

2024 Title VI Analysis of Parking Management Policy Update

1. Introduction

This report summarizes the Title VI equity analysis of parking fee implementation at Sound Transit park-and-ride (P&R) facilities. The analysis is conducted in accordance with Federal Transit Administration (FTA) regulations and Sound Transit policies that require an assessment of the impacts of parking fee implementation on minority and low-income P&R users. This report summarizes data, methodologies, and assumptions used to perform the equity analysis.

2. Background

Parking at Sound Transit operated P&R facilities is currently available free of charge, with some spaces at the facilities restricted to use by registered carpool permit holders during defined hours. Staff recommend expanding the parking management program with an amendment to Board policy that would authorize the CEO to set and adjust daily, permit, and special event parking fees at most existing and new facilities and adjust current authority to manage busy facilities with discounted or free carpool permits and paid single-occupant vehicle permits, in order to achieve the following prioritized goals:

1. Maximize transit ridership.
2. Ensure parking is reliably available throughout periods of peak demand to access Sound Transit services.
3. Recover costs associated with parking administration, operations, and maintenance.
4. Ensure that Sound Transit's parking program is easy for passengers to access, use, and understand.
5. Advance racial and social equity in access to transit.
6. Ensure Sound Transit's parking program is simple to operate and administer.

To understand the potential equity impacts of this policy amendment, Sound Transit has analyzed the potential change in passengers' cost to access and use transit with an assumption about initial pricing for daily fees and permits based on current market conditions and parking utilization trends.

Listed below are basic information and assumptions of Sound Transit P&R facilities and recommended parking fee program in 2024 and 2026.

Station	Transit Type*	Capacity 2024	Capacity 2026	Parking Fee Assumed in 2024	Parking Fee Assumed in 2026
Angle Lake	LR	1150	1150	\$2.00	\$2.00
Auburn	CR	530	634	\$2.00	\$2.00
BelRed/130th	LR	300	300	-	\$2.00
Edmonds	CR	156	156	-	\$2.00
Federal Way	LR	988	1590	-	\$2.00
Issaquah	EB	989	989	-	-
Kent	CR	996	996	\$2.00	\$2.00
Lakewood	CR	600	600	-	-

Mercer Island	LR	447	447	\$2.00	\$2.00
Mukilteo	CR	63	63	-	\$2.00
Northgate	LR	447	447	\$2.00	\$2.00
Puyallup	CR	1029	1029	\$2.00	\$2.00
Redmond Technology	LR	323	323	-	\$2.00
South Bellevue	LR	1500	1500	-	\$2.00
Sumner	CR	110	302	-	\$2.00
Tukwila	CR	390	390	-	\$2.00
Tukwila International Blvd	LR	600	600	\$2.00	\$2.00
Southeast Redmond Station	LR	0	1400	-	\$2.00
Lynnwood City Center Station	LR	1868	1868	\$2.00	\$2.00
Mountlake Terrace Station	LR	890	890	\$2.00	\$2.00
Shoreline North/185th	LR	500	500	\$2.00	\$2.00
Shoreline South/145th	LR	500	500	\$2.00	\$2.00
Kent/Des Moines Station	LR	0	500	-	\$2.00
S 272nd St Station	LR	0	1240	-	\$2.00

Sources: Sound Transit 2024.

* LR = Light Rail, CR = Commuter Rail, EB = Express Bus.

To estimate the impact of a policy update authorizing expanded parking management with daily parking fees on the cost of transit access for protected classes of the population, this analysis accounts for the parking fee in addition to roundtrip transit fares and station specific or regional average roundtrip access cost for driving to a P&R facility. The table below shows the breakdown of all costs considered.

Baseline Cost and Staff Recommended Alternative Costs

Cost Components	Baseline Cost 2024/2026 (No Daily Fees)	Potential Cost with Staff Recommended Policy Amendment 2024/2026
Full Transit Roundtrip Fare at from a Link Station	\$6.00	\$6.00
ORCA LIFT Transit Roundtrip Fare from a Link Station	\$2.00	\$2.00
Avg. Cost of Station Access (Driving Roundtrip between residence and P&R)	2024: \$4.02 - \$8.04* 2026: \$4.20 - \$8.40**	2024: \$4.02 - \$8.04 2026: \$4.20 - \$8.40
Full Parking Fee	\$0	\$2.00
ORCA LIFT Parking Fee	\$0	\$1.00

Sources: Sound Transit 2016. Fehr & Peers 2021. IRS.

