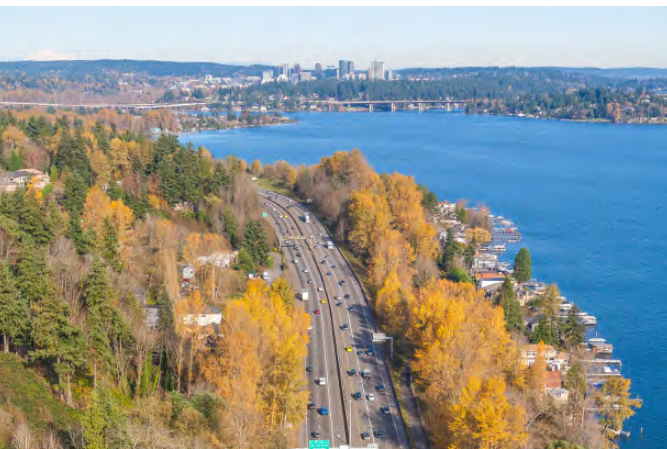


I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project (MP 0.0 to 11.9)

Attachment D: Environmental Justice Discipline Report





Title VI

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SUMMARY

The Washington State Department of Transportation (WSDOT) is proposing to construct the I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project (milepost [MP] 0.0 to 11.9) (the Project) to improve traffic operations and safety on Interstate 405 (I-405) through Tukwila, Renton, and Bellevue.

The Project is part of a comprehensive strategy identified in the 2002 *I-405 Corridor Program Final Environmental Impact Statement* (EIS) and subsequent *Record of Decision* (ROD) to reduce traffic congestion and improve mobility along the state's second-busiest highway. The Project is needed because travelers on I-405 face one of the most congested routes in the state, particularly during peak travel times. This Project is one of several projects now being advanced as part of a phased implementation of the Selected Alternative. The 2015 Connecting Washington funding package passed by the state legislature provides funding for constructing the Project.

The Project proposes to make several roadway, structural, drainage, and transit and high-occupancy vehicle (HOV) improvements to the I-405 corridor. In general, the Project proposes to add one lane to I-405 in each direction for about 8 miles beginning on I-405 near State Route (SR) 167 and continuing approximately 1 mile north of I-90. The existing HOV lane on I-405 and an additional lane would be operated as a two-lane express toll lane (ETL) system. This Project would link with other tolled systems to create a 40-mile tolled system between Auburn on SR 167 and Lynnwood on I-405, thus giving transit and carpool users a more reliable trip throughout the region. For more detailed information about the Project, refer to Section 2 – Project Description.

This environmental justice discipline report was prepared in support of the *I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project Environmental Assessment* (EA). This report documents the effects of the Project on environmental justice populations.

What is the purpose of this report?

This Environmental Justice Discipline Report assesses the effects of the Project on environmental justice populations. It evaluates:

What is an express toll lane?

An *express toll lane (ETL)* is a limited-access freeway lane that is actively managed through a variable toll system to regulate its use and thereby maintain express travel speeds and reliability. Toll prices rise or fall in real time as the lane approaches capacity or becomes less used. ETLs are available for use by transit and eligible HOV users without a toll and *single-occupant vehicles (SOV)* users who choose to pay a variable toll.

- The effects of the ETLs on environmental justice populations compared to the effects of not implementing the ETLs
- Other effects of the Project (Build Alternative) compared to the No Build Alternative

What is the study approach?

We used two study areas for this report:

- To determine whether the Project would result in benefits or adverse effects to environmental justice populations, we looked at the geographic area within 1/2 mile of either side of I-405 from Interstate 5 (I-5) in Tukwila to about a mile north of Interstate 90 (I-90) in Bellevue.
- To analyze potential benefits and effects of ETLs, we looked at the travelshed for I-405 (the geographic area from which traffic on I-405 originates).

To analyze effects that may be delayed or distant from the Project, we also looked at geographic areas outside the study area, including the travelshed for SR 167.

We began by determining if minority, low-income, or limited English proficient persons live in the study area. Next, we identified the potential benefits and adverse effects of the Project. We used demographic analyses to determine if any of the Project's adverse effects would disproportionately affect environmental justice populations. We identified mitigation, as appropriate, and benefits that may help offset any disproportionately high and adverse effects.

What are the existing conditions in the study areas?

There are minority, low-income, and limited English proficient persons living in the study areas who drive or use transit on I-405 between I-5 in Tukwila to just north of I-90 in Bellevue. These individuals—along with all other I-405 motorists and transit riders—deal with daily traffic congestion on I-405.

What is environmental justice?

Environmental justice is the fair treatment and meaningful involvement of all persons regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Environmental justice principles apply to minority, low-income, and limited English proficient populations.

What are environmental justice populations?

Federal orders, regulations, and guidance require agencies to identify and address potential adverse effects to low-income and/or minority populations. Additionally, Executive Order 13166 ensures limited English proficient populations have fair and equal access to the decision-making processes for publicly funded projects, as well as the benefits of these projects.

How would the Project affect environmental justice populations?

Benefits

All travel lanes on I-405 would operate with faster and more reliable trips with the Build Alternative. The greatest improvement would occur for northbound travelers during the morning peak period. For this trip in 2025, travel times would be reduced by about 18 minutes in the general purpose (GP) lanes compared to the GP Lanes under the No Build Alternative. Travel times would be about 5 minutes faster in the Express Toll Lanes (ETLs) with the Build Alternative compared to the No Build HOV2+ lane. Individual trip travel times could vary. Although most users would experience improved travel times, the exception is carpools with two people who choose not to pay a toll. In 2045, these carpools would be traveling in the GP lanes, and some trips in the GP lanes in 2045 would be a little slower than trips in the HOV2+ lanes under the No Build Alternative.

The additional capacity and the ETL system would improve travel times in both the GP lanes and ETLs for the Build Alternative compared to the No Build Alternative. The improvements would result in an increase in person throughput. For example, in 2025 during the morning commute period, I-405 near the interchange with NE 44th Street in Renton would carry approximately 5,400 more people with the Project than with the No Build Alternative.

The Build Alternative would add capacity to I-405, which would improve freeway operations and reduce congestion. This would, in turn, be expected to improve safety performance in the study area when compared to the No Build.

In addition, Sound Transit's expansion of the regional mass transit system includes multiple future improvements in the study area. Sound Transit will implement bus rapid transit on I-405 between Tukwila and Lynnwood and construct freeway stations that allow buses to pick up and drop off riders without having to exit and re-enter I-405. The two-lane ETL system would provide the infrastructure needed to facilitate a fast, reliable bus rapid transit system and result in benefits to transit riders, including those transit riders who identify as minority, have low incomes, or are limited English proficient.

What is a disproportionately high and adverse effect?

According to the *U.S. Department of Transportation (USDOT)*, a disproportionately high and adverse effect on minority and/or low-income populations means an adverse effect that: (1) is predominantly borne by a minority population and/or a low-income population, or (2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.

Adverse Impacts

Low-income and minority users could be adversely affected by the proposed ETLs in three ways:

- The cost of the toll to use ETLs would disproportionately affect low-income populations.
- Use of the electronic toll collection system could disproportionately affect limited English proficient populations.
- Use of the electronic toll collection system could disproportionately affect low-income populations.

We conclude the ETLs would not result in disproportionately high and adverse impacts to environmental justice populations, for the following reasons:

- All users—including low-income and limited English proficient users—would continue to have an accessible, convenient, and free travel option: the GP lanes on I-405.
- All travel lanes on I-405 would experience improved travel times with the Project as compared to No Build.
- Most motorists—including individuals who have low incomes or are limited English proficient—would not lose a travel option because of the Project. The only exception would be two-person carpools, who would have to pay a toll to use the ETLs during weekday peak periods. These carpools are able to use the HOV lanes for free today. However, because travel times in the GP lanes are expected to improve with the Project, two-person carpools who do not want to pay tolls would still have the same or faster travel times with the Project than without for trips in 2025. By 2045, two-person carpools who do not want to pay tolls would have slightly slower trips with the Project than without, but the time difference would be one minute to five minutes. As such, even two-person carpools would benefit from the Project compared to the No Build for most trips during most times of the day.

The Project would require multiple property acquisitions, which we discuss below. WSDOT conducts all property acquisition in accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970,

as amended and implemented by FHWA under 49 Code of Federal Regulations, Part 24, and according to Chapter 468-100 Washington Administrative Code Uniform Relocation and Assistance and Real Property Acquisition.

The Project would require three full property acquisitions that would result in residential displacements. All three displaced residences are owned by minorities, one of whom is limited English proficient.

The Project would require two full property acquisitions that would result in commercial displacements. One of the commercial property owners identifies as minority. The tenant for that property is a restaurant that is owned by a person who identifies as minority. At the time of publication of this document, the affected restaurant owner made the decision to relocate the restaurant about 40 miles from its current location. Many of the 26 current employees of the restaurant are unlikely to relocate with the restaurant, which means they would lose their jobs. At least a few of the employees of that restaurant identify as minority and some may be low income.

The other commercial property affected by a full acquisition is not owned or occupied by a member of an environmental justice population. This is a property with five warehouses that are used to store building materials. This business is owned by a Canadian company.

The Project would require 16 partial property acquisitions, 33 permanent easements, and 10 temporary construction easements on residential properties. Many of the permanent easements are subterranean and would not impact use of the property or utilities. Four residential property owners— including one property owner who identifies as minority— would permanently lose a portion of their yards due to partial acquisitions and the widening would bring the highway closer to their houses. These partial property acquisitions would not affect the house structures or access to the dwellings. The property owner who identifies as minority, along with one other property owner would also experience temporary disruption of sewer service while WSDOT relocates their sewer lines.

The Project would require 4 partial acquisitions, 10 permanent easements, and 10 temporary construction easements on commercial properties. As with the residential properties,

most of these partial acquisitions and easements would not affect access, or use of the property. WSDOT would need to rebuild driveway access for a few properties along NE 44th Street. One partial property acquisition would require to owner to relocate a small portion of their retail display.

We met with the agents who are working with commercial property owners affected by partial acquisitions and easements, and they indicated there are a few affected commercial property owners who identify as minority.

Although all of the full residential property acquisitions and several of the partial residential and commercial property acquisitions have already taken place under a previously approved project (the Renton to Bellevue 2008 Finding of No Significant Impact), this EA must consider the effects of these acquisitions and identify mitigation if there are adverse impacts.

Would there be any effects on environmental justice populations that would be delayed or distant from the Project?

The ETLs would have some effects that are delayed or distant from the Project; we describe these effects below. The Washington State Transportation Commission (WSTC) would set toll policy and toll rates for the ETLs on I-405 between I-5 in Tukwila to just north of I-90 in Bellevue. This could include a future policy or toll rate applying to the entire SR 167/I-405 ETL facility. As with any tolled facility, the cost to use the entire length of the system would disproportionately affect low-income users, for whom the total cost would represent a higher proportion of annual household income. Adverse effects would be offset by improved travel times, reliability, and travel conditions in both in the GP lanes and the ETLs system-wide for most motorists during most times of day. We do not anticipate the full ETL facility to result in disproportionately high and adverse effects to low-income populations.

By eliminating or reducing several areas of congestion on southbound I-405, the Project would allow higher traffic volumes to access SR 167, which would increase traffic in the southbound “downstream” on SR 167. WSDOT anticipates the higher volumes on I-405 southbound during peak periods to

create more congestion on southbound SR 167, which would increase travel times in the SR 167 GP lanes. Motorists traveling in the opposite direction on northbound SR 167 GP lanes would benefit from faster travel speeds as a result of improved operations on northbound I-405.

The SR 167 travelshed has substantial proportions of low-income, minority, and limited English proficient residents, so we conclude the effects of the project on traffic operations on SR 167 would disproportionately affect environmental justice populations. While we believe this congestion would cause some additional inconvenience for motorists, we do not believe this would be a high adverse effect.

Would the Project have any cumulative effects on environmental justice populations?

With the residential and commercial displacements, we found the Project would have a direct adverse effect on environmental justice populations (see Exhibit 5-1 in Section 5, Project Effects). WSDOT will mitigate for the direct impacts associated with property acquisitions and displacements, so the relocations would not contribute to an adverse cumulative effect.

The ETLs would have some contributions to cumulative effects; we describe these effects below.

We identified positive and negative direct and indirect effects of the ETLs on environmental justice populations in the I-405 travelshed. The ETLs—in conjunction with other reasonable and foreseeable transportation investments in the I-405 travelshed—would improve transportation conditions for most I-405 users, including environmental justice populations.

The ETLs would also have a minor contribution to a negative cumulative effect on the economic burdens of low-income users of I-405. The operation of ETLs would disproportionately affect low-income populations because the cost to use the ETLs would represent a higher proportion of their household income than middle and high income users. In combination with rising housing costs in the I-405 travelshed and Washington's regressive tax system described in Section 4, Existing Conditions, the ETLs would contribute to a negative

cumulative effect on economic burdens of low-income users of I-405.

WSDOT acknowledges the long-range transportation plan for the Puget Sound Region identifies tolling and other pricing strategies to address growing congestion, as well as the need for a more sustainable funding source for transportation. (Puget Sound Regional Council, May 2010). The cumulative effects of such strategies on low-income and minority populations would need to be analyzed appropriately if specific projects move forward.

What measures will WSDOT take to avoid or minimize disproportionately high and adverse effects to environmental justice populations?

To reduce the effects on the residential property owners whose entire properties are being acquired, WSDOT is conducting property acquisition in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, to ensure just compensation for all properties and a minimal adverse effect on the current owners and residents. WSDOT also provides interpretation and translation to limited English proficient property owners upon request, to ensure they can understand the property acquisition process and fully participate in negotiations. One of the three residential property owners whose entire property was acquired by WSDOT is limited English proficient. That property owner used their own representative—a bilingual realtor—to provide interpretation and translation, rather than requesting WSDOT services.

All of the residential properties acquired by WSDOT were owner-occupied. WSDOT is implementing the following measures to reduce the disproportionate high and adverse effects of the residential relocations on displaced households:

- Prior to starting the relocation process, staff met with the three affected households to discuss their specific needs related to relocation. WSDOT would provide interpretation and translation services to the limited English proficient household, but as explained earlier, that household elected to use their own representative for interpretation and translation.

- Prepared a relocation plan in advance of actual displacements.
- Collected information to identify the specific needs of any residents to be relocated.
- Made relocation resources available, without discrimination, to all eligible residential relocatees.
- Ensured there was at least one comparable replacement property available to relocate. In other words, WSDOT cannot require a resident to move unless it makes at least one comparable replacement property available. All three displaced families have found comparable properties in the same neighborhood as the homes that WSDOT purchased.
- Reimbursed the displaced person or family for certain costs, including the difference between the cost of the current dwelling and the cost of the comparable replacement.

At the time of this document was published, WSDOT had not yet made an offer to the minority commercial property owner to purchase the property. WSDOT is conducting this property acquisition in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, to ensure just compensation for all properties and a minimal adverse effect on the current owners and tenants.

WSDOT is implementing the following measures to reduce the disproportionate high and adverse effects of the commercial property acquisition on the displaced commercial tenant:

- Prepare a relocation plan. WSDOT has met with the tenant who owns the affected restaurant to discuss their needs specific to relocation. At the time of publication of this document, the affected tenant had decided to relocate the restaurant to Tumwater, Washington, about 40 miles from its current location.
- Collect information to identify the specific needs of the affected restaurant.
- Make relocation resources available, without discrimination, to the affected restaurant.
- Pay for the costs of relocating all personal property. As the affected property is a restaurant, some equipment

cannot be relocated or requires major reconfiguration to fit in a new space. In that case, WSDOT will pay to replace the property that cannot be moved or reconfigured.

- Provide up to \$2,500 to pay for time invested in searching for an appropriate replacement site.
- Provide limited funds to pay for permitting, site feasibility studies, and other costs associated with relocating to a new site.
- Provide limited funds to support reestablishment in a new location.

For the residential property owners affected by partial acquisitions, permanent easements, and temporary construction easements, WSDOT is taking the following measures to minimize adverse impacts:

- Conduct property acquisition in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, to ensure just compensation for all properties and a minimal adverse effect on the current owners and residents.
- WSDOT would provide access to interpretation and translation for owners who need language assistance to participate in negotiations upon request. None of the property owners affected by partial acquisitions, permanent easements, and temporary construction easements are limited English proficient, however, one property owner who speaks English as a second language enlisted the assistance of their own representative to assist with communication.
- For the four residential property owners who will lose a portion of their yards and have the highway closer to their properties, WSDOT has approved a noise wall for that location—Wall West 5—which will reduce the noise impacts compared to existing conditions.
- WSDOT will provide temporary relocation to the two property owners who will experience short-term disruption in their sewer service.

To reduce possible barriers to obtaining and maintaining a *Good To Go!* account for persons who have low-incomes or are underbanked:

- WSDOT will continue to offer the option for low-income persons who are eligible for public benefits to use their Electronic Benefit Transfer cards to open and maintain their *Good To Go!* accounts.
- WSDOT is working to expand the network of retail location where people can buy *Good To Go!* passes with cash, making it easier for people to purchase a pass without a bank account.

The Project would exacerbate traffic congestion on southbound SR 167. WSDOT has identified projects on the SR 167 corridor that will reduce this congestion. An auxiliary lane to southbound SR 167 between the SR 516 interchange southbound on-ramp and the S 277th Street interchange southbound off-ramp could help reduce congestion on SR 167. These projects are currently unfunded.

Conclusion: Would the Project result in disproportionately high and adverse effects to environmental justice populations?

The following table summarizes the effects of the Project on environmental justice populations, mitigation, and offsetting benefits.

What is a *Good To Go!* Account?

A *Good To Go!* account is the cheapest and easiest way to pay tolls in Washington. With an account, your tolls will be paid automatically without having to stop at a toll booth or worry about bills in the mail. For more information please go to:

<http://www.wsdot.wa.gov/GoodToGo/default.htm>

Exhibit 1. Summary of Project Effects on Environmental Justice Populations, Mitigation, and/or Offsetting Benefits

| Project Effect | Mitigation and/or Offsetting Benefits |
|--|--|
| Effects of the ETLs | |
| The cost of the toll to use ETLs would disproportionately affect low-income populations. | <ul style="list-style-type: none"> – These effects would be offset by faster travel times for most users—including environmental justice populations—with the Project. – WSDOT would continue to conduct targeted outreach to engage environmental justice populations in the study area and the I-405 travelshed. |
| Use of the electronic toll collection system could disproportionately affect persons with limited English proficiency and/or low-income populations. | <ul style="list-style-type: none"> – WSDOT would continue to offer the option for low-income persons who are eligible for public benefits to use their Electronic Benefit Transfer cards to open and maintain their <i>Good To Go!</i> accounts. The use of Electronic Benefit Transfer cards allows users who do not have bank accounts to obtain a <i>Good To Go!</i> pass and avoid extra charges for the pay by mail option. – WSDOT is working to expand the network of retail locations where people can buy <i>Good To Go!</i> passes with cash, making it easier for people to purchase a pass without a bank account. |
| The cost to use the entire length of the ETL system would disproportionately affect low-income users, for whom the total cost would represent a higher proportion of annual household income. | <ul style="list-style-type: none"> – This effect would be minor and improved travel times for almost all users—including environmental justice populations—would offset this effect. |
| Effects of Property Acquisitions | |
| Three households who identify as minority have been displaced. ⁷ | <ul style="list-style-type: none"> – WSDOT collected information to identify specific needs of the residents, made relocation resources available, ensured at least one comparable property was available to relocate, and reimbursed displaced families for certain relocation costs. |
| Thirteen residential property owners—including one minority property owner—would experience loss of use of a portion of their yards, closer proximity of their dwellings to the highway, and two would experience a temporary disruption in sewer service. | <ul style="list-style-type: none"> – WSDOT is conducting property acquisition in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, to ensure just compensation for all properties and a minimal adverse effect on the current owners and tenants. – Areas that qualified for a noise wall would maintain noise levels close to current conditions. – WSDOT discussed the impacts of the properties with the owners and they indicated a desire for a partial acquisition instead of a full acquisition. – WSDOT would provide temporary relocation to the two property owners who would experience short-term disruption in their sewer service. |

⁷ *All three full residential property acquisitions and some of the partial residential and commercial property acquisitions have already taken place under the completed NEPA process for the previously approved Renton to Bellevue Project in 2008; however, this EA must consider the effects of these acquisitions in making an environmental justice determination.*

Exhibit 1. Summary of Project Effects on Environmental Justice Populations, Mitigation, and/or Offsetting Benefits

| Project Effect | Mitigation and/or Offsetting Benefits |
|--|--|
| One commercial property owner who identifies as minority must sell his property to WSDOT. | <ul style="list-style-type: none"> – WSDOT is conducting property acquisition in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, to ensure just compensation for the adverse effect on the current owner and tenants. |
| One commercial business owned by an individual who identifies as minority is being displaced. | <ul style="list-style-type: none"> – WSDOT prepared a relocation plan, collected information to identify the specific needs of the affected business, paid for the costs of relocating or replacing all property, provided up to \$2,500 to pay for time invested in finding a replacement site, and provided limited funds to pay for costs associated with relocating and reestablishing. |
| For the displaced, minority-owned business, 26 restaurant employees—including some employees who are environmental justice populations—will lose their jobs. | <ul style="list-style-type: none"> – Per the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 employees are not eligible for benefits |
| Indirect Effects, Transportation | |
| With the Project, increased capacity on southbound I-405 would allow higher traffic volumes to access southbound SR 167, which would worsen congestion at the SR 167/S 277th Street interchange during afternoon peak periods. | <ul style="list-style-type: none"> – Although there are no funded projects to mitigate for this congestion, WSDOT has identified a project in the SR 167 corridor that would address this congestion. |

After analyzing the totality of the impacts and associated mitigation, we have determined that the Project would not have a disproportionately high and adverse effect on the study area’s environmental justice populations.

What would happen if the Project is not built?

Without the Project, there would be no capacity improvements or ETLs on this section of I-405. Residents and employees in the communities along I-405 through the study area would experience continued delay and time spent in traffic. These conditions would continue to make travel times unpredictable, thus affecting the quality of life for people that live and work in the area.

