks between September 2024 and December 2025

ROUTE BENEFIT

9 Buses Per Hour during Peak Periods

DAILY PASSENGER BENEFIT (=1000 RIDERS)

9,500 Daily Riders

15 23RD AVE E & E MADISON ST

Level of Complexity

1

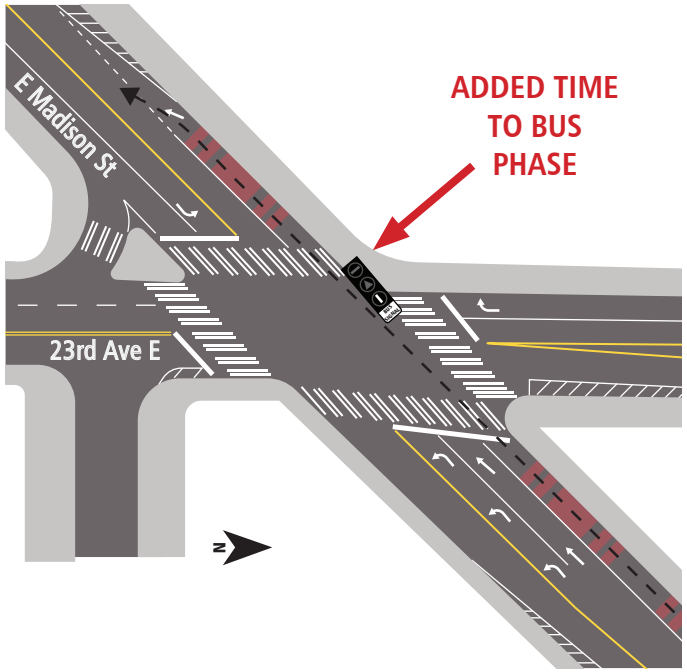
Signals

PROBLEM STATEMENT

Operators on the G Line reported the bus signal at the intersection of 23rd Ave E and E Madison St was not being called early enough. Field observations revealed that the bus signal was not providing enough time for G Line buses to move through the intersection before merging into a general purpose lane on the far side.

IMPROVEMENTS MADE

SDOT made adjustments to the signal timing that provided additional green time to the bus signal phase. This improvement allows operators to move through the intersection and merge into traffic before general purpose traffic, reducing the potential for a collision and increasing transit speed and reliability.



PROJECT

METRO ROUTES

G Line

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Laura Wojcicki (SDOT)

SEATTLE

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

This improvement upgraded safety for all traffic

10 Seconds

Savings per trip between April and December 2025

ROUTE BENEFIT

6 Buses Per Hour

DAILY PASSENGER BENEFIT (=1000 RIDERS)

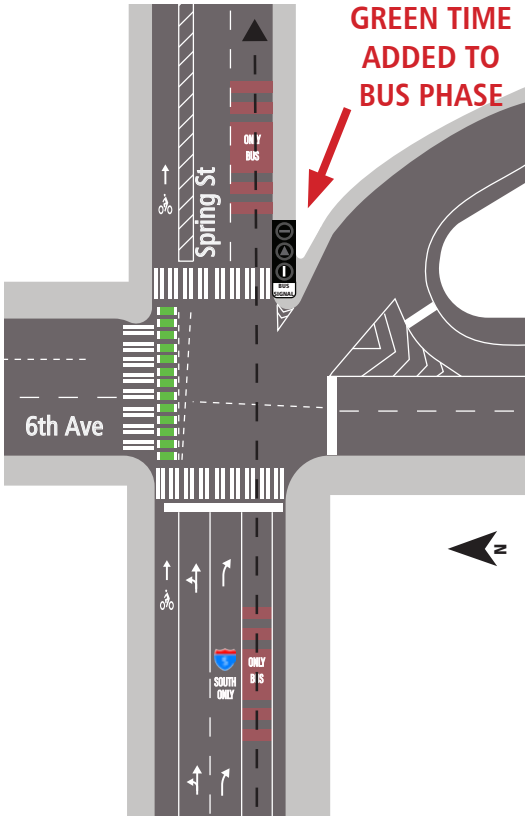
6,500 Daily Riders

Level of Complexity

2

Signals

6TH AVE & SPRING ST 16



PROBLEM STATEMENT

Operators reported the queue jump phase on Spring St at the intersection of 6th Ave was not detecting buses as they approached the intersection. Field observation noted that the signal was frequently being called when no bus was present, or not called after a bus had pulled into the detection zone until the following signal cycle. Further, because the intersection also has an on-ramp to I-5 south, the confusing cycle caused safety concerns for operators moving through the intersection.