* Based on Sound Transit 2016 travel distance to park and rides data, the average shortest one-way driving distance from/to a P&R facility is about 3 miles, and the longest is about 6 miles. The 2024 IRS standard mileage rate is \$0.67/mile. Therefore, the Access Cost of Driving Roundtrip from/to Home in 2024 would be in a range of $3 \text{ miles} * 2 * \$0.67/\text{mile} = \4.02 and $6 \text{ miles} * 2 * \$0.67/\text{mile} = \8.04 . Specific cost varies based on station.

** The 2026 standard mileage rate of is extrapolated to be \$0.70/mile based on the IRS standard mileage rate of 2023 and 2024 assuming a linear increase. Therefore, the Access Cost of Driving Roundtrip from/to Home in 2026 would be in a range of $3 \text{ miles} * 2 * \$0.70/\text{mile} = \4.20 and $6 \text{ miles} * 2 * \$0.70/\text{mile} = \8.40 . Specific cost varies based on station.

3. Regulatory Framework

Chapter IV of the Federal Transit Administration's (FTA) Circular 4702.1B ("Circular") describes the requirements that FTA recipients must follow to ensure their programs, policies, and activities comply with U.S Department of Transportation Title VI regulations. The requirements set system-wide service standards and policies that apply to all fixed-route providers of public transportation service.

Title 49 CFR Section 21.5 (b)(2) specifies that a recipient shall not "utilize criteria or methods of administration which have the effect of subjecting persons to discrimination because of their race, color or national origin, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program with respect to individuals of a particular race, color or national origin." Section 21.5 (b)(2) requires recipients to "take affirmative action to assure that no person is excluded from participation in or denied the benefits of the program or activity on the grounds of race, color or national origin."

Transit providers that operate 50 or more fixed-route vehicles in peak service and are in an urbanized area (UZA) of 200,000 or more in population are required to meet all requirements of Chapter IV including setting service standards and policies, collecting, and reporting data, monitoring transit service, and evaluating fare and service changes.

Permits and fees for accessing park and ride facilities are not explicitly subject to these federal regulations. However, Sound Transit has opted to evaluate the impact of parking fees on the total cost of accessing transit to identify any disparate impacts or disproportionate burdens this policy amendment might place on protected classes, including minority and low-income passengers, to inform fee rates, discounts, and adjustments, and to fulfill the agency mission to equitably connect more people and more places.

4. Sound Transit Fare Equity Analysis Policy

In compliance with the FTA's Circular, the Sound Transit Board of Directors adopted Resolution R2013-19 establishing policies for conducting equity analyses of fare changes. This policy establishes that Sound Transit will conduct a fare equity analysis during the planning phase of a potential fare change to determine whether the proposed fare change would have a disparate impact on minority populations and/or a disproportionate burden on low-income populations.

In 2022, the Sound Transit Board of Directors adopted Resolution R2022-19, establishing an updated Disparate Impact and Disproportionate Burden Policy, which was subsequently submitted to the FTA in Sound Transit's 2022 Title VI Program Update. The updated policy for fares is shown below:

3.3 Fare changes

3.3.1 The agency conducts an equity analysis of all proposed fare changes, as identified in section 2.3, to determine any potential disparate impact or disproportionate burden.

3.3.2 Fare increases. When considering a fare increase, if the agency's analysis indicates that the average percentage fare increase experienced by minority or low-income riders is 20 percent or greater than the average percentage fare increase experienced by non-minority or non-low-income riders, the change creates a disparate impact or disproportionate burden.

3.3.3 Fare decreases. When considering a fare decrease, if the agency's analysis indicates the average percentage fare decrease experienced by non-minority or non-low-income riders is 20 percent or greater than the average percentage fare decrease experienced by minority or low-income riders, the change creates a disparate impact or disproportionate burden.

3.3.4 Change in payment type or fare media. When considering a change in payment type or fare media, if the agency's analysis indicates that the impact on minority or low-income riders is 20 percent or greater than the impact on non-minority or non-low-income riders, the change creates a disparate impact or disproportionate burden. To the extent a change to fare media has any impact on the cost to ride transit, the incremental costs associated with the change are considered as part of a fare increase or decrease analysis.

Finally, this new policy establishes the following.

3.5 Findings of disparate impact or disproportionate burden

3.5.1 If the agency's analyses find that a major service change or fare change results in a potential disparate impact or disproportionate burden or a maintenance facility location results in a disparate impact, then the agency must consider steps to avoid, reduce and/or mitigate the potential adverse effects and reanalyze the modified proposal to determine if potential effects were removed or lessened.