Worsening traffic congestion and decreased travel speeds on I-405 in the GP and HOV lanes would also cause delays and reduce the reliability of transit service and carpools through the study area. Reduced transit reliability would result in increased costs for transit agencies and compromised service for transit users. If the Project is not built, transit service would

continue to operate primarily in the existing I-405 HOV lanes between Renton and Bellevue. Due to congestion in the HOV lanes, Sound Transit would likely not be able to meet travel times and reliability standards for planned bus rapid transit service, and Sound Transit would need to evaluate this impact on planned bus rapid transit service.

SECTION 1 INTRODUCTION

This environmental justice discipline report was prepared in support of the *I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project Environmental Assessment* (EA). This report documents the effects of the I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project (milepost [MP] 0.0 to MP 11.9) (the Project) on environmental justice populations.

The Project proposes to make several roadway, structural, drainage, and transit and high-occupancy vehicle (HOV) improvements to the Interstate 405 (I-405) corridor.

The Project is part of a comprehensive strategy identified in the 2002 *I-405 Corridor Program Final Environmental Impact Statement* (EIS) and subsequent *Record of Decision* (ROD) to reduce traffic congestion and improve mobility along the state's second-busiest highway. The Project is needed because travelers on I-405 face one of the most congested routes in the state, particularly during peak travel times.

What is the purpose of this report?

WSDOT is preparing this report to comply with several federal laws, orders, regulations, and guidance that establish the need to evaluate the effects of publicly funded projects on environmental justice populations.

- Federal Orders, Regulations, and Guidance on Environmental Justice
- The National Environmental Policy Act (NEPA) requires agencies to analyze and evaluate the social and economic effects of publicly funded projects.
- Title VI of the Civil Rights Act of 1964 is the foundation for environmental justice. It requires that “no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”
- Presidential Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations in 1994; US Department of Transportation (USDOT Order

A minority is an individual who identifies as Black (a person having origins in any of the black racial groups of Africa); Hispanic (a person of Mexican, Puerto Rican, Cuban, Central American, South American, or other Spanish culture or origin, regardless of race); Asian (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); American Indian/Alaskan Native (a person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition); or some other race.

5610.2(a)), Order to Address Environmental Justice in Minority Populations and Low-Income Populations; and FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (FHWA Order 6640.23(a)) all guide agencies to identify and address potential adverse effects not only to minority populations, but also to low-income populations.

- Other federal laws, such as the NEPA, Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended, and the Transportation Equity Act (TEA-21) also include the nondiscrimination requirements outlined in Title VI.
- The President's Executive Order 13166 on Improving Access to Services for Persons with Limited English Proficiency (August 11, 2000) reaffirms the Title VI prohibition against national origin discrimination and ensures that persons who are limited in English proficiency have meaningful access to federally funded programs and activities, consistent with Title VI. FHWA's Order 6640.23A guides the Washington State Department of Transportation (WSDOT) to provide limited English proficient populations with fair and equal access to the decision-making processes for publicly funded projects as well as the benefits of these projects. Consistent with FHWA policy guidance, our environmental review includes addressing effects to limited English proficient community members.

A low-income person is an individual whose household income falls below the federal poverty guidelines, as defined by the U.S. Department of Health and Human Services. For 2017, the federal poverty guideline for a household of four in one of the 48 contiguous states and Washington D.C. is \$24,600.

Why is environmental justice an important element to consider?

WSDOT builds transportation systems to improve the safety and mobility of people and goods. In addition, WSDOT acknowledges the state's vital interests in protecting and preserving natural resources and other environmental assets in addition to the health, safety, and wellbeing of its residents. Therefore, it is important to examine the potential effects of a project on environmental justice populations during the environmental documentation phase of a transportation project.

When we evaluate the potential effects of a project on environmental justice populations, we ask whether the project

would have a disproportionately high and adverse effect on low-income, minority, or limited English proficient populations. To make this determination, we ask the following questions:

- Do individuals with low incomes, individuals who identify themselves as minorities, and/or individuals with limited English proficiency live or work in the project study area?
- If so, would this project affect the livability of neighborhoods in the project study area?
- Would the project disrupt community cohesion— linkages that low income, minority, and/or limited English proficient persons have with their neighbors and community?
- How would the Project affect access to transit, bicycle, and pedestrian facilities in neighborhoods where low-income, minority, and/or limited English proficient persons live?
- How would the Project affect public safety in these neighborhoods?
- How would the Project affect access to schools, recreational facilities, and religious organizations that are of importance to individuals with low incomes, individuals who identify themselves as minorities, and/or individuals with limited English proficiency?
- Would the Project help or hurt minority-owned businesses employing or serving individuals with low incomes, individuals who identify themselves as minorities, and/or individuals with limited English proficiency?

Because these projects also include express toll lanes (ETLs) that would affect I-405 users, we determined whether individuals who identify as a minority, have low incomes, or are limited English proficient use I-405. Then, we examined how these users may be affected by the ETLs.

A limited English proficient person is an individual who has difficulty speaking, reading, writing, or understanding the English language and whose difficulties may deny that individual the opportunity to meaningfully engage in the transportation decision-making process. This definition applies to an individual who:

- Was not born in the United States;
 - Speaks a native language other than English and comes from an environment where a language other than English is dominant; or
 - Comes from an environment where a language other than English has had a substantial effect on that individual's English-language proficiency.
-

SECTION 2 PROJECT DESCRIPTION

What improvements are proposed with the Project?

Exhibit 2-1 describes in detail the improvements proposed with the Project. Exhibit 2-2, sheets 1 through 8, show the proposed improvements on a series of maps. In general, the Project proposes to add one lane to I-405 in each direction for about 8 miles beginning on I-405 near SR 167 and continuing approximately 9 miles north of I-90. The Project would also add a general purpose (GP) auxiliary lane to southbound I-405 between MP 6.7 (north of N 30th Street) and 7.1 (south of NE 44th Street) and MP 9.4 (north of 112th Avenue SE) to 10.5 (north of Coal Creek Parkway). The existing high-occupancy vehicle (HOV) lane on I-405 and the additional lane would be operated as a two-lane express toll lane (ETL) system. Additional details describing the ETLs are provided in the next question, "How would the express toll lanes work?"

Exhibit 2-1. Improvements Proposed with the I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project

| Project Element | I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project |
|---|---|
| I-405/I-5 Interchange Exhibit 2-2, Sheet 1 | <ul style="list-style-type: none"> – Extend the southbound left lane at the I-5 interchange west for approximately 500 feet to provide additional merge distance. |
| I-405 Lanes and Shoulders from SR 167 to north of I-90 Exhibit 2-2, Sheets 2 through 8 | <ul style="list-style-type: none"> – Create a dual ETL system from MP 2.9 (northeast of the I-405/SR 167 interchange) and MP 11.9 (north of the I-405/I-90 interchange) by adding one new lane in each direction and converting the existing HOV lane to an ETL. – Convert the existing HOV lane to a single ETL from MP 2.4 (at the I-405/SR 167 interchange) to MP 2.9 on northbound I-405 and from MP 1.6 (in Renton over Springbrook Creek) to MP 2.9 on southbound I-405. – Add an additional GP (auxiliary) lane on southbound I-405 between MP 6.7 (north of 30th Street) and MP 7.1 (south of NE 44th Street) and MP 9.4 (north of 112th Avenue SE) to MP 10.5 (north of Coal Creek Parkway). – Bring I-405 up to current freeway standards where feasible. |
| I-405 Tolling from SR 167 to north of I-90 Exhibit 2-2, Sheets 2 through 8 | <ul style="list-style-type: none"> – Construct tolling gantries to collect the tolls for the ETL system (see description in the row above). |
| Cedar Avenue Exhibit 2-2, Sheet 4 | <ul style="list-style-type: none"> – Reconstruct the bridge over I-405 to widen southbound I-405. |
| Renton Avenue Exhibit 2-2, Sheet 4 | <ul style="list-style-type: none"> – Reconstruct the bridge over I-405 to widen southbound I-405. |
| Cedar River Bridge Exhibit 2-2, Sheet 4 | <ul style="list-style-type: none"> – Widen the southbound I-405 bridge over the Cedar River. |
| Sunset Boulevard N Interchange Area Exhibit 2-2, Sheet 4 | <ul style="list-style-type: none"> – Widen the I-405 northbound and southbound bridges over Sunset Boulevard N. |
| NE Park Drive Interchange Area Exhibit 2-2, Sheet 5 | <ul style="list-style-type: none"> – Widen the I-405 southbound bridge over NE Park Drive. |
| N 30th Street Interchange Area Exhibit 2-2, Sheet 5 | <ul style="list-style-type: none"> – Replace the local road overpass abutment slopes with retaining walls on both sides of I-405 and lower the southbound I-405 roadway by approximately one foot. |
| NE 44th Street Interchange Area Exhibit 2-2, Sheet 6 | <ul style="list-style-type: none"> – Replace the northbound and southbound I-405 bridges over May Creek with two new single span bridges and provide habitat improvements. – Replace the NE 44th Street bridge over I-405. Construct new direct access ramps and two inline transit stations (one in each direction) in the I-405 median. Transit stations would include station platforms, signage, artwork, lighting, fare machines (ORCA), and site furnishings such as shelters, lean rails, benches, bollards, bicycle parking, and trash receptacles. – Realign and reconstruct the northbound access to I-405 from a loop ramp to a new on-ramp from Lake Washington Boulevard NE. – Build four roundabouts along local arterials. – Construct an at-grade park-and-ride lot at Lake Washington Boulevard N and N 43rd Street with a minimum of 200 parking stalls and a roundabout (improvements would be built, but may be built by Sound Transit or others). |

Exhibit 2-1. Improvements Proposed with the I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project

| Project Element | I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project |
|--|---|
| 112th Avenue SE Interchange Area Exhibit 2-2, Sheet 7 | <ul style="list-style-type: none"> – Replace the 112th Avenue SE bridge over I-405. – Construct new direct access ramps, two inline transit stations (one in each direction) in the I-405 median. Transit stations would include station platforms, signage, artwork, lighting, fare machines (ORCA), and site furnishings such as shelters, lean rails, benches, bollards, bicycle parking, and trash receptacles. – Construct a roundabout on 112th Avenue SE. – Reconfigure the Newport Hills Park-and-Ride. |
| Coal Creek Parkway Interchange Area Exhibit 2-2, Sheet 7 | <ul style="list-style-type: none"> – Construct a new southbound I-405 bridge on a new alignment. Convert the existing southbound I-405 bridge to northbound ETLs. – Convert the four local road intersections on Coal Creek Parkway SE to roundabouts. |
| I-405/I-90 Interchange Area Exhibit 2-2, Sheet 8 | <ul style="list-style-type: none"> – Reconfigure the I-405 southbound to I-90 eastbound ramp from one to two lanes. – Realign the I-405 northbound to I-90 eastbound ramp. As part of this work, construct two new bridges over the eastbound I-90 ramp to Factoria Boulevard and over Factoria Boulevard. |
| Fish Passage Exhibit 2-2, Sheet 6 | <ul style="list-style-type: none"> – Construct four fish passage crossings for unnamed tributary (UNT) 08.LW.0283 (formerly Gypsy Creek). – Construct a fish passage crossing under I-405 mainline for Stream UNT 08.LW.7.7A.^a – Construct a fish passage crossing under I-405 mainline for Stream UNT 08.LW.7.8.^a |
| Lake Washington Trail Exhibit 2-2, Sheets 6 and 7 | <ul style="list-style-type: none"> – Realign and reconstruct the existing trail west of its current location to reside in the King County's Eastside Rail Corridor property between Ripley Lane in Renton (MP 7.7) and Coal Creek Parkway in Bellevue (MP 10.2). As part of this work, widen a portion of the King County's Eastside Rail Corridor Regional Trail. |
| Noise Walls Exhibit 2-2, Sheets 4, 6, 7 and 8 | <ul style="list-style-type: none"> – Construct 4 new noise walls. – Relocate 2 existing noise walls. |
| Stormwater Management Exhibit 2-2, Sheets 1 through 8 | <ul style="list-style-type: none"> – Add 46.92 acres of new PGIS and 5.7 acres of non-PGIS. – Provide enhanced treatment for 100% of new impervious surfaces. – Retrofit 51 percent (111.5 acres) of existing untreated PGIS and continue to treat stormwater from the 21.27 acres of PGIS that currently receives treatment. – Treat a total of 179.69 acres of PGIS. |
| Construction Duration | <ul style="list-style-type: none"> – 5 years of construction is expected from 2019 through 2024. – The direct access ramps and associated transit improvements at 112th Avenue SE, reconfiguring the Newport Hills Park-and-Ride lot, and building four roundabouts on Coal Creek Parkway SE may be constructed after 2024, depending on when allocated funds for these elements become available. |

ETL = express toll lane GP = general purpose; HOV = high-occupancy vehicle; MP = milepost PGIS = pollutant generating impervious surfaces

^a For these culverts, a restrictor plate will be put in place to prevent flooding until a downstream barrier is removed, at which time the restrictor plate will be removed.

How would the express toll lanes work?

At this time, the Washington State Transportation Commission (WSTC) has not established operational hours, user exemptions, occupancy requirements, and operating parameters for the ETLs proposed with the Project. The WSTC would set operational requirements for the ETLs prior to opening day. For this analysis, we assumed the requirements for the current I-405, Bellevue to Lynnwood ETL system would be used for this project. These assumptions, listed below, represent the most recent operating guidance from the WSTC for ETLs:

- **Limited Access** – The system would have designated entry and exit points, with a buffer between the ETLs and the GP lanes. These access points would vary in length, depending on the location.
- **Dynamic and Destination Pricing** – The I-405 ETL system would use both dynamic and destination pricing to determine a driver’s toll at the time they enter the ETL. With *dynamic pricing*, toll rates vary based on congestion within the corridor to maintain performance. Electronic signs would be used to communicate the current toll rate for drivers. Toll rates are updated every few minutes, but the driver’s price is set when they enter the system. With *destination pricing*, the toll is based on the driver’s destination. Toll signs would show up to three toll rates for different toll zones, or destinations. Drivers would pay the rate they see upon entering the ETLs to reach their destination, even if they see a different toll rate for their destination further down the road. When both of these pricing approaches are used together, it means that the toll that drivers pay is based both on the congestion in the corridor and the distance they are traveling.
- **Operating Hours and Good To Go! Passes** – The ETL system is expected to operate from 5 a.m. to 7 p.m. on weekdays, with the system toll-free and open to all at other hours and on major holidays. Transit, HOVs, and motorcycles would need to have a *Good To Go!* pass to use the ETLs for free during operating hours. Eligible HOV users would be required to set the *Good To Go!* pass to the HOV mode to avoid charges. Single-

How does dynamic pricing work?

Electronic monitors along the roadway measure real-time information on the speed, congestion, and number of vehicles in the ETLs. This information is used to determine whether tolls go up or down to optimize lane use.

As the ETLs become congested, toll rates increase, and as congestion decreases, toll rates decrease. The use of dynamic pricing allows the lanes to operate with high volumes but avoid becoming congested.

When would tolls be charged to use the ETLs?

It is assumed the ETLs would operate from 5 a.m. to 7 p.m. on weekdays. At all other times and major holidays, the lanes would be free and open to all without a *Good To Go!* pass.

During operating hours:

- **SOVs** would pay a toll to use the lanes.
 - **Transit, HOV 3+, and Motorcycles** would travel for free with a *Good To Go!* pass.
 - **HOV 2+** would travel for free from 9 a.m. to 3 p.m. with a *Good To Go!* pass. From 5 a.m. to 9 a.m. and 3 p.m. to 7 p.m. HOV2+ would pay a toll to use the ETLs with or without a *Good To Go!* pass.
 - **Large vehicles** over 10,000 pounds gross vehicle weight would not be able to use the ETLs at any time.
-

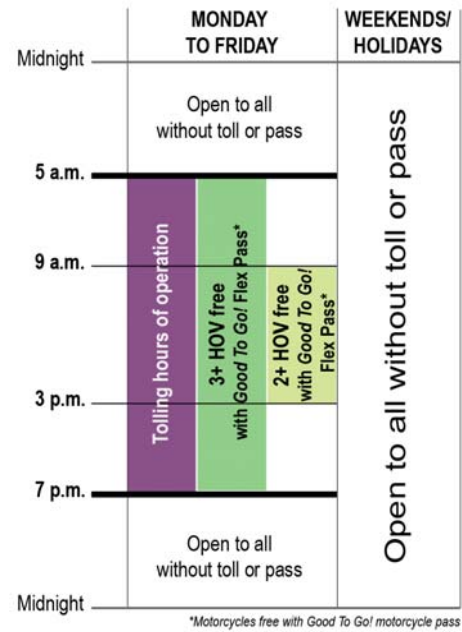
occupant vehicles (SOVs) could choose to pay a toll to use the ETLs during operating hours with or without a *Good To Go!* pass.

- Occupancy Requirements** – During the peak periods (weekdays from 5 a.m. to 9 a.m. and 3 p.m. to 7 p.m.), transit vehicles and carpools with three or more persons (HOV 3+) would be able to use the lanes for free with a *Good To Go!* pass. From 9 a.m. to 3 p.m., the system would be open toll-free to those with two or more passengers (HOV2+) with a *Good To Go!* pass. Motorcycles ride toll-free in the ETLs with a *Good To Go!* pass. During non-operating hours, SOVs will not be permitted to enter the ETLs from ramps where access is provided directly from local streets. SOV access would only be permitted from freeway GP entry and exit points.
- Vehicle Weight** – Vehicles over 10,000 pounds gross vehicle weight will be prohibited, which is consistent with HOV lane restrictions throughout Washington.
- Electronic Tolling** – Payments would be made via electronic tolling with a *Good To Go!* pass. For drivers who choose not to use a *Good To Go!* Pass, WSDOT offers optional photo billing (pay by mail) for an extra fee.

How would the Project be constructed?

WSDOT expects to construct the Project using a design-build contract. Design-build is a method of project delivery in which WSDOT executes a single contract with one entity for design and construction services to provide a finished product. With design-build projects, contractors have the flexibility to offer innovative and cost-effective alternatives to deliver the Project, improve project performance, and reduce project effects. Some design modifications that the contractor may propose could affect the Project footprint and design details described in this EA; however, if the contractor proposes modifications not covered by this EA, environmental review would be conducted as needed.

Construction work would include the removal of existing asphalt and concrete surfaces, clearing and grading adjacent areas, laying the aggregate roadway foundation, and placing



What is a *Good To Go!* Account?

A *Good To Go!* account is the cheapest and easiest way to pay tolls in Washington. With an account, your tolls will be paid automatically without having to stop at a toll booth or worry about bills in the mail. For more information please go to:

<http://www.wsdot.wa.gov/GoodToGo/default.htm>

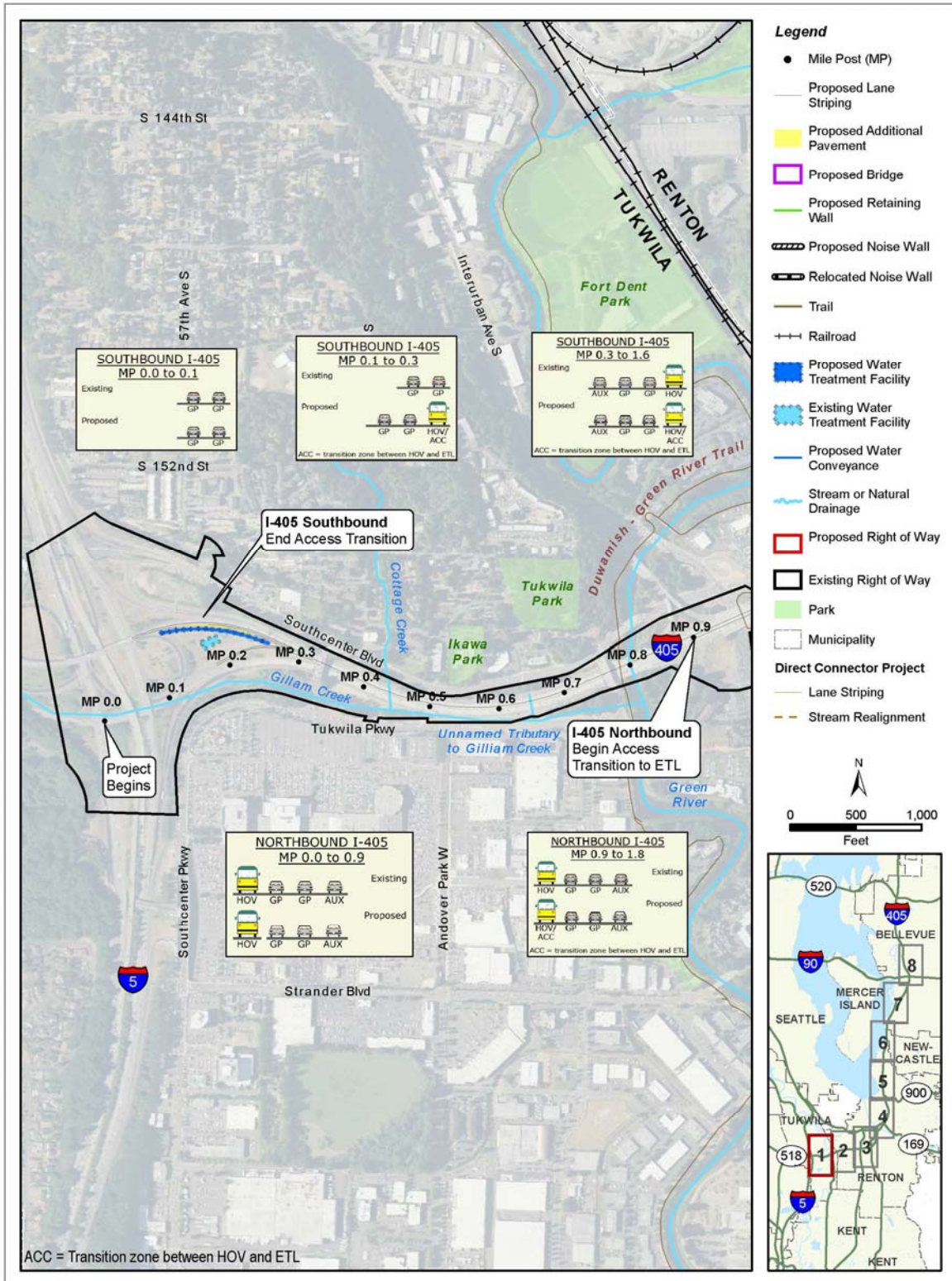
of asphalt and concrete surfaces. Changing the vertical and horizontal alignments of the I-405 mainline would require earthwork, with approximately 780,000 cubic yards of excavation and approximately 700,000 cubic yards of fill.