IMPROVEMENTS MADE

SDOT staff made adjustments to the detection zone and signal timing, specifically during off-peak periods when the issue was most prevalent. The improvement helps Operators move through the intersection during the appropriate phase and reduces the potential for Operators to move into the general purpose travel lane to get through the intersection, thereby reducing the potential for collisions at this intersection.

PROJECT

SEATTLE

METRO ROUTES

2, G Line

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Laura Wojcicki, Andrew Natzel (SDOT)

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

This improvement upgraded safety for all traffic

10 Seconds

Savings per trip between April and December 2025

ROUTE BENEFIT

9 Buses Per Hour

DAILY PASSENGER BENEFIT (=1000 RIDERS)

10,500 Daily Riders

17 PARK AVE N & LOGAN AVE N

Level of Complexity: 3

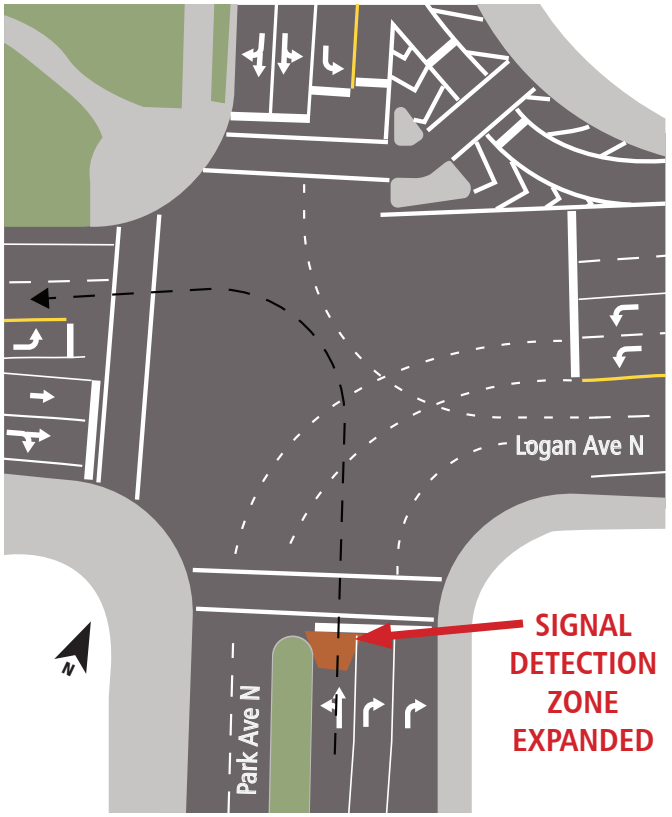
Signals

PROBLEM STATEMENT

During some overnight and early-morning trips on the F Line, some operators were encountering major delays when attempting to make the northbound left from Park Ave N onto Logan Ave N. Some trips were delayed for over eight minutes. This would require the Operator to call the Transit Control Center and request supervisor support to move through the intersection during a right light.

IMPROVEMENTS MADE

Investigation from staff at the City of Renton determined that in some instances of inclement weather, or when a bike rack was extended, the headlights on the bus would not reach the detection zone needed to trigger the left turn phase. Staff at the City of Renton expanded the detection zone and increased the sensitivity of the cameras to address this concern.