3.5.2 The agency conducts public outreach regarding major service changes, fare changes and maintenance facility location selections, including the agency's steps to avoid, reduce and/or mitigate any adverse effects and the modified proposal to determine if potential effects were removed or lessened.

3.5.3 If the equity analysis reveals a major service change or fare change creates a disparate impact or disproportionate burden or a facility location creates a disparate impact, the agency may only proceed if it has a substantial legitimate justification for implementing the proposal and the selected proposal is the least discriminatory under consideration.

Although parking fees are not technically a required fare for all passengers to use Sound Transit services, this analysis uses the agency guidance from Board policy R2013-19 to assess the potential impacts of amending the parking management policy, including authorization for daily parking fees.

5. Definitions & Data Sources

Analyses assessing the impact of parking fees were performed at both the station level and the system level in a 2024 scenario and a 2026 scenario. In each scenario, both the station-level and the system-level analyses consist of three components in the fare calculation: roundtrip access costs of the P&R facilities, roundtrip fares of riding transit at the P&R facilities, and parking fees at the P&R facilities (if implemented). Within the same scenario, the access costs were assumed to be the same across all populations while the transit fares and parking fees could vary based on a user's income category (i.e., whether the person qualifies for a discounted ORCA LIFT fare). Documented below are specific data sources and assumptions used for each analysis.

Station-level Analysis

The station-level analysis used American Community Survey (ACS) 2017-2021 5-Year Estimates data to estimate the number of minority/non-minority and low-income/non-low-income residents in each of the 24 P&R service areas. A P&R service area is defined by a 3-mile travel shed from the P&R facility. The 3-mile travel shed and associated demographics were assumed to be consistent between 2024 and 2026.

Access Cost

Access costs for P&R facilities are calculated by multiplying their average access distances and the IRS standard mileage rates. The 2024 IRS standard mileage rate is \$0.67/mile¹, and the 2026 rate was extrapolated to be \$0.70/mile, assuming a linear increase between 2023 and 2026. The average access distances were extrapolated based on Sound Transit 2016 travel distance to park and rides data. The table below shows the access distances and roundtrip costs at each P&R facility. Newer P&R facilities with no data were assumed to have the average access distance of existing facilities with data (4.17 miles).

Transit Fare & Parking Fee

Low-income/non-low-income users: For the station-level analysis, low-income is defined as household income at or below 200% of the Federal poverty level – the same threshold used to qualify users for the ORCA LIFT program that Sound Transit and other ORCA agencies use to provide discounted fares for low-income passengers. With the ORCA LIFT program, low-income users will pay \$1.00 for parking at any P&R facility, compared to \$2.00 for non-low-income users. Low-income users will also pay \$2.00 for a discounted roundtrip transit fare, compared to \$6.00 for non-low-income users.

Minority/non-minority users: For minority/non-minority groups, the station-level analysis attempted to calculate a weighted average for fares paid by both low-income and non-low-income users within minority/non-minority groups. In other words, the fares calculated for the minority/non-minority group incorporated different income groups which may or may not qualify for the discounted ORCA LIFT fares mentioned above. However, due to limitations of ACS data, the crosstab low-income minority/non-minority calculations only included population whose household income are at or below 100% of the Federal poverty level, instead of 200%. As a result, the station-level transit fares and parking fees calculated for the minority/non-minority group might be more conservative because more people in both groups would pay less in reality.

System-level Analysis

The system-level analysis inherited the same ACS estimates as the station-level analysis (i.e., the number of minority/non-minority and low-income/non-low-income residents in each of the 24 P&R facility service areas). The same three components considered in the station-level analysis – access costs, transit fares, and parking fees – were also used in the system-level calculations.

Access Cost

The system-level access cost with respect to income or race is defined as the access cost of an average P&R user regarding their income or race. For instance, the system-level access cost for low-income users is calculated by the access cost of an average low-income P&R rider living in any of the 24 service areas.

¹ <https://www.irs.gov/tax-professionals/standard-mileage-rates>

Transit Fare & Parking Fee

Low-income/non-low-income users: For the system-level analysis, low-income is also defined as household income at or below 200% of the Federal poverty level – the same threshold used for ORCA LIFT discounted fares qualification. For an average low-income P&R user, the system-level discounted roundtrip transit fare will be \$2.00, and the system-level discounted parking fee will be the average discounted parking fee per rider across all P&R facilities. For an average non-low-income P&R user, the system-level discounted roundtrip transit fare will be \$6.00, and the system-level discounted parking fee will be the average full parking fee per rider across all P&R facilities.