Construction equipment such as backhoes, excavators, front loaders, pavement grinders, jack hammers, pile drivers, trucks, as well as grading and paving equipment would be used. Equipment used for construction would include cranes, pile drivers, drilling rigs and augers, backhoes and excavators, jack hammers, concrete pumping equipment, and slurry processing equipment.

Staging areas in unused right of way would provide room for employee parking, large equipment storage, and material stockpiles. The contractor may also find other locations for construction staging.

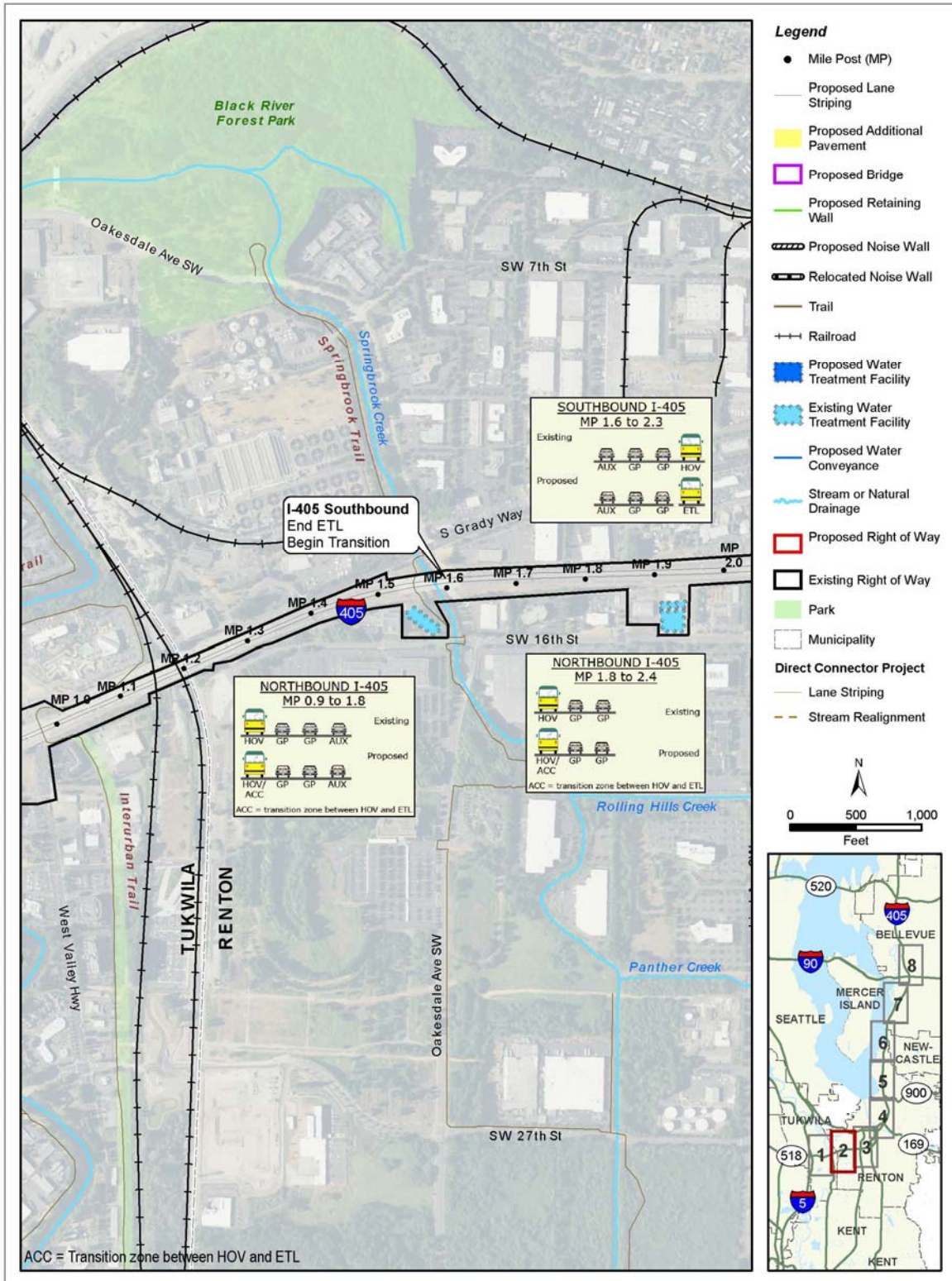
I-405, TUKWILA TO I-90 VICINITY EXPRESS TOLL LANES PROJECT (MP 0.0 TO 11.9)
 ENVIRONMENTAL JUSTICE DISCIPLINE REPORT

Exhibit 2-2. I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project Improvements, Sheet 1 of 8



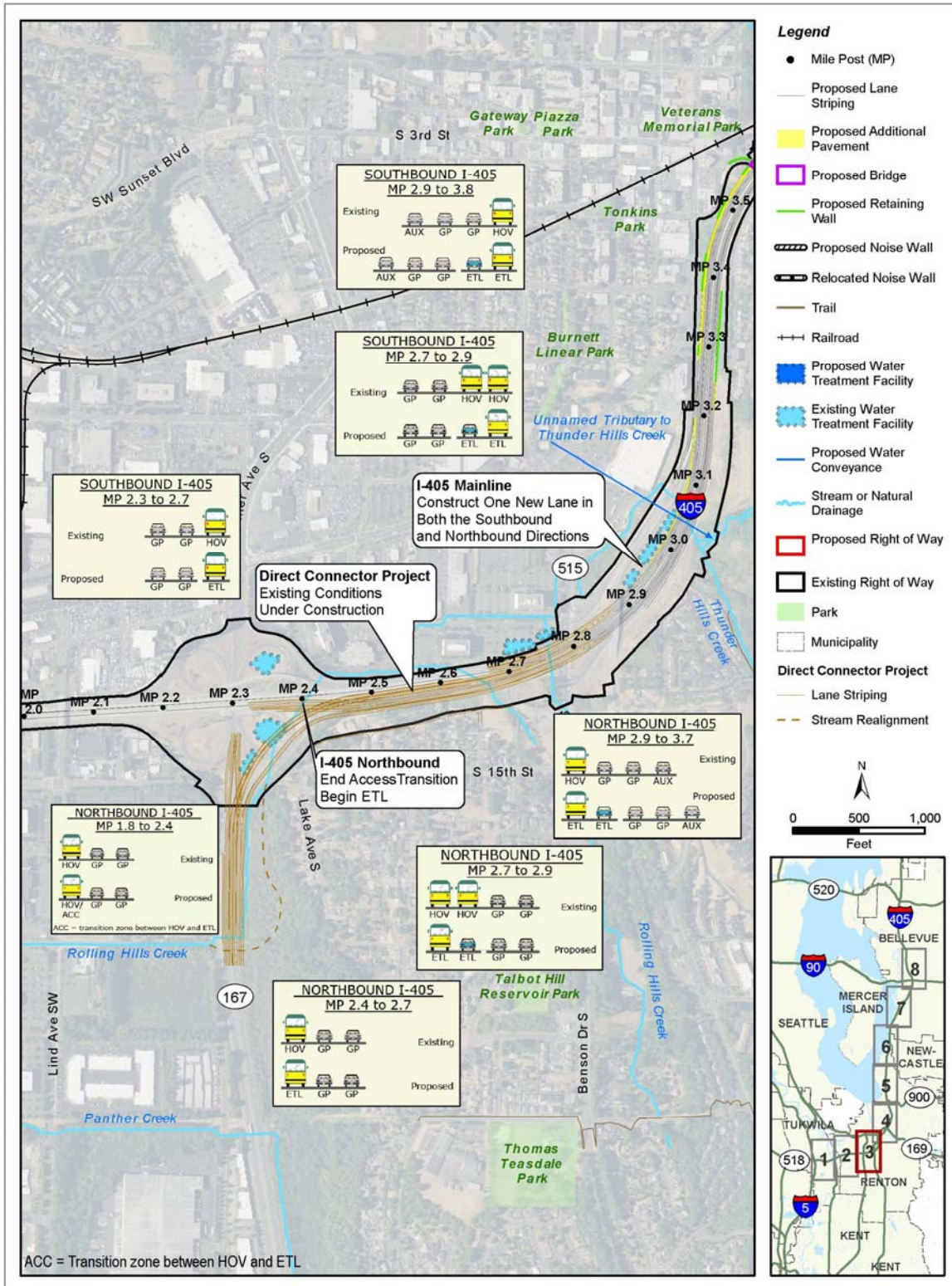
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 ENVIRONMENTAL JUSTICE DISCIPLINE REPORT

Exhibit 2-2. I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project Improvements, Sheet 2 of 8



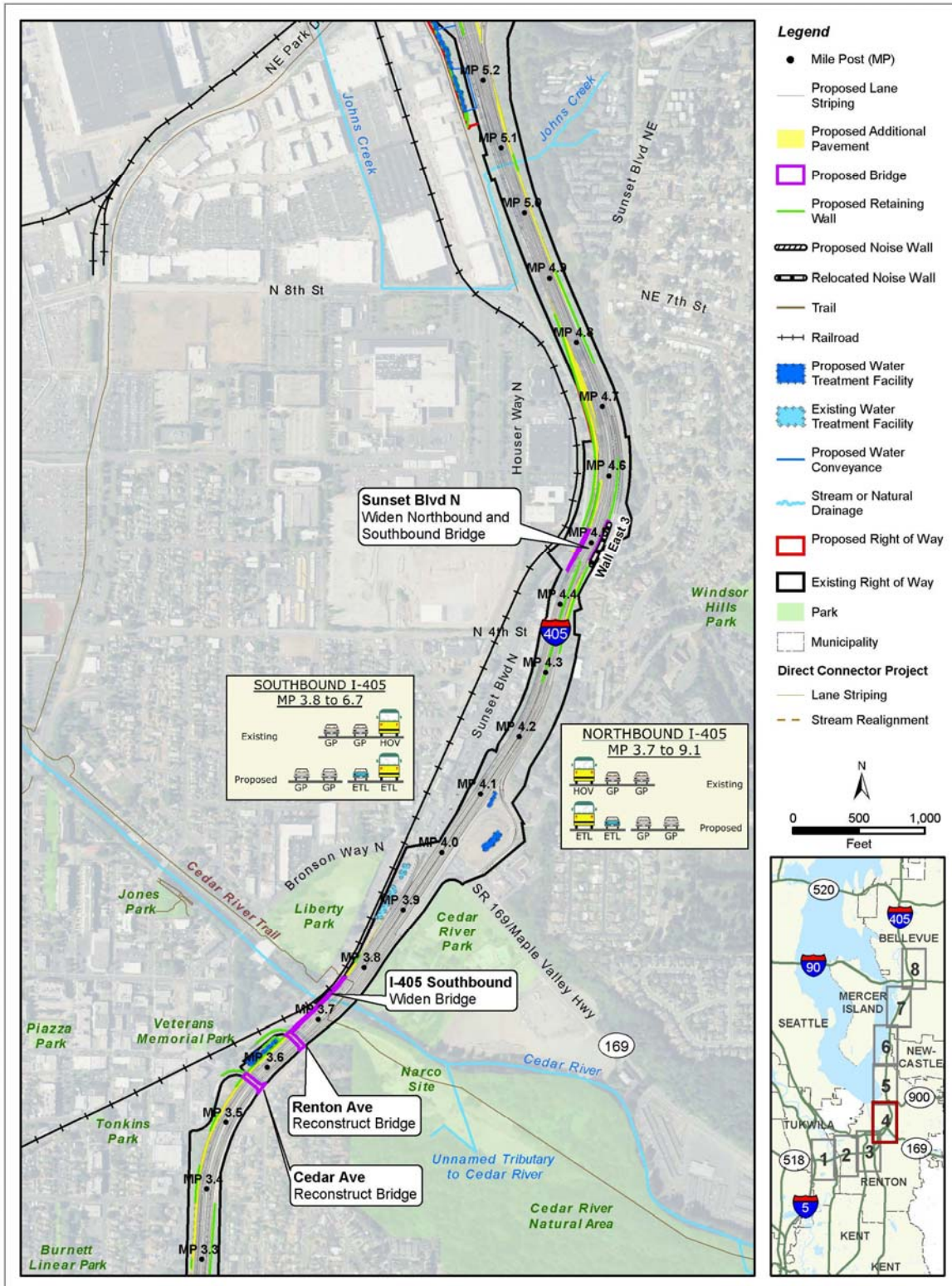
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 ENVIRONMENTAL JUSTICE DISCIPLINE REPORT

Exhibit 2-2. I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project Improvements, Sheet 3 of 8



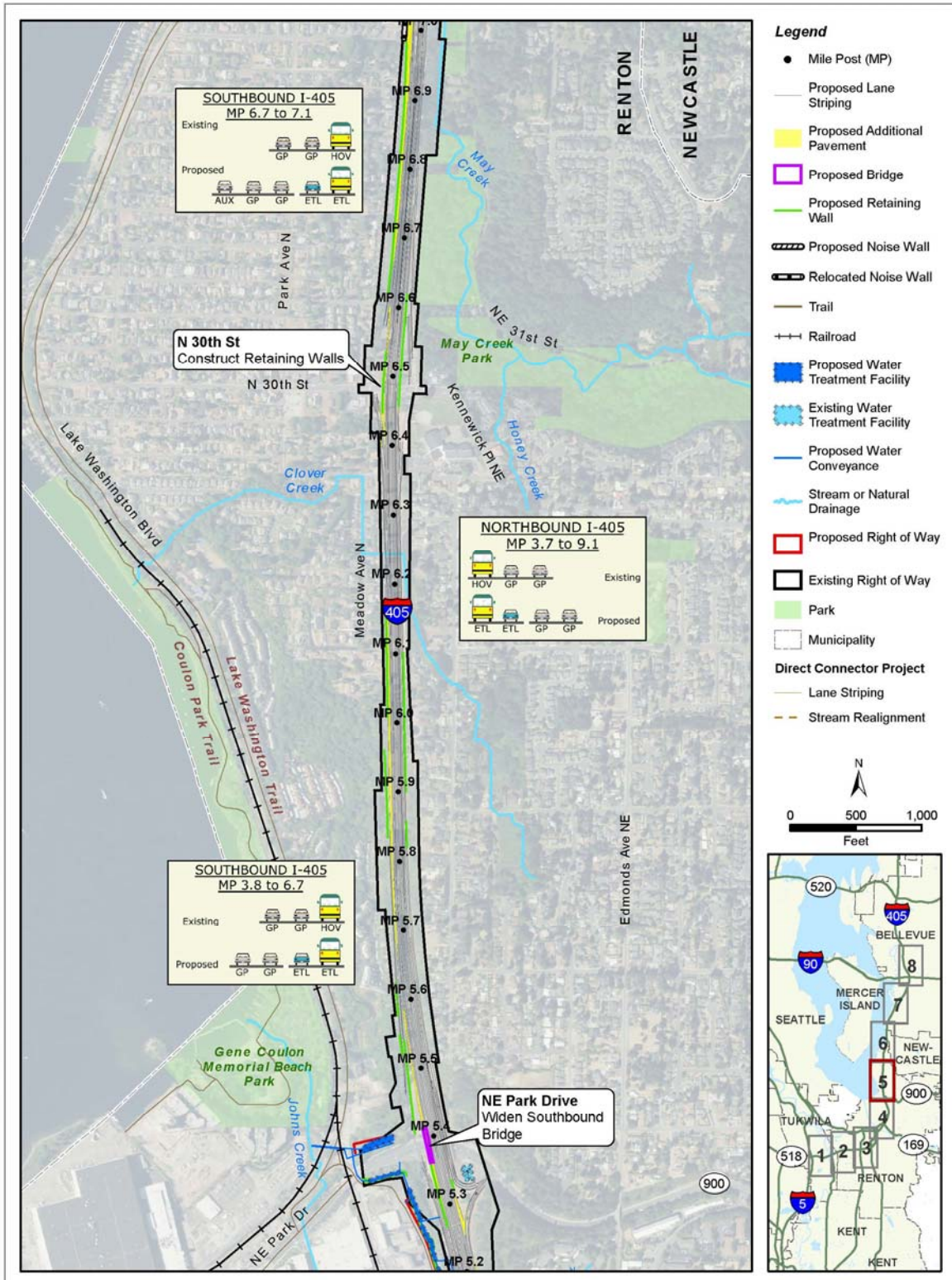
I-405, TUKWILA TO I-90 VICINITY EXPRESS TOLL LANES PROJECT (MP 0.0 TO 11.9)
 ENVIRONMENTAL JUSTICE DISCIPLINE REPORT

Exhibit 2-2. I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project Improvements, Sheet 4 of 8



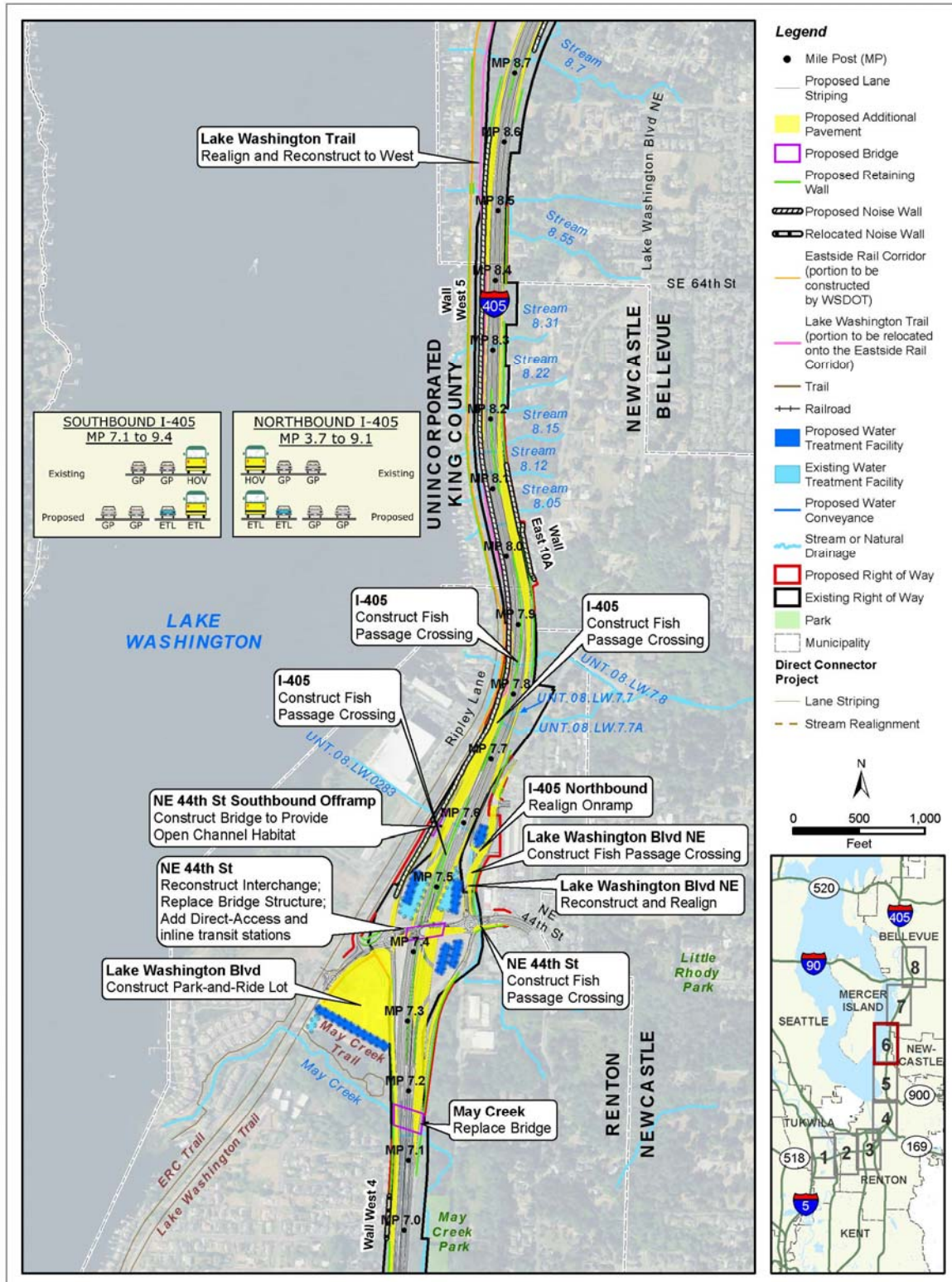
I-405, TUKWILA TO I-90 VICINITY EXPRESS TOLL LANES PROJECT (MP 0.0 TO 11.9)
 ENVIRONMENTAL JUSTICE DISCIPLINE REPORT

Exhibit 2-2. I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project Improvements, Sheet 5 of 8