PROJECT

METRO ROUTES

F Line

PROJECT PARTNERS

CITY OF RENTON
WASHINGTON

ACKNOWLEDGMENTS

Flora Lee, Bradley Jones (City of Renton)
Willis Loveridge (KCM)

Renton

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

1-8 Minutes

Savings on trips experiencing this infrequent issue

ROUTE BENEFIT

5 Buses Per Hour

DAILY PASSENGER BENEFIT (=1000 RIDERS)

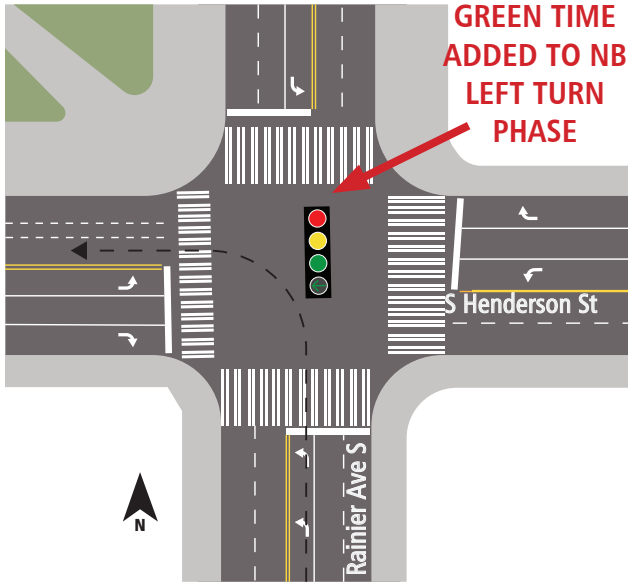
5,150 Daily Riders

Level of Complexity

1

Signals

S HENDERSON ST & RAINIER AVE S 18



PROBLEM STATEMENT

Operators of the Routes 106 and 107 reported frequently encountering delays when making the northbound left from Rainier Ave S onto S Henderson St. Observations showed that buses were often unable to begin their movement in time if they were behind other vehicles. This caused Operators on the Routes 106 and 107 to be unable to make it to the intersection before the left turn phase turned red.

IMPROVEMENTS MADE

SDOT increased the green time for the left turn phase to accommodate buses and other large vehicles making the left turn. This improvement allows buses to begin their movement and make it through the intersection before the light turns red.

PROJECT

SEATTLE

METRO ROUTES

106, 107

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Laura Wojcicki, Andrew Natzel (SDOT)

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

4 Seconds
Savings per trip between November and December 2025

ROUTE BENEFIT

8 Buses Per Hour during Peak Periods

DAILY PASSENGER BENEFIT (=1000 RIDERS)

7,800 Daily Riders

19 AURORA AVE N (N 46TH ST - N 115TH ST)

Level of Complexity: 4

Street and Intersection Design | Traffic Regulations

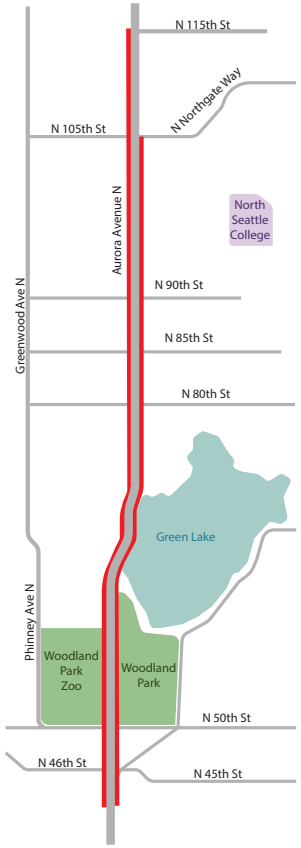
PROBLEM STATEMENT

Operations of the E Line were frequently delayed during off-peak travel periods due to parked vehicles in bus lanes. The signage on the bus lanes on Aurora Ave indicated that vehicles could park in the bus lane during non-peak travel times.

Addressing this issue required outreach to nearby businesses and residents, as well as coordination with WSDOT.

IMPROVEMENTS MADE

In anticipation of construction activity on Interstate 5, Metro and SDOT collaborated to expand the operating hours of the bus lanes on Aurora Ave N from peak-only, to 24/7. SDOT and Metro Community Engagement staff contacted impacted businesses to coordinate loading zone requirements, and SDOT crews installed new signage indicating the expanded operating hours of the Aurora BAT Lanes.