Minority/non-minority users: For minority/non-minority groups, the system-level analysis also attempted to calculate a weighted average for fares paid by both low-income and non-low-income users within minority/non-minority groups. In other words, the fares calculated for the minority/non-minority group incorporated different income groups which may or may not qualify for the discounted ORCA LIFT fares mentioned above. The system-level analysis adopted crosstab income and race percentages summarized from the 2019 origin-destination (O-D) survey conducted by Sound Transit. The percentages of minority and non-minority who are at or below 200% Federal poverty level are 28% and 10%, respectively. The system-level transit fares and parking fees for a minority rider were then calculated as weighted averages of low-income/non-low-income non-white riders taking roundtrip transit and parking at any P&R facilities. The system-level transit fares and parking fees for a white rider were calculated as weighted averages of low-income/non-low-income white riders taking roundtrip transit and parking at any P&R facilities.

6. Analysis of Disparate Impact/Disproportionate Burden

Station-level Analysis

For the station-level analysis, the average percent fare changes were calculated against a free parking condition with respect to different income or race groups. For instance, to calculate the average percent fare change for low-income users at a station, the following formula was used:

$$\frac{\text{Average cost of lowincome customers with FREE parking} - \text{Average cost of lowincome customers with PARKING FEE}}{\text{Average cost of lowincome customers with FREE parking}}$$

Table 1 and Table 2 below show the 2024 and 2026 average percent fare change by income and race. Table 3 then shows the absolute differences of average percent cost change between low-income and non-low-income groups and between minority and non-minority groups.

Table 1: 2024 Impact of Parking Fare on P&R Users with Respect to Their Income or Race

Station	2024 Parking Fee	2024 Average % Fare Change by Income		2024 Average % Fare Change by Race	
		Low-Income	Non-Low-Income	People of Color	White
Angle Lake	2.00	14%	18%	17%	17%
Auburn	2.00	14%	18%	17%	17%
BelRed/130th	-	0%	0%	0%	0%
Edmonds	-	0%	0%	0%	0%
Federal Way	-	0%	0%	0%	0%
Issaquah	-	0%	0%	0%	0%
Kent	2.00	13%	17%	17%	17%

Lakewood	-	0%	0%	0%	0%
Mercer Island	2.00	14%	18%	17%	18%
Mukilteo	-	0%	0%	0%	0%
Northgate	2.00	14%	18%	17%	17%
Puyallup	2.00	11%	16%	15%	16%
Redmond Technology	-	0%	0%	0%	0%
South Bellevue	-	0%	0%	0%	0%
Sumner	-	0%	0%	0%	0%
Tukwila	-	0%	0%	0%	0%
Tukwila International Blvd	2.00	13%	17%	17%	17%
Southeast Redmond Station	-	0%	0%	0%	0%
Lynnwood City Center Station	2.00	14%	18%	17%	17%
Mountlake Terrace Station	2.00	13%	17%	17%	17%
Shoreline North/185th	2.00	13%	17%	17%	17%
Shoreline South/145th	2.00	13%	17%	17%	17%
Kent/Des Moines Station	-	0%	0%	0%	0%
S 272nd St Station	-	0%	0%	0%	0%

Source: Fehr & Peers 2024.

Table 2: 2026 Impact of Parking Fare on P&R Users with Respect to Their Income or Race

Station	2026 Parking Fee	2026 Average % Fare Change by Income		2026 Average % Fare Change by Race	
		Low-Income	Non-Low-Income	People of Color	White
Angle Lake	2.00	13%	17%	17%	17%
Auburn	2.00	13%	17%	17%	17%
BelRed/130th	2.00	13%	17%	17%	17%
Edmonds	2.00	13%	17%	17%	17%
Federal Way	2.00	16%	20%	19%	19%
Issaquah	-	0%	0%	0%	0%
Kent	2.00	13%	17%	16%	17%
Lakewood	-	0%	0%	0%	0%
Mercer Island	2.00	13%	17%	17%	17%
Mukilteo	2.00	13%	17%	17%	17%
Northgate	2.00	13%	17%	17%	17%
Puyallup	2.00	11%	15%	15%	15%

Redmond Technology	2.00	13%	17%	17%	17%
South Bellevue	2.00	13%	17%	17%	17%
Sumner	2.00	13%	17%	17%	17%
Tukwila	2.00	16%	20%	19%	19%
Tukwila International Blvd	2.00	13%	17%	16%	17%
Southeast Redmond Station	2.00	13%	17%	17%	17%
Lynnwood City Center Station	2.00	13%	17%	17%	17%
Mountlake Terrace Station	2.00	13%	17%	17%	17%
Shoreline North/185th	2.00	13%	17%	17%	17%
Shoreline South/145th	2.00	13%	17%	17%	17%
Kent/Des Moines Station	2.00	13%	17%	16%	17%
S 272nd St Station	2.00	13%	17%	16%	17%

Source: Fehr & Peers 2024.