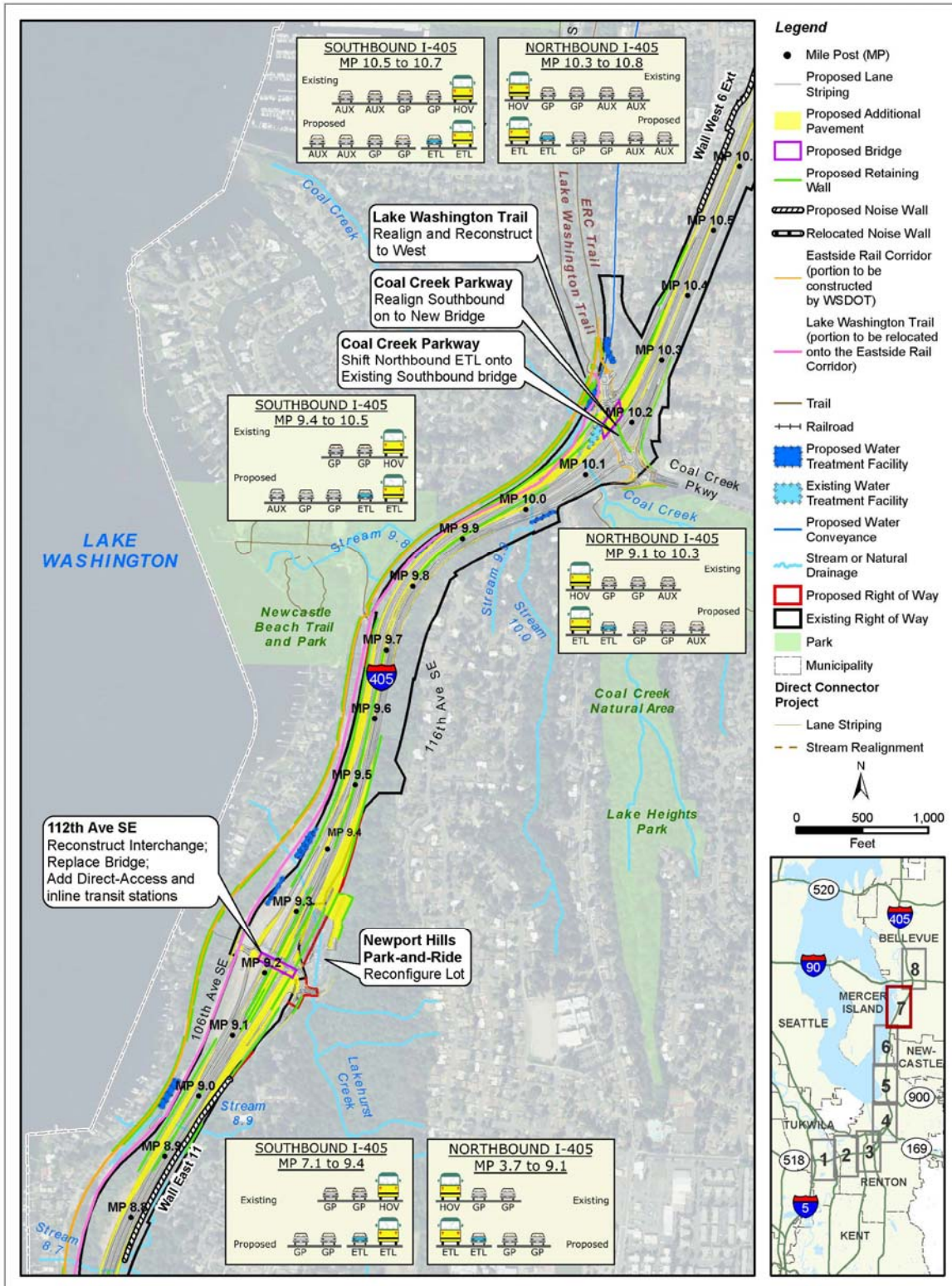
I-405, TUKWILA TO I-90 VICINITY EXPRESS TOLL LANES PROJECT (MP 0.0 TO 11.9)
 ENVIRONMENTAL JUSTICE DISCIPLINE REPORT

Exhibit 2-2. I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project Improvements, Sheet 6 of 8



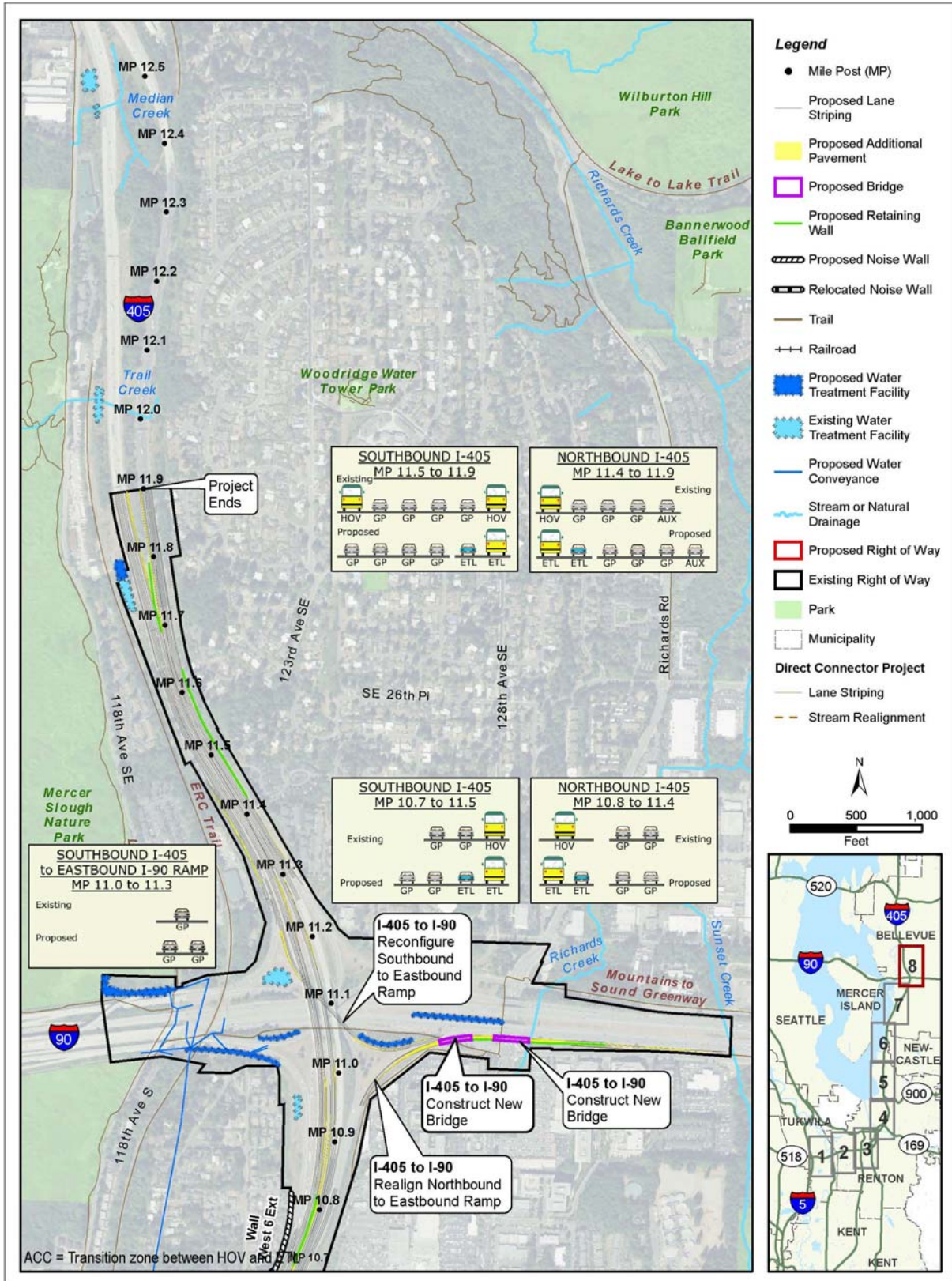
I-405, TUKWILA TO I-90 VICINITY EXPRESS TOLL LANES PROJECT (MP 0.0 TO 11.9)
 ENVIRONMENTAL JUSTICE DISCIPLINE REPORT

Exhibit 2-2. I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project Improvements, Sheet 7 of 8



I-405, TUKWILA TO I-90 VICINITY EXPRESS TOLL LANES PROJECT (MP 0.0 TO 11.9)
 ENVIRONMENTAL JUSTICE DISCIPLINE REPORT

Exhibit 2-2. I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project Improvements, Sheet 8 of 8



SECTION 3 STUDY APPROACH

What is the study area and how was it determined?

The study area varies depending on the resource and potential effect or benefit being evaluated. This Environmental Justice Discipline Report analyzes three geographic areas, described below:

- To determine if the Project would result in benefits or adverse effects on environmental justice populations, we looked at the geographic area within 1/2 mile of either side of I-405 in each direction between I-5 in Tukwila and about a mile north of I-90 in Bellevue.
- To analyze potential benefits and effects of ETLs, we looked at the current travelshed for I-405. We refer to the geographic area from which I-405 users come as the I-405 travelshed.
- To analyze effects that may be delayed or distant from the Project, we also considered geographic areas outside the study areas described above. This includes the geographic area where trips on SR 167 originate (the SR 167 travelshed).

For this discipline report, we refer to the geographic area within 1/2 mile of either side of I-405 between I-5 in Tukwila and about a mile north of I-90 in Bellevue as the project study area.

What policies or regulations are related to effects on environmental justice populations?

The methodology for this discipline report is consistent with federal and state policies and plans that inform FHWA and WSDOT guidance. These include the guidance described in Section 1 of this report as well as the following federal and state policies:

- FHWA's Community Impact Assessment: A Quick Reference for Transportation

- WSDOT's *Environmental Manual*, Section 458, Social and Economic, and Section 470, Public Services and Utilities (WSDOT 2017a)
- Federal Highway Administration *Environmental Justice Reference Guide* (FHWA 2015)

How did we collect information for this report?

To evaluate the affected environment, we used EJScreen, a website developed and maintained by the U.S. Environmental Protection Agency. EJScreen uses data from the 2010 U.S. Decennial Census and American Community Survey (ACS) 3- and 5-year estimates. EJScreen allows us to collect information on demographic characteristics of populations in the study area. Although ACS data are estimates, for the purpose of this analysis, the estimates are more useful than using 2010 Census data alone, because 2010 Census data are nearly 10 years old (collected in 2009).

We verified Census and ACS findings with Washington State Office of Superintendent of Public Instruction demographic data on students enrolled in elementary schools in each study area for the most recent school year available.

We met with the Transportation technical lead for the Project to do the following:

- Determine the travelshed for I-405.
- Understand potential increases or reductions in traffic congestion, travel delays, and the level of service for the I-405 GP lanes, ETLs, and transit routes that serve the corridor.
- Identify any transit routes that will not be able to access ETLs because of where they enter and exit I-405, and determine how these routes will be affected.

In addition, we met with the technical lead and/or reviewed analyses for the following disciplines:

- Visual Quality, Air Quality, Noise, Socioeconomics, Hazardous Materials, Public Services and Utilities, Cultural Resources, and Section 4(f) to identify potential benefits and effects of the Project on surrounding businesses and communities, especially

those with low-income, minority, and limited English proficient residents.

- Land Use, to identify potential benefits of the Project to affected communities, such as coordinating with local master and comprehensive plans and potential effects to surrounding neighborhoods as a result of changes to land use.
- Relocations, to identify potential property acquisitions and relocations as a result of the Project, especially in neighborhoods where there are low-income, minority, and limited English proficient populations.

We conducted a literature review of existing research on the effects of ETLs on affected communities and environmental justice populations. We also referenced previous environmental justice analyses of ETL projects, including the SR 167 High-Occupancy Toll (HOT) Lanes Pilot Program and I-405 Bellevue to Lynnwood Project.

Several additional data sources and databases informed the demographic analysis, existing conditions, and analysis of the effects of the Project on environmental justice populations, including:

- King County Metro Transit rider/non-rider surveys (King County Metro Transit 2016)
- U.S. Bureau of Transportation Statistics, which compiles, analyzes, and makes accessible information on the nation's transportation systems
- U.S. Census TIGER/Line Files, an acronym for "Topologically Integrated Geographic Encoding and Referencing" system. These are the maps prepared for the U.S. Census Bureau that contain all the essential census geography, including street addresses, governmental unit boundaries, and sub-municipal boundary data such as Census Tracts, Block Groups, and Blocks. These maps enable transportation analysts and decision-makers to closely examine the spatial patterns of socioeconomic characteristics such as income and race.

Public Involvement

Public involvement with communities in the study area has influenced the Project. Members of the public have had an

opportunity to review and provide input, starting in 1998 when WSDOT, FHWA, King County Metro Transit, and local jurisdictions came together to address congestion and improve mobility in the I-405 corridor. Extensive public involvement with communities along the I-405 corridor continues today. Public input influenced WSDOT's decision to advance the Project.

Most of the public outreach to date has been provided in English. WSDOT translated noise wall information for the Monterey Terrace neighborhood in Renton when the Project team sought input from property owners and tenants on whether to build a noise wall in this area. Section 6 of this document, which describes mitigation, includes outreach in multiple languages.

Listed below are outreach activities specific to the Project:

- Holding four public open houses about the Project in Bellevue and Renton in August 2015 and September 2016. These open houses were attended by 316 people. Most comments and questions at the open houses were regarding the construction timeline and property acquisitions. Public outreach to inform people of the meetings include:
 - Mailing 4,604 postcards announcing the public open houses to households within 750 feet on either side of I-405 between SR 167 and NE 6th Street (August 2015 and September 2016).
 - Publishing display ads in area papers and online publications announcing the open houses (August 2015 and September 2016). This included translating and placing display ads in the following publications to communicate with persons with limited English proficiency: La Raza, Seattle Viet Times, The Korea Daily, and the Seattle Chinese News. The display ads for the hearing for this EA were translated into Spanish, Korean, Chinese, and Vietnamese.
 - Hanging posters and distributing postcards to community gathering places, such as libraries, throughout the corridor announcing the open houses (August 2015 and September 2016).

- Emailing notice of the open houses to WSDOT project listservs and other agency or community group lists (August 2015 and September 2016).
- Sending press releases announcing the open houses to local and regional media outlets (August 2015 and September 2016).
- Providing briefings to community groups and councils, such as the Bellevue Downtown Association (January and June 2016), Bellevue Chamber of Commerce (February 2016 and April 2017), Renton City Council (May 2016 and February and September 2017) Bellevue City Council (January 2016 and January 2017), Newcastle Chamber of Commerce (September 2017), Bellevue Sunrise Rotary (November 2017), and Newcastle City Council (December 2017).
- Participating in public open houses hosted by King County for the Eastside Rail Corridor Regional Trail Project in 2017 in Renton and Bellevue to discuss the scope and schedule of trail work associated with this Project.
- Hosting targeted meetings with eight neighborhood organizations along the Project alignment, including Greenwich Crest (April 2017), Newport Shores (October 2017), Kimberlee Park (October 2016), and Woodridge (April 2017) in Bellevue; Lake Lanes in Renton/Bellevue (March 2015, September 2016, and January 2018); and Kennydale (January 2016 and April 2018) and Monterey Terrace (October 2016 and March 2017), and Renton Hill (October 2017) in Renton, with additional meetings planned for 2018. The primary topics of interest at these meetings included Project scope and schedule; preliminary designs for highway, local street and interchange work; noise walls and analysis; vegetation and landscaping; air quality; effects on future traffic levels; drainage and stormwater treatment; changes to transit infrastructure and access; expectations during construction (phasing, timeline, neighborhood access); and bicycle/pedestrian infrastructure.

- Responding to area residents' and commuters' questions and comments through telephone, email, and in-person conversations. Major topics of interest have included preliminary Project designs, with a focus on effects to individual property owners, such as right of way acquisition; potential noise walls; vegetation and landscaping; ETL operations; and clarifications about the funded Project.
- Providing a Project website with information that addresses Project scope and budget, design, public involvement opportunities, benefits, and timeline.
- Translating noise wall information into Spanish for the Monterey Terrace neighborhood in Renton due to advice from a local property manager. The purpose of communication was to seek input from property owners and tenants on whether to build a noise wall in this area.

From 2014 to the present, WSDOT has been conducting public involvement throughout the I-405 corridor regarding ETLs.

This includes the following:

- Holding over 200 briefings with community and neighborhood organizations, local jurisdictions (staff and elected officials), and other interested groups
- Staffing booths at 10 fairs and festivals in the corridor, including Renton River Days and Bellevue Strawberry Festival

To supplement this outreach with more targeted engagement with environmental justice populations, WSDOT conducted seven interviews with social service providers who serve environmental justice populations in the study area and I-405 travelshed, including:

- City of Bellevue Human Services Division (August 15, 2016)
- City of Burien Department of Human Services (September 23, 2016)
- City of Redmond Human Services (August 29, 2016)
- City of Renton Department of Human Services (August 11, 2016)
- Coal Creek YMCA (January 12, 2017)

- Hopelink (August 25, 2016)
- Youth Eastside Services (August 16, 2016)

The purpose of these interviews was to share information about the Project—including the introduction of ETLs—and gather their insights on how environmental justice populations may benefit or experience adverse effects because of the Project. Most questions and concerns raised in these interviews were about how ETLs may affect low-income and limited English proficient persons.

WSDOT reached out to 28 other human service agencies and social service providers to offer project briefing but did not receive a response or the request was turned down. WSDOT will continue to reach out to these organizations as the Project progress.

Engagement with Tribes

American Indians are environmental justice populations. WSDOT coordinates with tribal governments to identify and address social, cultural, environmental, and other issues of significance to tribal members.

WSDOT is committed to respectful, effective consultation and communication with tribal governments in recognition that Project activities may affect their rights and interests. WSDOT Executive Order E1025.01 on Tribal Consultation reaffirms the commitment to an effective working relationship with tribal governments.

WSDOT participated in government-to-government consultation with four federally recognized tribes during preparation of the I-405 Corridor Program EIS: Muckleshoot Indian Tribe, Snoqualmie Tribe, Tulalip Tribes, and the Confederated Tribes and Bands of the Yakama Nation. WSDOT also consulted with the Duwamish Tribe as an interested party.

More recently, WSDOT consulted with the tribes to discuss ecosystems effects. During those discussions, WSDOT informed the tribes about the ETLs for this Project but did not receive any feedback specific to the tolling.

On February 11, 2016, WSDOT sent letters to the Muckleshoot Tribe, the Snoqualmie Nation, and the Confederated Tribes and Bands of the Yakima Nation requesting tribal participation

in the identification of cultural resources in and around the study area. To date, there has been no response.

WSDOT continues to consult with these tribes as it advances the Project, engaging tribal governments at each stage of the environmental analysis. In March 2017, for example, representatives from the Muckleshoot Indian Tribe met with WSDOT, King County, the City of Renton, the Washington State Department of Ecology, and the Washington State Department of Fish and Wildlife with a goal to develop an approach to improving fish passage.

WSDOT continues to consult with the Muckleshoot Tribe regarding fish passage.

How did we evaluate effects?

Analytic Techniques to Address Non-Toll-Related Effects

To identify potential effects on minority or low-income populations, as well as limited English proficient residents (in addition to reviewing findings from other disciplines such as transportation and land use), we considered the outcomes from WSDOT's interviews with social service providers and public outreach for the Project to find answers to the following questions:

- How would construction and operation of the Project affect environmental justice populations?
- How would construction and operation of the Project benefit environmental justice populations?

In reviewing summaries from the interviews and social service providers and public outreach, we considered perceptions of low-income, minority, and limited English proficient community members about the potential benefits and effects of the project, magnitude of those effects, and suitability of proposed mitigation to avoid or minimize adverse effects.

After we identified potential adverse effects and benefits, we isolated the project effects that would affect people differently, such as noise or increased traffic congestion.

We also examined whether the Project could affect community cohesion—linkages that people in a community have with their neighbors and social resources like schools, community centers, recreational facilities, and churches.

Next, we determined whether any adverse effects or benefits would disproportionately affect low-income or minority populations. FHWA directs WSDOT to apply two criteria to determine whether an effect is disproportionately high and adverse:

- The adverse effect is predominantly borne by a minority population and/or a low-income population, or
- The adverse effect would be suffered by the minority population and/or low-income population and be appreciably more severe or greater in magnitude than the adverse effect on the non-environmental justice populations/general population.

We used geographic information systems (GIS) to map the potential adverse effects over census block group demographic data. This approach compared the minority and poverty status of those who would be affected by the Project to those who would not be affected. We also compared the limited English proficient status of those affected by the Project to those not affected.

In determining whether there would be disproportionately high and adverse effects to low-income or minority populations, we also considered project benefits that would affect low-income or minority populations.

In addition, we considered the following:

- Are there reasonable and feasible measures to avoid or minimize disproportionately high and adverse effects?
- Are there any project benefits that would affect low-income or minority populations?
- Did WSDOT modify the Project to avoid or minimize disproportionately high and adverse effects?

Analytic Techniques to Address the Effects of Express Toll Lanes

To identify potential adverse effects and benefits of the ETL system and the all-electronic toll system on low-income, minority, and limited English proficient populations, we relied on outcomes from the interviews with social service providers, the results from surveys with SR 167 users on their experiences with HOT lanes, and our literature review.

To determine the proportion of I-405 users who are low-income, minority, or limited English proficient, we overlaid the map of the I-405 travelshed with demographic data from EJScreen. We created three overlaid travelshed maps: low-income populations in the travelshed, minority populations in the travelshed, and limited English proficient populations in the travelshed.

We evaluated whether any adverse effects of the ETL system and all-electronic tolling on low-income populations would be considerably more severe or greater in magnitude than the adverse effects suffered by the general population. To make this determination, we compared modeled travel times with and without the addition of or conversion to ETLs for the following user types:

- Drivers of SOVs who would use the GP lanes
- Drivers of SOVs who would pay to use the ETLs
- Two-person carpools who can now use the HOV lanes for free, but must pay during peak travel periods when the HOV lane is converted to an ETL
- Three-person carpools who would be able to use the ETL for free when it is converted
- Transit riders
- Paratransit providers and riders

We examined the distribution of *Good To Go!* passes to see if there are any demographic differences between geographic areas that have higher *Good To Go!* penetration compared to geographic areas with lower *Good To Go!* usage.

SECTION 4 EXISTING CONDITIONS

Why do we evaluate existing conditions?

Existing conditions describe the study area today, before any construction takes place. By evaluating existing conditions and comparing them to our expectations for future conditions during operation of the Project, we can understand how the Project would benefit or adversely affect environmental justice populations.

What information did we use to evaluate the existing conditions?

To evaluate existing conditions, we first described the current demographic characteristics of the study area using EJScreen and data from the Office of Superintendent of Public Instruction.