PROJECT

METRO ROUTES

E Line

PROJECT PARTNERS

Seattle Department of Transportation

ACKNOWLEDGMENTS

Jonathan Dong, Aidan Bernal (SDOT)

SEATTLE

TRANSIT BENEFITS

OPERATIONAL IMPROVEMENTS

118 Seconds
Savings per trip between
November 2024 and April 2025

ROUTE BENEFIT

9 Buses Per Hour during Off-Peak Periods

DAILY PASSENGER BENEFIT (=1000 RIDERS)

13,000 Daily Riders

MINOR SPOT IMPROVEMENTS

20 RENTON TRANSIT CENTER

Problem Statement

Operators of the Route 106 were having difficulty serving the final stop and accessing the designated layover space at the Renton Transit Center. There was frequently not enough room for the 106 to maneuver around Route 107 coaches in Bay 10, which frequently blocked access to the layover space in Bay 9 for Route 106 operators.

Improvements

Bay 10, which provides layover for the Route 107, was shortened from 90 feet to 70 feet. This reallocation of space made Bay 9, the layover space for Route 106, 140 feet long which provides ample space for both routes to layover.

Thanks to South Base Safety Committee, Dave Korthals (KCM)

21 RAINIER AVE S & S JACKSON ST

Problem Statement

Buses frequently encounter long queues when making the turn from Rainier Ave S to S Jackson St. The high level of traffic at this intersection made it difficult for buses to move through the queue and complete the left turn before the end of the signal cycle.

Improvements

SDOT Traffic Operations provided an additional two seconds of green time to the northbound left turn phase to help buses clear the intersection during the green signal phase.

Thanks to Atlantic Base Safety(KCM), Andrew Natzel (SDOT)

22 MONTLAKE BLVD E & E SHELBY ST

Problem Statement

A queue jump light at this intersection was no longer needed, but caused delay for all traffic on Montlake Blvd E.

Improvements

SDOT crews disabled the queue jump signal, improving travel times for all modes of travel on Montlake Blvd E.

23 BROADWAY & E FIR ST

Problem Statement

Fir Street has a combination of narrow roadway width and frequent loading activities, leading to infrequent delay for the Route 60. Vehicles frequently double park along Fir St to access housing in the Yesler Terrace area. A lack of designated loading space caused uncertainty to random transit trips.

Improvements

SDOT reviewed curb space needs in Yesler Terrace and provided additional designated loading space on Fir St. These designated loading zones reduce the frequency of unexpected delays by clearing the roadway for transit operators.

Thanks to William Wan, Fred Perez (SDOT)

24 22ND AVE W & W DRAVUS ST

Problem Statement

Operators reported having a difficult time seeing oncoming traffic at this location due to several overgrown trees along W Dravus St. This caused unsafe operating conditions.

Improvements

Trees were trimmed at this location in order to increase the sight distance for operators of the Routes 31 and 33.

Thanks to Nolan Rundquist, Dylan Reeder (City of Seattle Urban Forestry)

ACKNOWLEDGMENTS

This program and annual report would not be possible without the help and support from our partner agencies throughout King County While specific agencies and staff members have been listed next to each spot improvement, it is worth noting that there may be some staff who contributed that were not acknowledged

Special appreciation to:

KING COUNTY METRO:
- Transit Operators
- Service Quality Staff
- Transit Supervisors
- Vehicle Maintenance
- Atlantic, Bellevue, Central, East, North, Ryerson, and South Base Safety Committees

You all are the eyes and ears that provide a unique look at the transit system, seeing the impacts of planning decisions day in and day out Your dedication to ensuring an equitable, safe, reliable and expedient transit service are appreciated by all who get to ride the system and work alongside you.

Additional thanks to Thomas Hawthorne, the King County Metro Photographer, for capturing the completed spot improvements and helping tell the story of the Spot Improvement Program and the great work our partners do across King County.