Table 3: Station-Level Disparate Impact/Disproportionate Burden

Station	2024		2026	
	Absolute % Difference between Low-Income and Non-Low-Income	Absolute % Difference between People of Color and White	Absolute % Difference between Low-Income and Non-Low-Income	Absolute % Difference between People of Color and White
Angle Lake	-4%	0%	-4%	0%
Auburn	-4%	0%	-4%	0%
BelRed/130th	0%	0%	-4%	0%
Edmonds	0%	0%	-4%	0%
Federal Way	0%	0%	-3%	0%
Issaquah	0%	0%	0%	0%
Kent	-4%	0%	-4%	0%
Lakewood	0%	0%	0%	0%
Mercer Island	-4%	0%	-4%	0%
Mukilteo	0%	0%	-4%	0%
Northgate	-4%	0%	-4%	0%
Puyallup	-4%	0%	-4%	0%
Redmond Technology	0%	0%	-4%	0%
South Bellevue	0%	0%	-4%	0%
Sumner	0%	0%	-4%	0%

Tukwila	0%	0%	-3%	0%
Tukwila International Blvd	-4%	0%	-4%	0%
Southeast Redmond Station	0%	0%	-4%	0%
Lynnwood City Center Station	-4%	0%	-4%	0%
Mountlake Terrace Station	-4%	0%	-4%	0%
Shoreline North/185th	-4%	0%	-4%	0%
Shoreline South/145th	-4%	0%	-4%	0%
Kent/Des Moines Station	0%	0%	-4%	0%
S 272nd St Station	0%	0%	-4%	0%

Source: Fehr & Peers 2024.

The station-level analysis indicated that the low-income users would experience an equal or lower average percent fare increase compared to the non-low-income users at each station. The analysis also indicated that minority users would experience the same average percent fare increase compared to white users. Therefore, neither the 2024 nor the 2026 plan of parking fee implementation would result in a disparate impact or disproportionate burden.

System-Level Analysis

Like the station-level analysis, the average percent fare changes at the system level were also calculated against a free parking condition with respect to different income or race groups. System-level costs of an average rider using an average P&R facility are calculated with and without the parking fees implemented with respect to the user's income and race. Table 4 and Table 5 below show the system-level average percent fare change by income and race in 2024 and 2026. Table 6 shows the absolute percent differences of average percent cost change between low-income and non-low-income groups and between minority and non-minority groups at the system level.

Table 4: 2024 Impact of Parking Fare on P&R Users at the System Level

2024 Average % Fare Change by Income		2024 Average % Fare Change by Race	
Low-Income	Non-Low-Income	People of Color	White
8%	10%	9%	11%

Source: Fehr & Peers 2024.

Table 5: 2026 Impact of Parking Fare on P&R Users at the System Level

2026 Average % Fare Change by Income		2026 Average % Fare Change by Race	
Low-Income	Non-Low-Income	People of Color	White
12%	16%	15%	16%

Source: Fehr & Peers 2024.

Table 6: System-Level Disparate Impact/Disproportionate Burden

2024 Average % Fare Change		2026 Average % Fare Change	
Absolute % Difference between Low-Income and Non-Low-Income	Absolute % Difference between People of Color and White	Absolute % Difference between Low-Income and Non-Low-Income	Absolute % Difference between People of Color and White
-2%	-2%	-5%	-1%

Source: Fehr & Peers 2024.

The system-level analysis indicated that the low-income and minority users would experience lower average percent fare increase compared to the non-low-income and non-minority users systemwide. Therefore, neither the 2024 nor the 2026 plan of parking fee implementation would result in disproportional burdens or disparate impacts.

Summary

In general, both analyses led to the same result – the parking fee implementations in 2024 and 2026 would not result in a disparate impact or disproportionate burden.

7. Mitigation

Even though this action will result in no disparate impact or disproportionate burden, Sound Transit will work to mitigate any adverse effects on passengers by providing for discounted parking and permit fees for those who qualify for reduced fare programs, in accordance with the recommended policy amendment, and to ensure all riders who qualify for discounted fees are able to take advantage of them.