In addition, we collected information on the following in the study area:

- Neighborhoods
- Community cohesion
- Religious and social facilities and services, specifically those that serve low-income, minority, or limited English proficient populations
- Pedestrian, transit, and bicycle facilities
- Parks and recreation activities and facilities that low-income, minority, or limited English proficient populations use
- Community gathering places that are important to low-income, minority, or limited English proficient populations
- Businesses that are owned by or serve low-income, minority, or limited English proficient populations

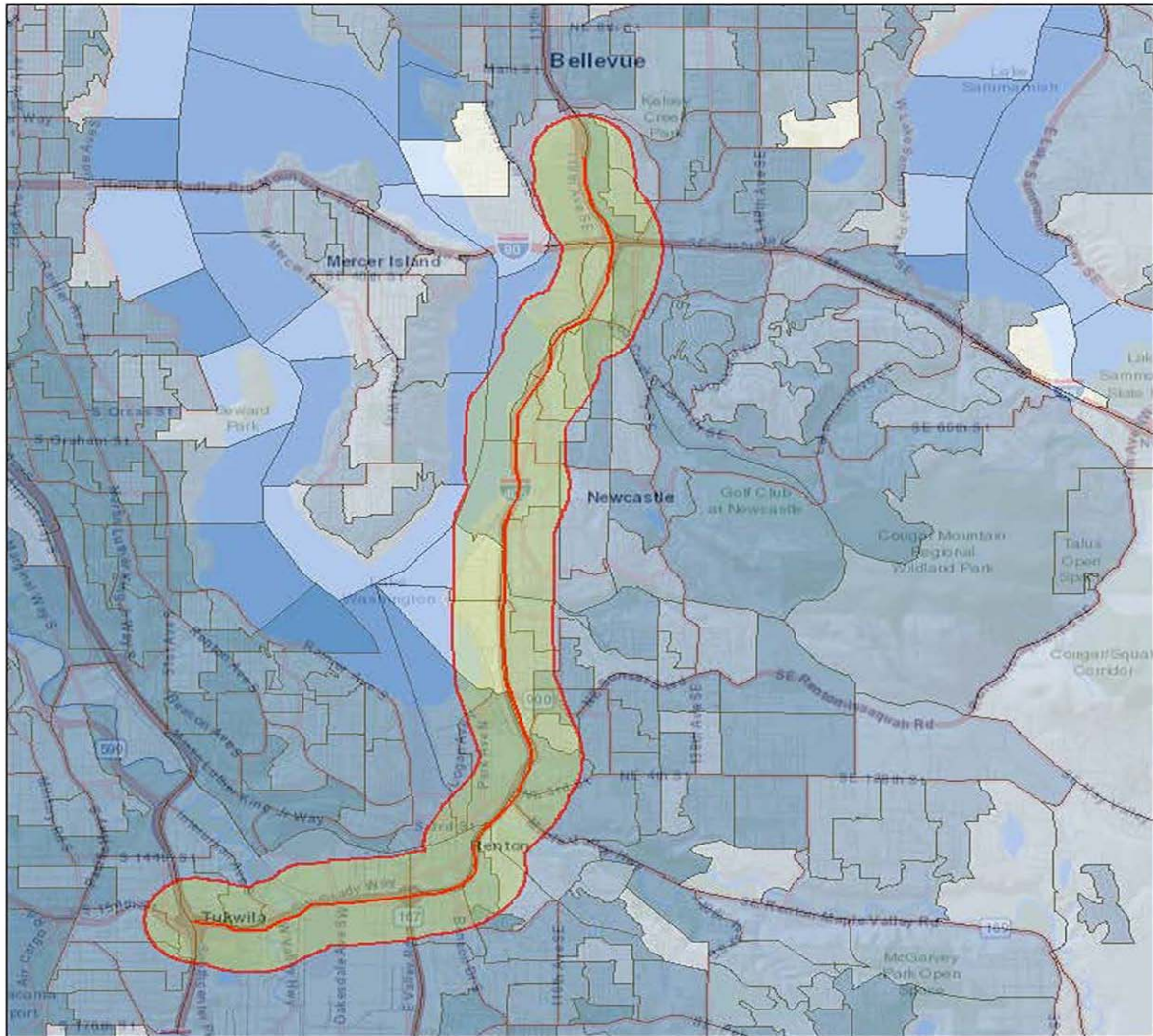
What are the existing conditions for environmental justice populations in the study area?

Are there environmental justice populations in the study area?

When conducting an environmental justice analysis of a project or projects, the first question we ask is whether individuals who identify as minorities, individuals with low incomes, or individuals with limited English proficiency live or work in the neighborhoods surrounding or affected by the project.

According to EJScreen, there are environmental justice populations in the study area. Exhibits 4-1 through 4-3 show EJScreen maps with the percentage of residents who identify as minority, have incomes at or below the poverty level, or are limited English proficient, respectively. Exhibit 4-4 shows minority and low-income data from the study area. Exhibit 4-5 maps the census block groups in the study area. Appendix D shows minority populations for the census block groups in the project area and populations by race and ethnicity. Our analysis confirms there are minority and/or low-income populations living in the study area.

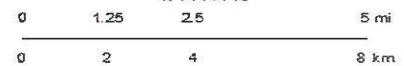
Exhibit 4-1. Percent Minority Within the Study Area



March 1, 2018

1:144,448

- | | | |
|----------------|--|----------------|
| Buffer Area | | 21.12 - 41.43 |
| Digitized Line | | 41.43 - 74.13 |
| by Block Group | | 74.13 - 100.00 |
| | | 0.00 - 8.19 |
| | | 8.19 - 21.12 |

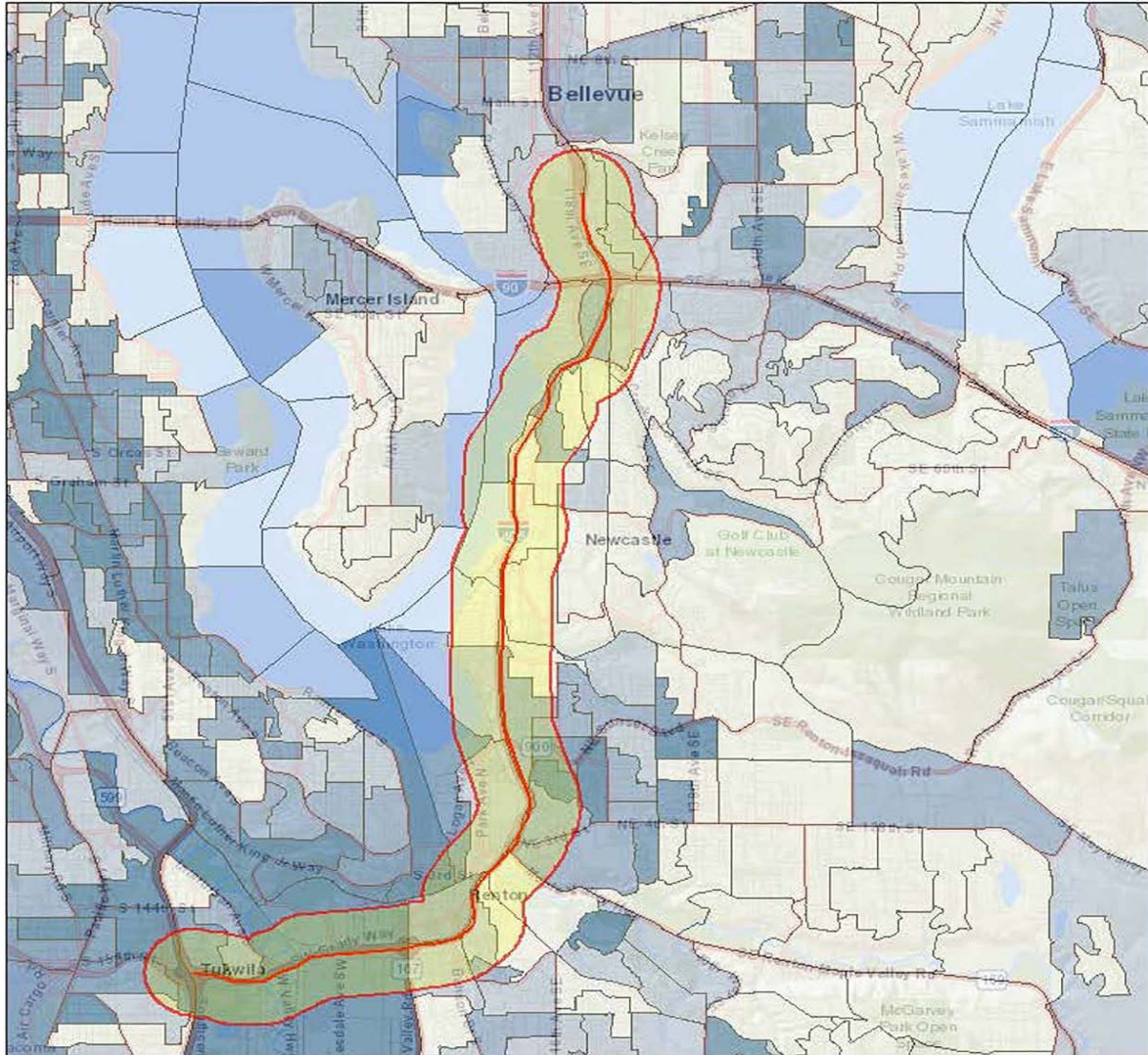


EPA
 Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, OpenStreetMap contributors, and the GIS User Community

EJ/SCREEN 2017

I-405, TUKWILA TO I-90 VICINITY EXPRESS TOLL LANES PROJECT (MP 0.0 TO 11.9)
 ENVIRONMENTAL JUSTICE DISCIPLINE REPORT

Exhibit 4-2. Percent Low-Income Within the Study Area



March 1, 2018

1:144,448

- Buffer Area 9.02 - 15.12
- Digitized Line 15.12 - 25.00
- by Block Group 25.00 - 100.00
- 0.00 - 4.26
- 4.26 - 9.02

| | | | |
|---|------|-----|------|
| 0 | 1.25 | 2.5 | 5 mi |
| 0 | 2 | 4 | 8 km |

EPA
 Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, OpenStreetMap contributors, and the GIS User Community

EJSCREEN 2017

Exhibit 4-3. Percent Linguistically Isolated Within the Study Area

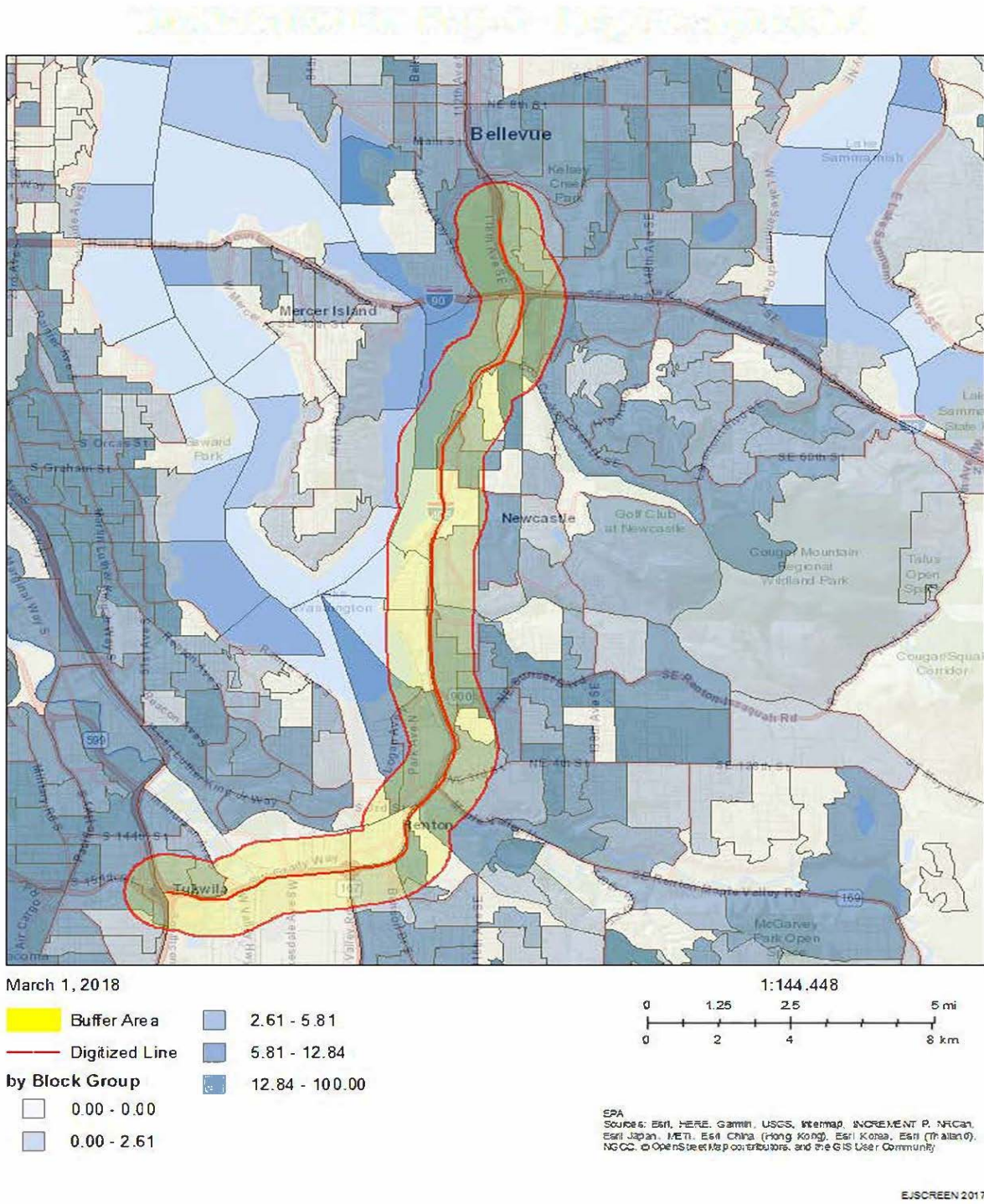


Exhibit 4-4. Comparison of Minority and Low-Income Populations in the Study Area

| Census Block Group | Percent Identifying as Minority | Percent Population at or below Federal Poverty Level |
|-----------------------------|---------------------------------|--|
| 235002 | 37 | 4 |
| 235003 | 42 | 12 |
| 238012 | 37 | 8 |
| 239004 | 22 | 6 |
| 247011 | 41 | 10 |
| 247012 | 51 | 6 |
| 247013 | 25 | 3 |
| 247021 | 24 | 12 |
| 247024 | 32 | 2 |
| 247025 | 39 | 6 |
| 248003 | 65 | 9 |
| 252002 | 36 | 12 |
| 253011 | 19 | 8 |
| 253012 | 13 | 2 |
| 253013 | 49 | 10 |
| 253023 | 58 | 20 |
| 254002 | 64 | 17 |
| 254003 | 51 | 10 |
| 254004 | 36 | 21 |
| 257011 | 41 | 2 |
| 257012 | 34 | 9 |
| 257015 | 35 | 6 |
| 258063 | 57 | 7 |
| 262001 | 64 | 53 |
| 262003 | 67 | 19 |
| 262004 | 53 | 17 |
| 283001 | 54 | 5 |
| Project Area Average | 44 | 10 |

Source: U.S. Census Bureau, 2011–2015 American Community Survey 5-Year Estimates

Exhibit 4-5. Census Block Groups Within the Study Area, Sheet 1 of 3

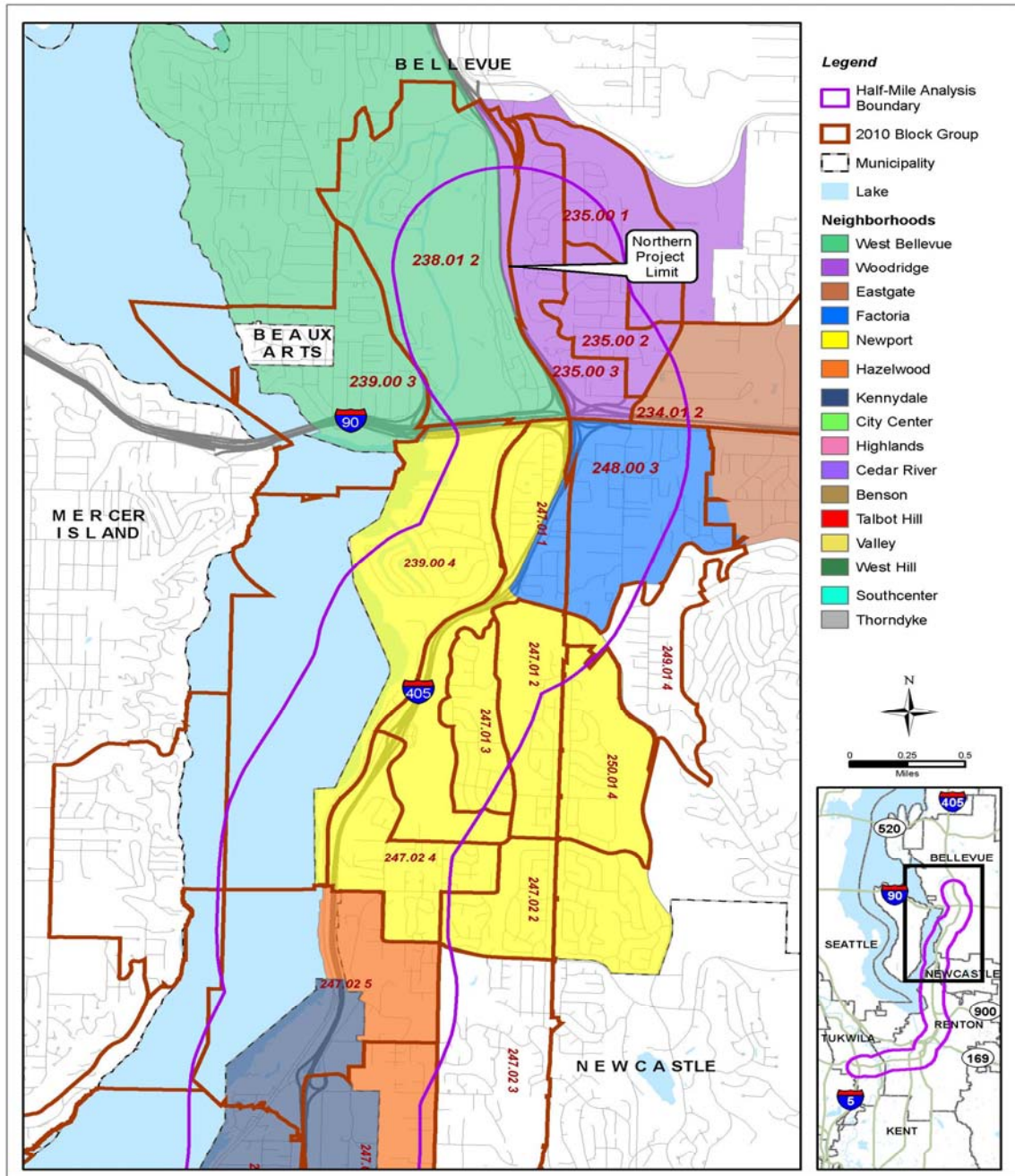


Exhibit 4-5. Census Block Groups Within the Study Area, Sheet 2 of 3

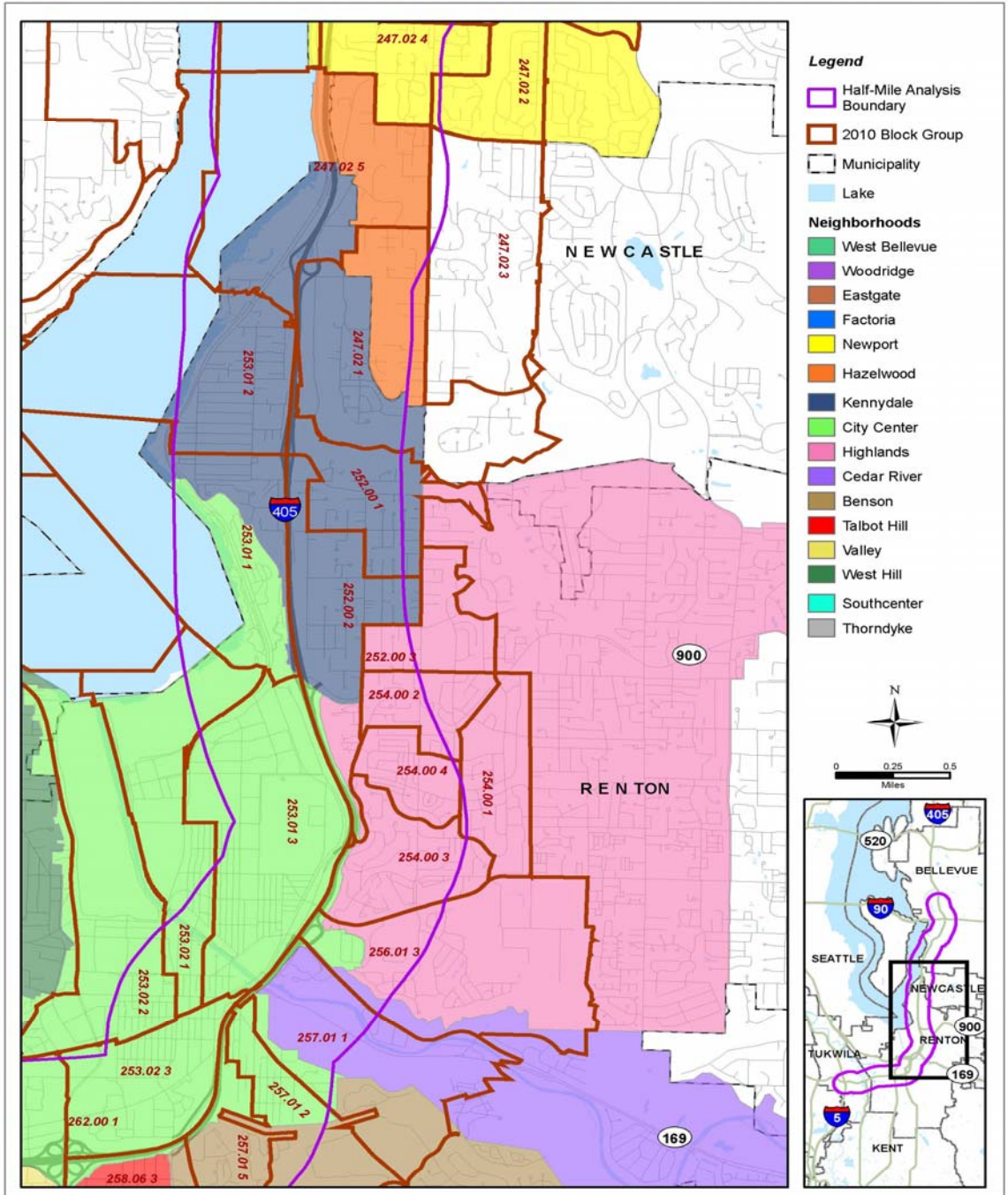
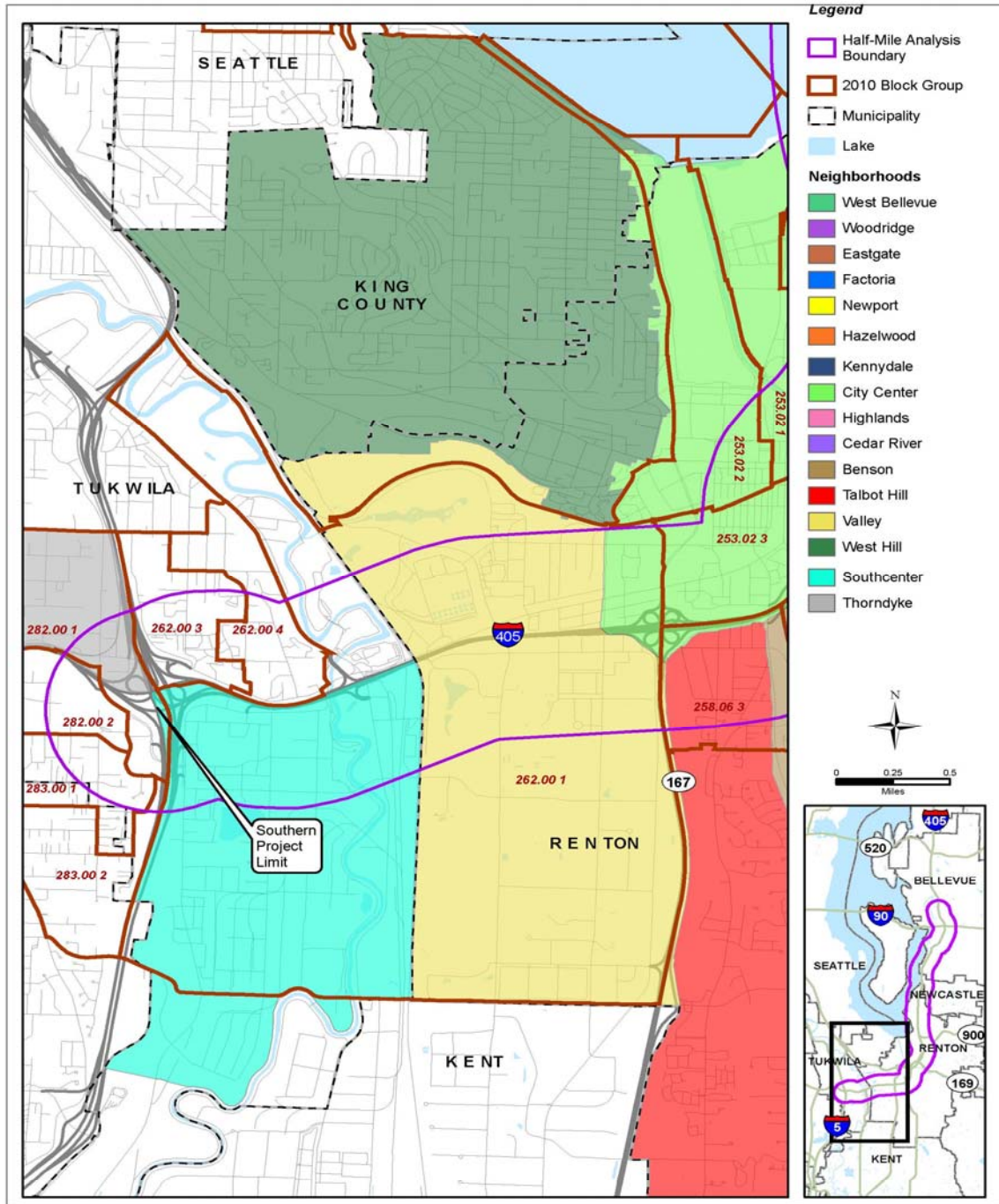


Exhibit 4-5. Census Block Groups Within the Study Area, Sheet 3 of 3



These data echo the results of the demographic analysis of elementary schools in the study area. Exhibit 4-6 shows the demographics of students in the study area.

Exhibit 4-6. Demographics of Students at Elementary Schools in Project Study Area

| School | Percent Identifying as a Race other than White (2017) | Percent Hispanic (of any race) (2017) | Percent Free- or Reduced-Price Lunch Eligible (2017) | Percent Bilingual or Transitional (2017) |
|---------------------------|---|---------------------------------------|--|--|
| Hazelwood | 51 | 11 | 22 | 16 |
| Highlands | 83 | 47 | 70 | 50 |
| Kennydale | 63 | 20 | 34 | 19 |
| Newport Heights | 59 | 8 | 21 | 16 |
| Talbot Hill | 79 | 15 | 45 | 19 |
| Tukwila | 87 | 27 | 65 | 38 |
| Study Area Average | 70 | 21 | 43 | 26 |

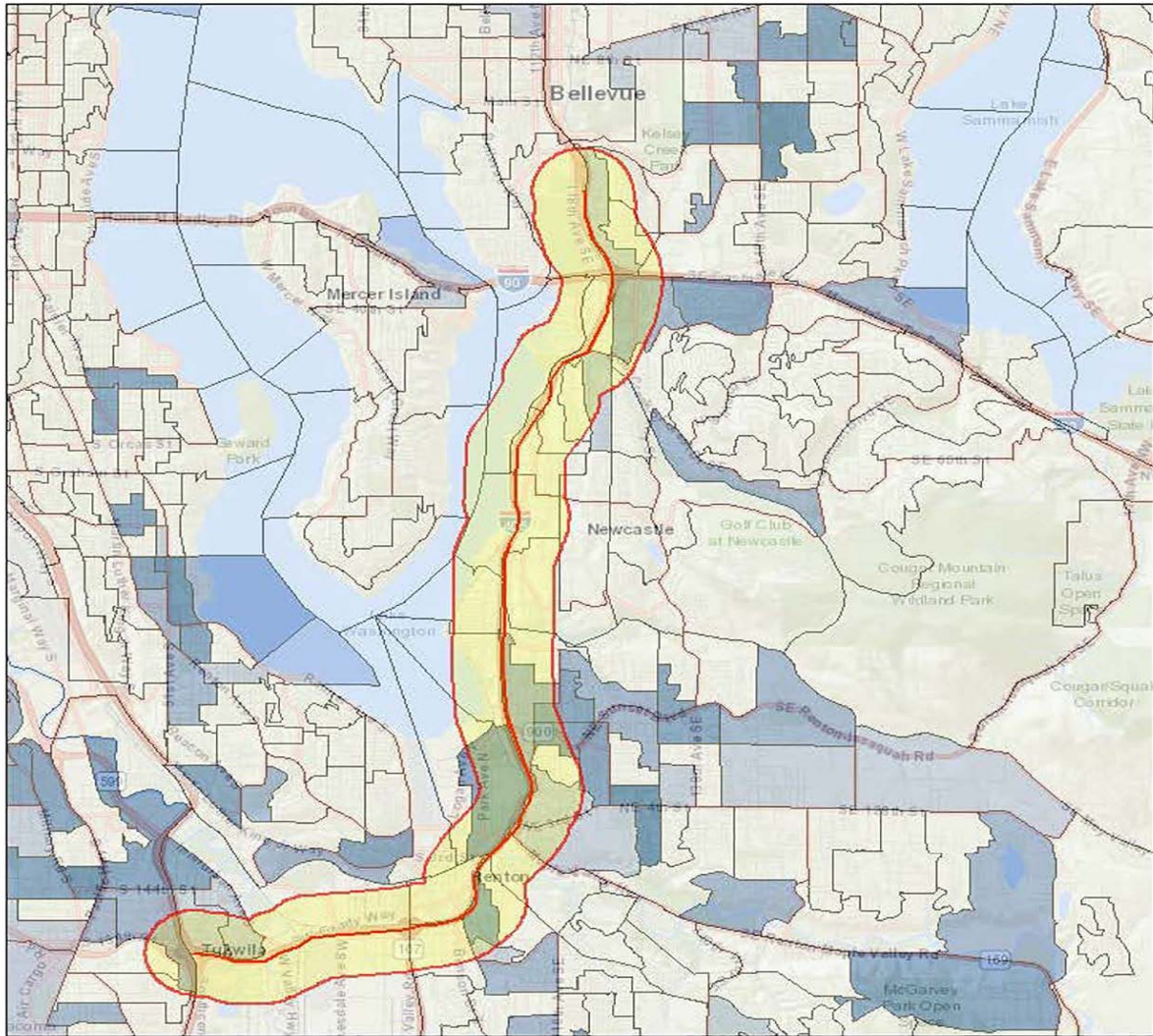
Source: Washington Office of Superintendent of Public Instruction, School Report Card in 2015-16 (2016)

We conducted a deeper analysis to determine if specific language needs exist in the study area. The U.S. Department of Justice recommends translating materials when 5 percent or more of a project study area speak that language at home. This recommendation has some limitations; not everyone who speaks a language other than English at home is unable to speak and read English well. To understand language needs in the study area, therefore, we used EJSscreen, which has a tool for identifying “linguistically isolated households.” EJSscreen defines linguistically isolated households as those in which all members age 14 and over speak a language other than English and do not speak English “very well.”

We found six census block groups at the southern end of the study area where 5 percent or more of the population lives in a linguistically isolated household and speaks Spanish. Exhibit 4-7 shows the percentage of individuals who live in linguistically isolated households in each census block group in the study area. Based on this demographic analysis, WSDOT will continue to translate Project information deemed critical into Spanish.

I-405, TUKWILA TO I-90 VICINITY EXPRESS TOLL LANES PROJECT (MP 0.0 TO 11.9)
 ENVIRONMENTAL JUSTICE DISCIPLINE REPORT

Exhibit 4-7. Percent Population Living in Linguistically Isolated Households Who Speak Spanish Within the Study Area



March 1, 2018

1:144,448

- Buffer Area 2.48 - 5.61
- Digitized Line 5.61 - 12.50
- by Block Group 12.50 - 100.00
- 0.00 - 0.00
- 0.00 - 2.48

0 1.25 2.5 5 mi
 0 2 4 8 km

EPA
 Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

EJSCREEN 2017

Several social service providers interviewed by WSDOT indicated that they translate their own written materials into Spanish. In addition, social services work with clients who speak the following languages:

- Arabic
- Farsi
- Korean
- Mandarin
- Russian
- Somali
- Vietnamese

None of the above languages are spoken by 5 percent or more of the study area population, but WSDOT may consider translating and interpreting into some of these languages if it appears there is a need over the duration of Project design and construction.

Neighborhoods where Environmental Justice Populations Live

There are 16 recognized neighborhoods within the study area: Woodridge, West Bellevue, Eastgate, Factoria, and Newport in Bellevue; Hazelwood, Kenndale, Highlands, City Center, Cedar River, and Benson, Valley, Talbot Hill, and West Hill in Renton; and Thorndyke and Southcenter in Tukwila.

Based on the demographic analysis, environmental justice populations live in all 16 neighborhoods. Census block groups do not overlap exactly with designated neighborhood boundaries, but the analyst can make inferences about the demographic makeup of each neighborhood by overlaying 2011–2015 American Community Survey estimates with neighborhood maps.

The Factoria neighborhood in Bellevue, the City Center, Highlands, Talbot Hill, and Valley neighborhoods of Renton and the Thorndyke and Southcenter neighborhoods of Tukwila have the largest proportions of minority populations. These neighborhoods include census block groups within which between 53 and 100 percent of the residents identify as minority. The Valley neighborhood also has the highest proportion of households with incomes at or below the federal poverty level.

The Factoria neighborhood in Bellevue and the City Center, Talbot Hill, and Valley neighborhoods in Renton appear to have concentrations of linguistically isolated populations. A linguistically isolated person is the U.S. Census Bureau's term for a person who speaks limited to no English.

The Crossroads neighborhood in Bellevue, which is 2 miles outside the study area, is known as one of East King County's most ethnically and linguistically diverse neighborhoods. Residents of the Crossroads neighborhood represent 10 percent of Bellevue's population. Crossroads Mini City Hall is a neighborhood service center extending city services and community connections to East Bellevue residents. As a fully equipped satellite office inside Crossroads Shopping Center, the Mini City Hall provides customer service and outreach in eight languages to Bellevue's diverse population.

Community Cohesion in Neighborhoods

Most of the neighborhoods—including those with substantial minority, low-income, and limited English proficient residents—within the study area are well-established. These neighborhoods have existed for a long time, and the cities of Tukwila, Bellevue, and Renton support community cohesion in their neighborhoods. Bellevue and Renton assign a City employee to serve as a neighborhood liaison to each of the recognized neighborhoods. The liaison links the neighborhood to City departments and services. Bellevue and Renton offer neighborhood grant programs that provide funds and technical assistance to support neighborhoods in making self-identified improvements. Tukwila does not have City staff dedicated to supporting neighborhoods, but it does have a council subcommittee focused on neighborhoods.

Religious and Social Service Facilities and Providers that Serve Environmental Justice Populations

Religious Facilities

Through interviewing social service providers and conducting a community profile, we identified the following places of worship that are of importance to minority, low-income, and/or limited English proficient residents of the study area.

- Bellevue Korean Presbyterian Church, located in Bellevue and serving Korean-speaking residents

- Bread of Life Christian Church, located in Bellevue and Evangelical Chinese Church of South King County, Mei-Hua Chinese United, and Trinity Taiwanese Mennonite Church, located in Renton and serving Chinese-speaking residents
- Korean Pilgrim Presbyterian Church, located in Bellevue and serving Korean-speaking residents
- Seed of Abraham Pentecostal Church, located in Renton and serving African-American residents
- Hosanna Asamblea de Dios, located in Bellevue and Our Lady of Guadalupe Church, located in Renton, both of which serve Spanish-speaking residents
- Cambodian Fellowship and International Free Methodist Church, both located in Renton and serving Cambodian-speaking residents
- Ukrainian Pentecostal and Ukrainian Christian Church, located in Renton and serving Ukrainian-speaking residents
- Hong An Vietnamese Baptist Church, Vietnamese Bible Fellowship, and Vietnamese Grace Baptist, located in Renton and serving Vietnamese-speaking residents

Social Service Providers

There are dozens of community-based and social service providers who serve minority, low-income, and limited English proficient residents in the study area. Appendix C includes a full list of these service providers.

Pedestrian and Bicycle Facilities in Study Area Neighborhoods

Although pedestrian and bicycle travel are prohibited on I-405, there are several pedestrian and bicycle facilities located adjacent to I-405 in neighborhoods. These include:

- The Lake Washington Trail (bicycle/pedestrian), which runs parallel to I-405 from near the NE 44th Street interchange in Renton to the Coal Creek Parkway interchange in Bellevue.
- Several pedestrian crossings of I-405 in the study area are served by off-street paths. These include the Duwamish-Green River Trail, Interurban Trail,

Springbrook Trail, Cedar River Trail, and Mountains to Sound Greenway

- Several sidewalks alongside roads that cross over or under I-405, as well as some dedicated bicycle lanes. These are located throughout the study area

Although not yet constructed, the right of way that would become the future Eastside Rail Corridor Trail runs alongside I-405 until I-405 bisects the trail just north of the I-90 interchange. The Eastside Rail Corridor right of way south of I-90 is a gravel trail that is open to the public; King County Parks Division would construct a fully paved trail when funding is available.

Fish Passage

I-405 crossed multiple streams and these fish bearing streams are of importance to tribes, specifically the Muckleshoot Tribe in this area. In some cases, the existing culverts that pass under I-405 restrict fish passage.

Businesses or Community Gathering Places of Importance to Environmental Justice Populations

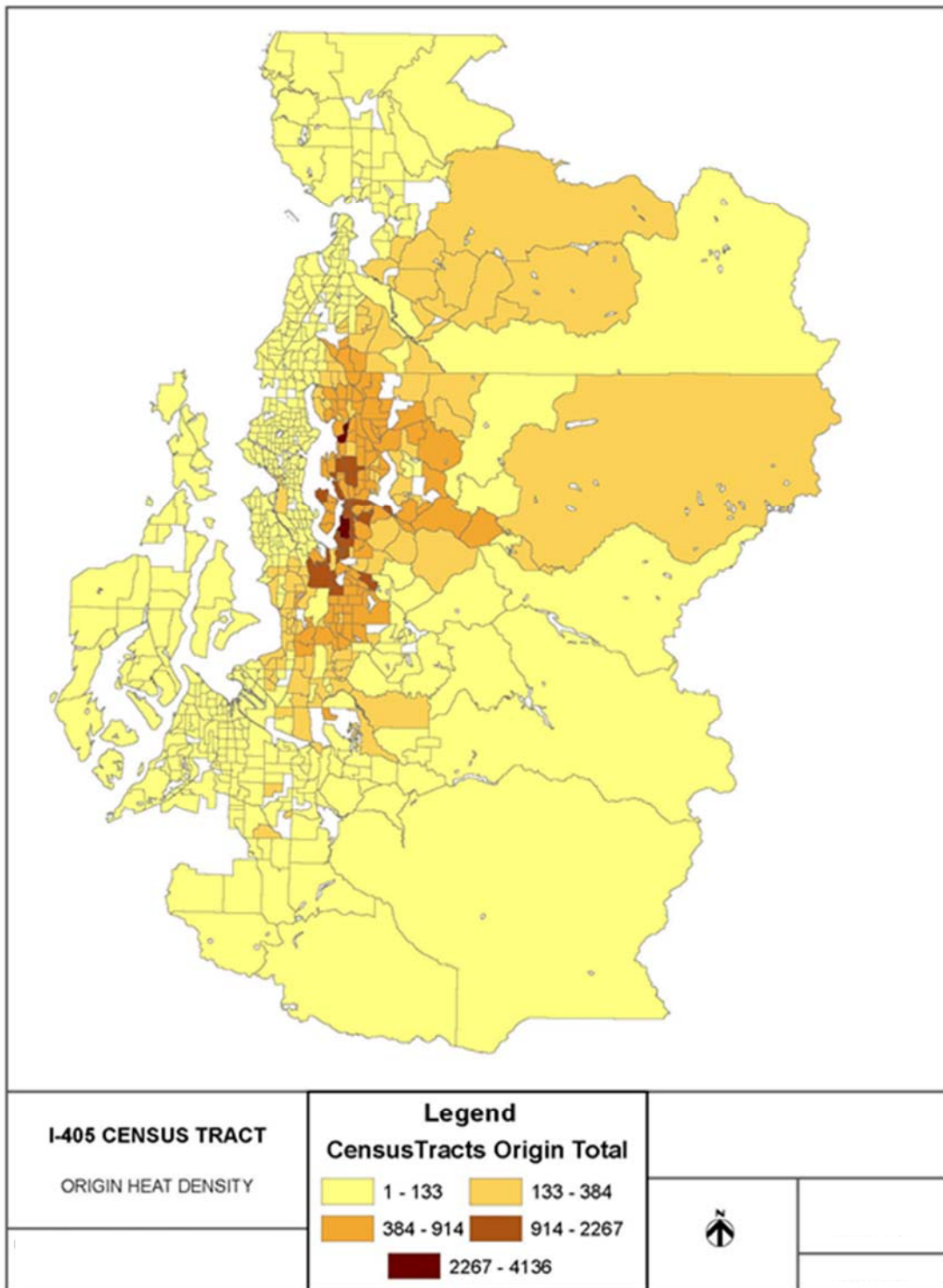
Interviews with social service providers in the study area and a community profile did not turn up any businesses or community gathering places of importance to environmental justice populations within the study area.

What are existing conditions for environmental justice populations in the I-405 travelshed?

ETLs would have the potential to affect not just residents within the study area, but also residents who use the I-405 corridor. The travelshed is the geographic area from which most trips on a specific corridor originate.

To identify the travelshed for I-405, WSDOT generated a map (Exhibit 4-8) of users based on the census tracts from which their trips originated.

Exhibit 4-8. Census Tracts Trip Origin



Are there environmental justice populations who use I-405?

Our analysis for the Project indicates there are minority, low-income, and limited English proficient residents living in the I-405 travelshed. Most I-405 users in the study area come from the census tracts in Renton and south Bellevue, where there are substantial minority and/or low-income populations as well as some limited English proficient residents (see Exhibits 4-9 through 4-11).

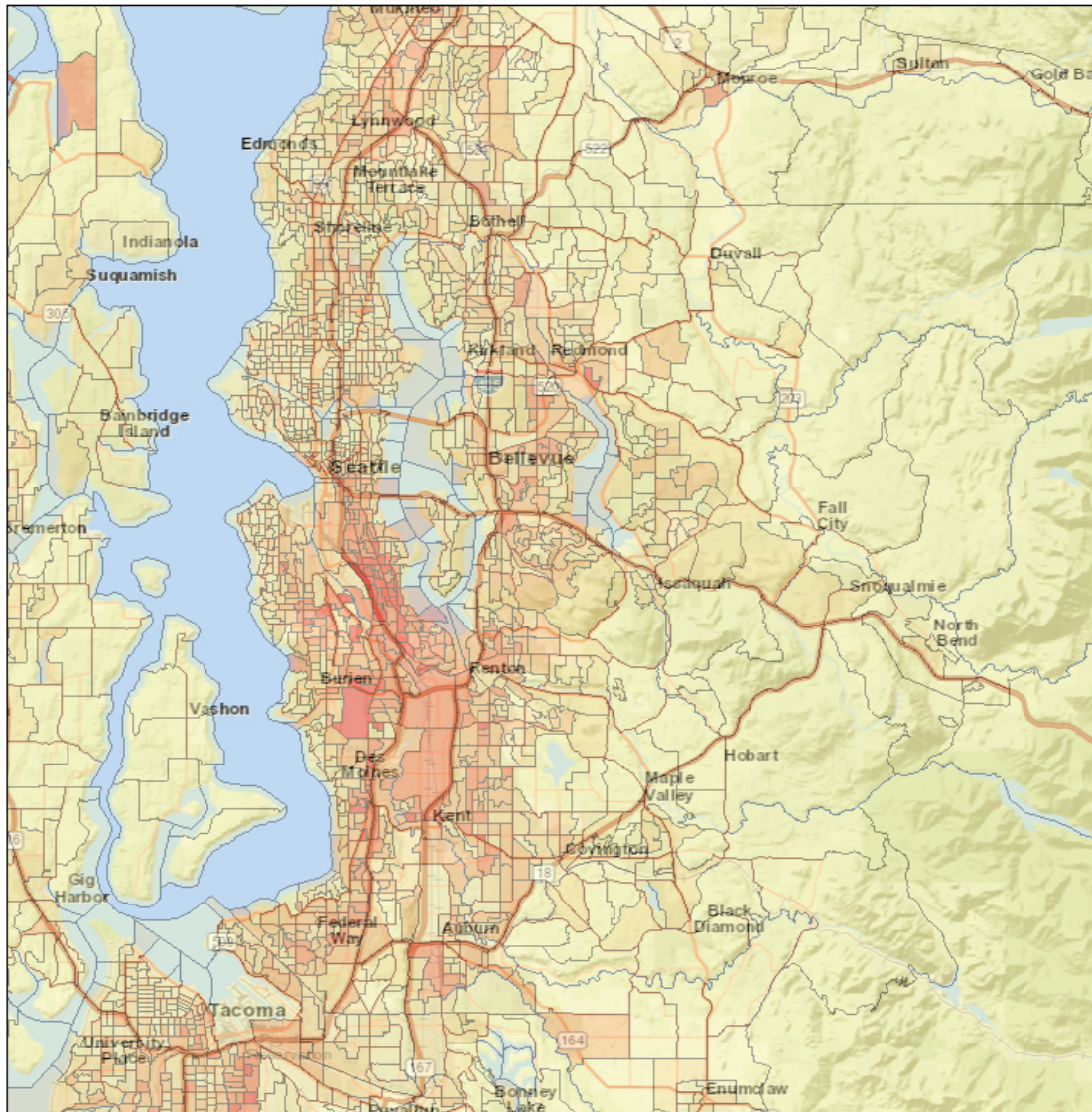
Based on our demographic analysis of the I-405 travelshed, we can infer that individuals who identify as a minority, have low incomes, or are limited English proficient use I-405.

Transportation and Travel that Affects Environmental Justice Populations

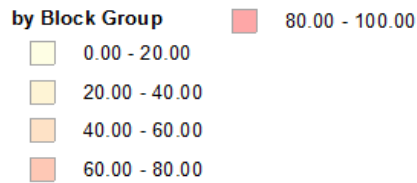
Congestion on I-405

Today, traffic in the study area on I-405 is congested many hours of the day due to high traffic demand in both directions. During peak commute hours, high traffic volumes in the GP and HOV lanes cause drivers to travel at reduced speeds. Many intersections on adjoining local and regional streets are also congested due to high traffic volumes.

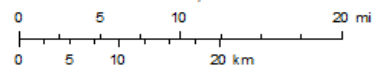
Exhibit 4-9. I-405 Travelshed – Percent Minority



July 28, 2017



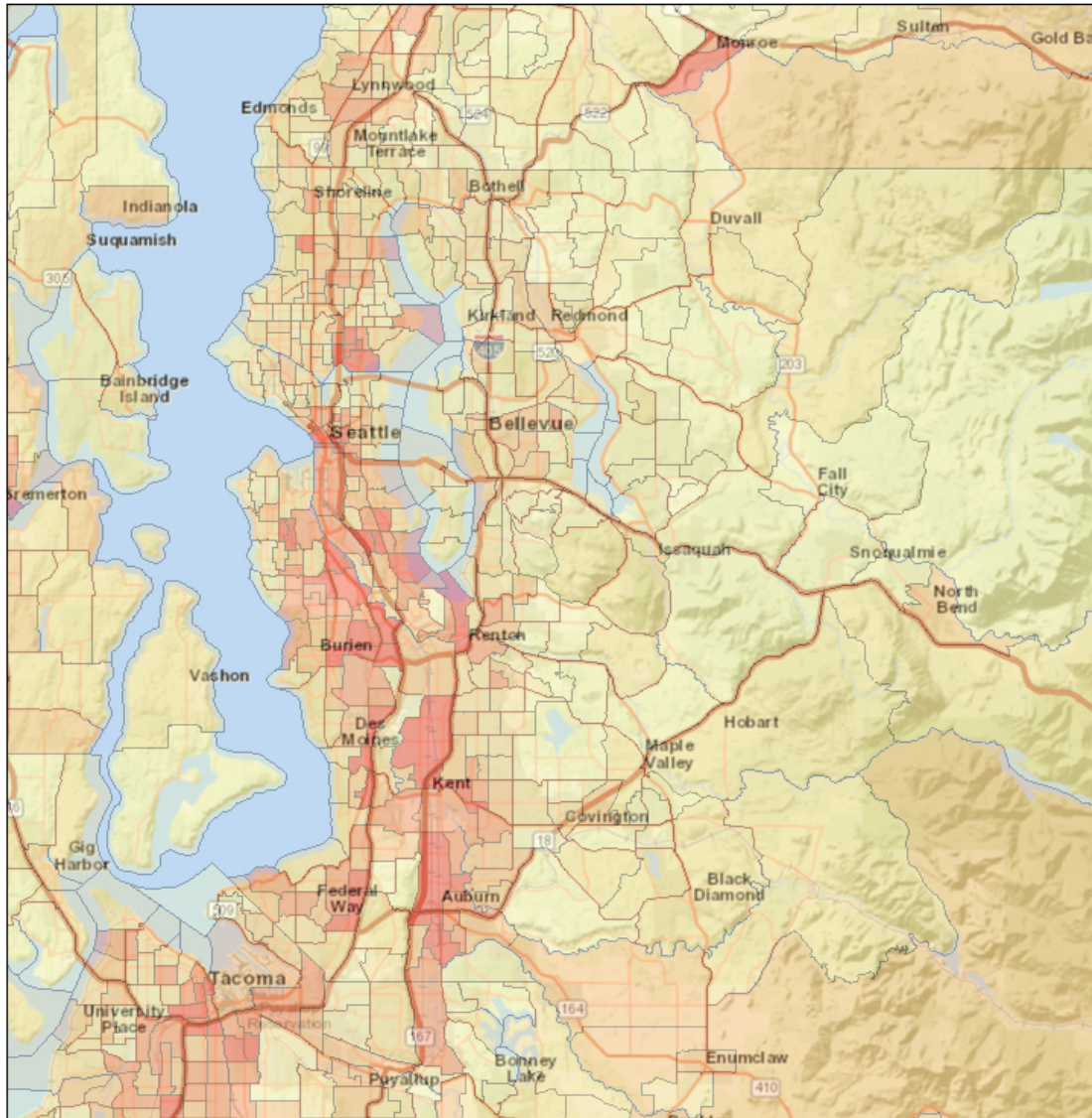
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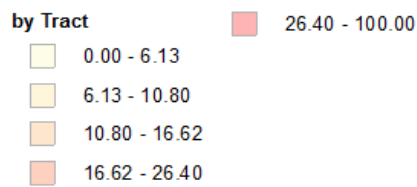
EPA
 Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan,
 Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),
 MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User
 Community

EJSCREEN 2016

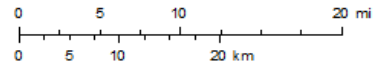
Exhibit 4-10. I-405 Travelshed – Percent Low-income



July 28, 2017



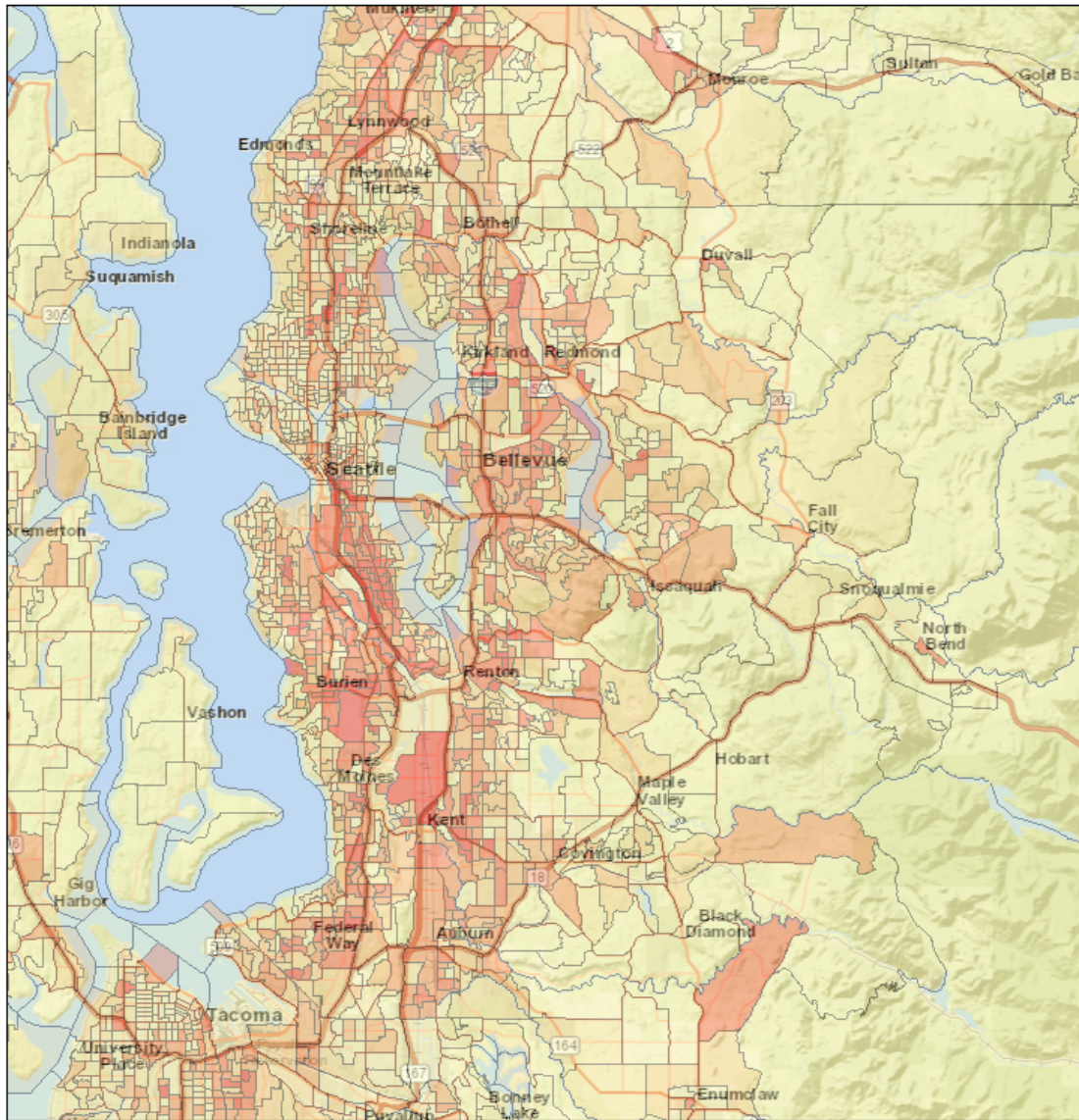
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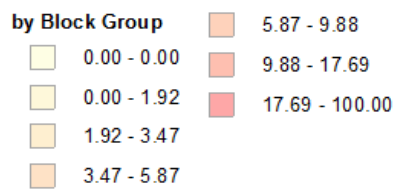
EPA
 Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, OpenStreetMap contributors, and the GIS User Community

EJSCREEN 2016

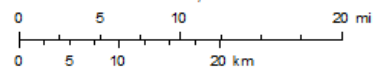
Exhibit 4-11. I-405 Travelshed – Percent Linguistically Isolated



July 28, 2017



1:577,791



EPA
 Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, OpenStreetMap contributors, and the GIS User Community

EJSCREEN 2016

Transit Service on I-405

Based on our demographic analysis, we can infer there are minority, low-income, and limited English proficient residents who use transit on I-405 through the study area. According to the 2015 King County Metro Transit Rider/Non-Rider Survey (2016), approximately 30 percent of transit riders identified as belonging to a minority group. Interestingly, there were no significant differences between transit riders and non-riders in terms of how likely they are to identify as a minority. There are also low-income transit riders; of those transit riders who live in East King County, 12 percent have annual household incomes below \$35,000. Regular transit riders in King County are more likely than non-riders to have annual household incomes below \$35,000.

Transit service is available throughout the study area. King County Metro Transit and Sound Transit provide this service. All bus routes in the study area offer weekday service, and three routes offer weekend service. Many of these buses use I-405 between I-5 in Tukwila and I-90 in Bellevue for at least a portion of their trip. The *I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project Transportation Discipline Report* in Attachment A to the *I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project EA* provides more detailed information about existing transit service in the study area.

Bus routes in the study area provide service to and from seven park-and-ride lots located along I-405 in the study area:

- Newport Hills at 112th Place SE
- South Renton at S Grady Way/Shattuck Avenue S
- South Bellevue at Bellevue Way/112th Avenue SE
- Kennydale United Methodist at Park Ave N and N 30th Street
- Renton Park-and-Ride at S 2nd Street and Burnett Avenue
- Renton City Municipal Garage at 655 S 2nd Street
- Tukwila Station at 7301 Longacres Way

Transit vehicles use both the I-405 HOV lanes. Transit vehicles experience delay because the HOV and GP lanes are congested during peak periods throughout the study area. This reduces

transit reliability and means passengers are sitting on buses or waiting at transit stops for longer periods.

Regional Trends that Affect Environmental Justice Populations

East King County, along with the rest of the greater Puget Sound region, has experienced rapid job and population growth since the end of the Great Recession. In addition to increased traffic congestion on the region's highways and arterials, this boom has increased demand for housing, thus driving up purchase prices and rents. A May 2017 article by the *Seattle Times* reports home prices in the region have been rising faster than any other metro region in the country. Rents have also been increasing, rising 57 percent in the last 6 years (Seattle Times 2017).

According to the U.S. Department of Housing and Urban Development (HUD), households spending more than 30 percent of income for housing costs are "cost-burdened" and may have difficulty affording necessities such as food, clothing, transportation, and medical care. Households spending more than 50 percent are "severely cost-burdened" (HUD 2017).

A Regional Coalition for Housing (ARCH) is a partnership of King County and East King County cities that cooperate to assist with preserving and increasing the supply of affordable housing in the area. According to a 2015 analysis by ARCH, in East King County, nearly 40 percent of renters and 35 percent of homeowners with a mortgage are cost-burdened, and over 14 percent of households are severely cost-burdened. This percentage has increased somewhat since 2000. Perhaps most relevant to this environmental justice analysis, nearly 75 percent of low-income households in East King County are cost-burdened, compared to only 13 percent of higher income households (ARCH 2015).

When households are cost-burdened, it makes it that much harder for them to pay for other needs, such as transportation.

In addition, Washington State is considered to have the most regressive tax structure in the U.S., according to the Institute on Taxation and Economic Policy (ITEP), a non-profit, non-partisan research organization. ITEP uses modeling to project the real-life economic effects of tax policies on taxpayers at every income level. Washington's tax policies have multiple

features that disproportionately burden lower-income taxpayers. According to ITEP, for households earning less than \$21,000 a year, state and local taxes represent nearly 17 percent of household income, compared to families making over \$100,000, who pay less than 7 percent of household income in state and local taxes (ITEP 2015) When considering the effect of tolls—another regressive form of taxation—on low-income populations, it is important to consider them in the context of an already regressive tax structure. Section 5 of this document discusses the cumulative effects of these regressive tax policies plus tolling on low-income households.

SECTION 5 PROJECT EFFECTS

To evaluate how operation of the Project would affect environmental justice populations, we asked three questions:

- Would the Project result in adverse effects or benefits compared to No Build?
- Would those adverse effects or benefits disproportionately affect minority, low-income, or limited English proficient persons, or would the effects be appreciably greater for these groups than for the general population?
- If there is an adverse effect, would it be disproportionately high?

Would operation of the Project have effects on environmental justice populations?

Exhibit 5-1 compares the environmental justice effects of operating the Project to effects of the No Build.

We discuss the benefits and adverse effects of the ETLs and project construction on environmental justice populations later in this section.

Exhibit 5-1. Summary of Operational Project Effects on Environmental Justice Populations

| Evaluation Element | Project | No Build |
|---|---|--|
| Historic and cultural resources of significance to tribes | The Project would have no effect on any historic, cultural, or archaeological resources. | There would be no effect on any historic, cultural, or archaeological resources. |
| Fishing and aquatic resources of significance to tribes | The Project would replace five fish barriers with fish passable structures. In addition, WSDOT would make habitat improvements to May Creek. | In accordance with the terms of the existing injunction, existing fish barriers would be replaced under a future project. |
| Noise in neighborhoods | <p>With the Project and proposed noise wall mitigation, noise levels are expected to exceed WSDOT noise abatement criteria (NAC) at 171 receivers representing 304 residences, 5 parks, 7 trails, and 3 churches, which is less than expected noise impacts with the 2045 No Build. The Project includes constructing 4 new noise walls and relocating 2 existing noise walls.</p> <p>The Project would build Wall East 10A in the City of Newcastle. Wall East 10A would reduce noise levels by 1 to 11 dBA as compared to the 2045 No Build. While Wall East 10A would reduce noise levels for several receivers, most receivers would continue to experience noise levels above the NAC. The neighborhood adjacent to the East 10a wall has a population that is 32% minority, 2% low-income, and 6% have limited English proficiency.</p> <p>The Project would build Wall West 5 along the eastern side of the Eastside Rail Corridor Regional Trail, in portions of Renton, Bellevue, and unincorporated King County. The wall would reduce noise levels to below the NAC for 11 of the 22 receivers representing 100 residences. The neighborhood adjacent to Wall West 5 has a population that is 36% minority, 5% low-income, and 1% have limited English proficiency.</p> <p>The Project would build Wall East 11 in the City of Bellevue. This noise wall is expected to reduce noise levels to below the NAC at 3 of 11 receivers, representing 6 residences. The neighborhood adjacent to the East 11 wall has a population that is 38% minority, 4% low-income, and there is no known population with limited English proficiency.</p> <p>The Project would extend existing Wall West 6 in Bellevue. The wall would reduce noise to below the NAC for 8 of the 16 receivers representing 15 residences. The neighborhood adjacent to West 6 has a population that is 41% minority, just under 14% low-income, and just under 5% have limited English proficiency.</p> <p>The Project would replace and relocate approximately 400 feet of Wall West 4. All eight receivers representing 54 dwelling units are expected to maintain noise levels below the NAC. The neighborhood adjacent to Wall West 4 has a population that is 13% minority, 4% low-income, and there is no known population with limited English proficiency.</p> | <p>With No Build, noise levels would exceed WSDOT noise abatement criteria at 203 receivers representing 444 residences, 1 hospital, 5 parks, 7 trails, and 3 churches. With No Build, 140 more residences would experience noise impacts than with the Project and the proposed mitigation.</p> |

Exhibit 5-1. Summary of Operational Project Effects on Environmental Justice Populations

| Evaluation Element | Project | No Build |
|--|---|---|
| | <p>The Project would relocate Wall East 3—an existing noise wall on the bridge over Sunset Boulevard—9 feet to the east within existing WSDOT right of way. Once it is relocated, the four receivers representing 18 homes behind the existing wall would experience noise levels above the NAC. The neighborhood adjacent to Wall East 3 has a population that is 53% minority, 14% low-income, and 5% has limited English proficiency.</p> <p>Attachment C, <i>Noise Discipline Report</i>, contains additional information about the noise analysis done for the Project. Based on the demographic analysis, the population affected by noise would not be predominately minority or low-income. We describe noise impacts on property owners affected by partial property acquisitions later in this table.</p> | |
| <p>Air quality, water quality, public services, utilities, and visual effects in neighborhoods</p> | <p>The Project would result in improvements over current conditions for water quality, public services, and utilities. Air emissions for the Build or No Build Alternatives would be reduced compared to existing conditions because of improved vehicle technology. The project would result in minor changes to visual quality experienced by I-405 users and neighbors. According to Attachment F, <i>Visual Impact Assessment Discipline Report</i>, for neighbors adjacent to the highway, the Project would have few impacts. The Project proposes minimal clearing of vegetation between the highway and the WSDOT right of way line. In locations where vegetation would be cleared and not replanted, neighbors are generally screened from the highway through topography, noise walls, and remaining vegetation. Just north of NE 44th Street, where Wall 10 East would be constructed, the Project would clear the last remaining vegetation that shields neighbors from the highway. The neighborhood adjacent to the East 10a wall has a population that is 32% minority, 2% low-income, and 6% have limited English proficiency. Based on the demographic analysis, the population affected by visual impacts would not be predominately minority or low-income.</p> | <p>No improvements to water quality, public services, and utilities. Air emissions would be reduced compared to existing conditions because of improved vehicle technology.</p> |

Exhibit 5-1. Summary of Operational Project Effects on Environmental Justice Populations

| Evaluation Element | Project | No Build |
|-----------------------------------|---|--|
| Bicycle and pedestrian facilities | <p>The Project would include improvements to bicycle and pedestrian facilities in the corridor. The Project would align the Lake Washington Trail to the Eastside Rail Corridor right of way between north of the Ripley trestle in Renton (MP 7.7) and Coal Creek Parkway interchange in Bellevue (MP 10.2). This would improve connectivity for bicyclists and pedestrians in the corridor. The realigned trail would be built to current ADA standards. These improvements would benefit the surrounding neighborhoods. A demographic analysis of neighborhoods within ½ mile of this improvement indicates there are populations who identify as minority (up to 40 percent of the census block group) and households with low incomes (up to 15 percent of the census block group). This suggests environmental justice populations would benefit from these improvements.</p> <p>In addition, at NE 44th Street, sidewalks would be improved by providing contiguous sidewalk on both sides of the street. Currently sidewalks are provided on the north side of the roadway and they are not contiguous. Sidewalks would also be provided between the park-and-ride and inline transit stations.</p> <p>At 112th Avenue SE, bicycle lanes would be provided on both sides of the street and a sidewalk would be provided on the north side, which would be an improvement over existing conditions where no bike lanes or sidewalks are currently provided. Sidewalks would also be provided between the park-and-ride and inline transit stations.</p> <p>At Coal Creek Parkway, sidewalks would be provided on both sides of the street, which would be an improvement over existing conditions since sidewalks are only provided on the south side.</p> | <p>The Lake Washington Trail realignment would not take place. Improvements to bike lanes and sidewalks at NE 44th Street, 112th Avenue SE, and Coal Creek Parkway would not be built.</p> |

Exhibit 5-1. Summary of Operational Project Effects on Environmental Justice Populations

| Evaluation Element | Project | No Build |
|---|--|---|
| <p>Effects to residential property owners and tenants</p> | <p>Full residential property acquisitions: The Project would require full acquisitions of three residential properties. WSDOT has already acquired these three properties, which were owner-occupied and owned by persons who identify as minority. One of these owners has limited English proficiency. WSDOT mitigated for these effects as described in Exhibit 7-1 and Section 6 – Measures to Avoid or Minimize Effects. These acquisitions took place based on the completed NEPA process for the previously approved Renton to Bellevue Project in 2008; however, this EA must consider the effects of these acquisitions.</p> <p>Partial residential property acquisitions: The Project would require 33 permanent easements on residential properties. Many of the permanent easements are subterranean and would not impact of the property or utilities.</p> <p>The Project would require 16 partial property acquisitions on residential properties. Three of these residential properties do not have homes on the property. Nine of the affected residential properties would lose a small portion of their yards and the Project would bring the highway between 40 and 120 feet closer to homes than it is now. Even with the widening, however, the highway would be more than 35 feet away from homes. With the Project, noise walls would be built at 4 of these 9 properties and noise levels would be similar to existing conditions at all 9 properties once the Project is built.</p> <p>Four residential property owners—including one property owner who identifies as minority-- would permanently lose a larger portion of their yards and the Project would bring the highway 75 to 105 feet closer to their houses. The partial property acquisitions would not affect the house structures or access to the homes for the four affected property owners. With the noise wall that WSDOT would construct in front of these four homes, noise levels would remain the same or up to 1 dBA higher than current noise levels.</p> <p>The project team reached out to residential property owners and tenants affected by the partial property acquisitions and permanent easements and confirmed that some of the persons affected identify as minority, and a few have limited English proficiency. WSDOT would mitigate for the adverse effects to affected property owners and tenants as described in Exhibit 7-1 and Section 6 - Measures to Avoid or Minimize Effects.</p> | <p>Full residential property acquisitions: Since WSDOT has purchased all three residential properties required for the Project and relocated the residents, the effects of the No Build would be similar to the effects of the Project. The only difference would be that WSDOT would sell or repurpose the acquired properties if at a later date they determined the properties were not needed.</p> <p>Partial residential property acquisitions: As of the date of publication of this document, WSDOT had closed on 7 partial residential acquisitions or easements and has several offers in progress. Under the No Build, WSDOT would most likely retain the partial acquisitions and easements. Without the Project, the highway would not be closer to houses. However, noise levels for the 13 residential property owners described in the previous column would be up to 6 dBA higher than today.</p> |

Exhibit 5-1. Summary of Operational Project Effects on Environmental Justice Populations

| Evaluation Element | Project | No Build |
|---|---|---|
| <p>Effects to businesses, community gathering places, and faith-based organizations of particular importance to environmental justice populations</p> | <p>The Project would displace two businesses and cause minor impacts to access for a few other businesses during construction. One commercial displacement would affect a chain restaurant owned by a person who identifies as minority. At the time of publication of this document, the affected restaurant owner made the decision to relocate the restaurant about 40 miles from its current location. Many of the 26 current employees of the restaurant are unlikely to relocate with the restaurant, which means they would lose their jobs. At least a few of the employees of that restaurant identify as minority and some may be low income. The Uniform Relocation Act does not cover employees of a business. The second commercial property affected by a full acquisition is not owned or operated by a member of an environmental justice population. This is a property with five warehouses that are used to store building materials. This business is owned by a Canadian company.</p> <p>The Project would also require four partial acquisitions and 10 permanent easements on commercial properties. A few of the affected commercial property owners identify as minority. As with the residential properties, most of these partial acquisitions and easements would have little to no impact on the owners' or tenants' use of the property. One retail business would need to relocate a small portion of their display as a result of the partial acquisition of their property. Along NE 44th Street, the existing commercial driveways would need to be rebuilt to tie into the rebuilt street. This would create a temporary and minor effect, although access to these businesses would be maintained during construction.</p> <p>The Project would not cause any other substantial effects on businesses, community gathering places, or faith-based organizations of importance to environmental justice populations.</p> | <p>No effects on businesses, community gathering places, or faith-based organizations of particular importance to environmental justice populations.</p> <p>As of the date of publication of this document, WSDOT had closed on one commercial easement. Under the No Build, WSDOT would most likely retain the partial acquisitions and easements.</p> |

Exhibit 5-1. Summary of Operational Project Effects on Environmental Justice Populations

| Evaluation Element | Project | No Build |
|--------------------|---|--|
| Community cohesion | <p>A total of 54 properties totaling 5.6 acres would be affected by property acquisitions and easements. This includes 3 residential properties and 2 commercial properties that would be permanently displaced. The total area that would be directly affected by these acquisitions is small compared to the number of residences and businesses located in the study area. Because of this, effects to community cohesion are expected to be minimal. In addition, WSDOT will incorporate context sensitive solutions and will adhere to the <i>I-405 Urban Design Criteria</i> (WSDOT 2016b) to help make the Project fit aesthetically with the surrounding community. The Project would result in mostly positive effects on community cohesion. New and improved sidewalks, inline transit access improvements at NE 44th Street and 112th Avenue SE, and reduced traffic congestion on I-405 and arterials would promote community cohesion for the neighborhoods in the study area.</p> <p>The Build Alternative would require a permanent acquisition of land at the Fawcett property and a temporary easement from the Meadow property that comprise the May Creek Greenway, a Section 4(f) resource. These properties are owned by the City of Renton, which has concurred that with mitigation, the use of the Fawcett property would have a <i>de minimus</i> impact and the Meadow property would qualify as temporary occupancy under Section 4(f) . During construction, temporary access delays may affect people accessing Cedar River Park, Gene Coulon Memorial Beach Park, Newcastle Beach Park. In addition, temporary detours or delays and a trail realignment would be required within the WSDOT right of way at the Cedar River Trail. Additional information about effects to recreational resources are provided in Section 4.4 of the EA.</p> | <p>Greater traffic congestion on I-405 and some intersections at local roads in the study area could have an effect on community cohesion in neighborhoods adjacent to or bisected by I-405.</p> |

ADA = Americans with Disabilities Act; EA = environmental assessment; WSDOT = Washington State Department of Transportation

How would operation of ETLs affect environmental justice populations?

Benefits

All travel lanes on I-405 would operate with faster, more reliable trips as a result of the Project. According to the *Transportation Discipline Report*, Attachment A to the I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project EA, the addition of capacity and an ETL system would improve travel times in both the ETLs and the GP lanes compared to No Build. This means that people who may be unable to pay a toll to use the ETLs—including some environmental justice populations—would still benefit from improved travel times for most trips in the GP lanes.

Motorists using the GP lanes between I-5 in Tukwila and north of I-90 in Bellevue would experience faster travel times for most trips in both directions during morning and afternoon peak periods compared to No Build. Travel times in the ETLs would also improve compared to the HOV lanes in the No Build Alternative. WSDOT expects the ETLs to operate near posted speed limits through most of the study area, even during peak periods.

Drivers who have a carpool of three or more people (HOV 3+) would be able to access the ETL for free during peak hours if they have a *Good To Go!* pass. Drivers who have a carpool of two or more people (HOV 2+) would be able to use the system for free between 9 a.m. and 3 p.m. weekdays. Even most carpools with two people that currently use the existing HOV lane would benefit from improved travel times compared to the No Build. No Build assumes the occupancy requirement for the existing HOV lane would not change from two or more persons in a vehicle to three or more people in a vehicle. With the Project, carpools with two people would no longer be able to use the HOV lanes for free during weekday peak travel periods.²

When would tolls be charged to use the ETLs?

WSDOT assumes the ETLs would operate from 5 a.m. to 7 p.m. on weekdays. At all other times and major holidays, the lanes would be free and open to all without a *Good To Go!* pass.

During operating hours:

- **SOVs)** would pay a toll to use the lanes.
 - **Transit, HOV 3+, and Motorcycles** would travel for free with a *Good To Go!* pass.
 - **HOV 2+** would travel for free from 9 a.m. to 3 p.m. with a *Good To Go!* pass. From 5 a.m. to 9 a.m. and 3 p.m. to 7 p.m. HOV2+ would pay a toll to use the ETLs with or without a *Good To Go!* pass.
 - **Large vehicles** over 10,000 pounds gross vehicle weight would not be able to use the ETLs at any time.
-

² *With the Project, HOV 2+ carpools must add another passenger or pay the toll to continue to use these lanes during peak periods; they would be able to use the ETLs free of charge from 9 a.m. to 3 p.m. weekdays.*

To understand how carpools with two people would be affected by the ETLs, we compared forecasted travel times for such carpools in the GP lanes during peak periods to travel times in the HOV lanes under the No Build. Trips in 2025 in the GP lanes would be the same or faster than trips in the HOV lanes under the No Build, even during peak periods. In 2045, trips in the GP lanes would be slightly slower than trips in the HOV lanes under the No Build, but in most cases by about one minute to five minutes.

The Project would also result in improved person throughput, or the amount of people who would be able to travel on I-405 in the study area. WSDOT forecasts that person throughput would increase with the Project. For example, in 2025 during the morning commute period, I-405 near the interchange with NE 44th Street in Renton would carry approximately 5,400 more people with the Project than with the No Build Alternative. The amount of person throughput varies by time of day and direction. According to the *I-405 Express Toll Lanes: 21 Months of Operations* performance analysis of the ETL lanes on I-405 from Bellevue to Lynnwood, since implementation of ETLs, I-405 is handling anywhere from 4 percent to 20 percent higher traffic volumes (WSDOT 2017b).

The ETL system is expected to reduce delay and improve reliability for transit service that use these lanes. Some transit routes would continue to operate in the GP lanes. These transit routes would also benefit from expected decrease in travel times for the GP lanes. The Project includes direct access ramps for transit and HOV users of the ETLs at the NE 44th Street interchange and 112th Avenue SE. This would improve travel times for transit vehicles that use these interchanges and would support the implementation of bus rapid transit in the I-405 corridor.

As part of the Sound Transit 3 funding package, Sound Transit plans to provide bus rapid transit service on the SR 518 and I-405 corridors between Burien and Lynnwood by 2024. Sound Transit will be making transit-related improvements in these corridors as needed to implement a bus rapid transit system. Some of these improvements would be separate projects funded by Sound Transit that would go through a separate environmental review process, where benefits and adverse effect would be determined. These projects, along with this

How would drivers obtain a *Good To Go!* pass?

Drivers can open *Good To Go!* Account and order pass online, on the phone, or at a customer service center in Seattle, Bellevue, or Gig Harbor using a credit card, debit card, or checking account. Drivers can also preload and replenish their electronic toll account using cash in person at a customer service center. Pay by Mail allows drivers without a *Good To Go!* pass to use the ETLs and receive a bill in the mail. WSDOT assesses a surcharge to such users. The current Pay by Mail surcharge for the Bellevue to Lynnwood ETLs is \$2.

Project and the I-405, Downtown Bellevue Vicinity Express Toll Lanes Project, would benefit transit riders.

Under existing conditions, approximately 91 percent of crashes in the study area are rear-end and sideswipe crashes. These crash types are typically associated with congested conditions. The Build Alternative would add capacity to I-405, which would improve freeway operations and reduce congestion. This would, in turn, be expected to improve safety performance in the study area when compared to the No Build. Safety performance during off-peak periods is expected to be similar between the Build and No Build Alternatives.

With the Build Alternative, lane and shoulder widths in some sections of I-405 would be increased compared to No Build and widths in other sections would decrease based on physical limitations in the corridor. Based on research, areas with reduced widths would be expected to see a decrease in safety performance, while areas with added width would see an improved safety performance.

Adverse Effects

The cost of using the ETLs to gain a faster trip could be a barrier for some I-405 travelers. The ETLs in the study area would use an electronic toll system to collect tolls.

The electronic toll collection system could be a barrier for I-405 travelers who do not understand the system or how to acquire a *Good To Go!* pass. To use the electronic toll collection system, individuals who do not have a credit or debit card—the “unbanked” or “underbanked”—must travel to a customer service center in Seattle, Bellevue, or Gig Harbor to open an electronic toll account and preload or replenish it using cash.³ This may discourage some unbanked and underbanked I-405 motorists from using the ETLs, or they may incur additional costs in Pay by Mail surcharges.

³ *The Federal Deposit Insurance Corporation (FDIC) defines “unbanked” as those adults without an account at a bank or other financial institution and no ability to conduct transactions electronically. “Underbanked” individuals have limited access to mainstream financial services and typically rely on non-traditional forms of finance, including check cashing services, loan sharks, and pawnbrokers. The FDIC estimates there are 10 million unbanked or underbanked individuals in the U.S., most which are immigrants and/or people with low incomes.*

There are also some indirect effects associated with the ETLs; we discuss these effects later in this section, under the heading *Would the Project have other effects that may be delayed or distant?*

Would the ETLs result in a disproportionately high and adverse effect on environmental justice populations?

In determining whether an effect is “disproportionately high and adverse,” the U.S. Department of Transportation Environmental Justice Order notes that agencies should take into account planned mitigation measures, offsetting benefits to the affected minority and/or low-income populations, and the relevant number of similar existing system elements in non-minority and non-low-income areas (FHWA 2015) (WSDOT 2017a).

There are three ways in which ETLs could disproportionately affect environmental justice populations:

- The cost of the toll to use ETLs would disproportionately affect low-income populations.
- Use of the electronic toll collection system could disproportionately affect limited English proficient populations.
- Use of the electronic toll collection system could disproportionately affect low-income populations.

None of these effects would have a disproportionately high and adverse effect on the environmental justice populations.

The following paragraphs describe our analysis and conclusions.

Any toll that charges all users the same amount, regardless of income, disproportionately affects low-income users. This is because, compared to users with moderate and high incomes, the toll represents a higher proportion of annual income. It becomes even more important to consider the effect tolls may have on low-income households in the Puget Sound region, where 75 percent of low-income families are cost-burdened by their housing costs.

Some social service providers interviewed by WSDOT expressed concern about this, indicating many low-income motorists do not have the financial resources to pay the toll. Outcomes from WSDOT’s interviews with community-based

organizations and social service providers in the study area suggest there may be some differences between income groups on how they use the ETLs. In general, interview participants expressed concern that a toll would dissuade low-income individuals from using these lanes. A few interview participants explained their clients cannot afford gas for their automobiles and expressed skepticism that these clients would be able to afford a toll. On the other hand, some interview participants felt that, because the GP lanes would continue to be available, their clients would not be adversely affected.

Multiple studies on ETL use indicate users of all incomes value the faster trip and use the lanes when they absolutely need to be somewhere on time. In 2009, WSDOT conducted a survey of SR 167 HOT lane users, a system in South King County similar to the ETLs on I-405, and found HOT lane users spanned all income categories, including households with relatively low incomes. The survey showed most SR 167 HOT lane users had household incomes of \$50,000 to \$124,000, and nearly 16 percent of users had household incomes under \$50,000 (WSDOT 2012).

Studies of SR-91 express lanes in California indicate about three-quarters of vehicles using the express lanes at any given time belong to low- and middle-income users. Furthermore, low-income drivers are as likely to approve of the lanes as drivers with higher incomes. In fact, over half of commuters with household incomes under \$25,000 a year approved of providing toll lanes in public opinion surveys (FHWA 2017). Some social service providers interviewed by WSDOT echoed these findings, indicating that, after initial confusion about and frustration with the Bellevue to Lynnwood ETLs, the negative feedback from staff and clients has subsided and some people appreciate having the option of purchasing a faster trip when they need it.

To understand the extent to which tolls may disproportionately affect low-income users, we estimated the annual cost for a typical user. The sidebar explains how we developed this estimate. We estimated the annual cost for the average ETL user to be \$106.56 for users with a *Good To Go!* pass and \$178.56 for users who pay by mail.⁴ Exhibit 5-2

How did we estimate the annual cost to a typical user of ETLs?

Estimating the annual cost for a typical user proved to be challenging, for two reasons. First, toll rates to use the lanes would vary, depending on the amount of traffic congestion in the lanes. During relatively quiet periods, toll rates in the I-405 Bellevue to Lynnwood ETLs can be as low as \$0.75. During peak periods, toll rates in the Bellevue to Lynnwood ETLs can go as high as \$10. Second, toll rates for these projects have not yet been set.

Given these uncertainties, we based our estimate on what has been happening with the Bellevue to Lynnwood ETLs over the past 21 months. According to *the I-405 Express Toll Lanes 21-Month Update* (WSDOT 2017b), the average toll during the peak period in the peak direction was \$2.96. The average user makes between two to five trips per month, so we assumed three trips per month for our estimate.

⁴ To calculate these average annual costs, we assumed an average toll of \$2.96 x three times per month x 12 months per year. For Pay by Mail users, we added a

shows the percentage of annual household income the toll represents for low-, middle-, and high-income users.

Exhibit 5-2. Comparison of Percentage of Household Income for Different User Types

| User Type | Low-Income User | Middle-Income User | High-Income User |
|---|--|--|--|
| Description of user type | \$28,780/year or less (HHS federal poverty level of household of 5 people) | Median household income for King County: \$82,000/year | 1.5 times median household income for King County (\$123,000/year or more) |
| Percent of annual income for <i>Good To Go!</i> passholders | 0.4% | 0.1% | 0.1% |
| Percent of annual income for Pay by Mail users | 0.6% | 0.2% | 0.2% |

HHS = U.S. Department of Health and Human Services, July 2017

While Exhibit 5-2 demonstrates that tolls would represent a higher proportion of household income for low-income users, these estimates do not suggest the tolls are unaffordable for these users. Given the relative infrequency with which the average I-405 motorists chooses to pay the toll and use the ETLs, the annual cost of making this choice tends to be relatively small for most users. As stated previously, the Washington State Transportation Commission would set operating parameters for the ETL system. However, WSDOT’s current assumption is that the ETLs would be free for all users at night and on weekends. This means the tolls would only affect low-income and other ETL users during the daytime on weekdays. As such, while we believe the toll to use ETLs would disproportionately affect low-income users, we do not believe that the adverse effect would be high. Furthermore, this adverse effect would be offset by increased travel speeds for most motorists traveling toll-free in the GP lanes during most times of day.

The electronic toll collection system could disproportionately affect limited English proficient travelers. Limited English proficient users who have difficulty understanding the electronic toll system and how to acquire a *Good To Go!* pass may be less likely to use the ETL system or could incur additional costs in Pay by Mail surcharges. Social service providers interviewed by WSDOT echoed this concern, adding

\$2-per-trip surcharge.

that when WSDOT opened the ETLs from Bellevue to Lynnwood, there was a lot of confusion amongst clients about how to use them and whether there would still be a non-tolled option available.

Because most unbanked and underbanked individuals are immigrants and individuals with low incomes, the barrier for these individuals to obtaining a *Good To Go!* pass and loading or replenishing a *Good To Go!* account could have a disproportionately adverse effect on environmental justice populations.⁵ Note that, as of 2009, low-income individuals who are eligible for public benefits have been able to use their Electronic Benefit Transfer cards to open and maintain their *Good To Go!* accounts. The use of Electronic Benefit Transfer cards allow users who do not have bank accounts to obtain a *Good To Go!* pass and avoid extra charges for the pay by mail option. In addition, WSDOT is currently working to expand the network of retail location where people can buy *Good To Go!* passes with cash, making it easier for people to purchase a pass without a bank account.

To determine if there is an economic difference between *Good To Go!* passholders and people who do not hold a *Good To Go!* pass, we consulted a 2016 WSDOT survey of *Good To Go!* pass users and obtained zip code data for people who have purchased a *Good To Go!* pass from WSDOT (WSDOT 2016a). Based on our analysis of these data, it appears that the current distribution of *Good To Go!* passes is related more to geographic proximity to a tolled facility and population density than economic conditions. Given the data currently available, there is not enough information to conclude whether there is an economic difference between *Good To Go!* passholders and people who do not hold a *Good To Go!* pass.

To understand the severity of the effect of the toll and electronic toll collection system on low-income or limited English proficient persons, we compared forecasted average travel times during the peak hours of the day for people who would use the GP lanes and people who would use the ETLs. Exhibit 5-3 shows these comparisons. Note that when the ETLs

⁵ According to a telephone survey conducted by WSDOT in 2009 for the SR 520: I-5 to Medina Bridge Replacement and HOV Project, more than 25 percent of low-income respondents indicated they would not be able to use a credit, debit, or checking account to prepay their electronic transponder account (WSDOT 2009)

are operating, we anticipate that some carpools with two people would choose to use the GP lanes during peak periods instead of paying the toll to use the ETLs. The travel time forecasts in the transportation analysis take into account the expected increase in traffic volumes as carpools with two people move into the GP lanes.

Exhibit 5-3. Comparison of Average Travel Times for GP Lanes and ETLs in 2025 and 2045 from I-5 to I-90 in Minutes

| | | 2025 No Build | | 2025 Build | | 2045 No Build | | 2045 Build | |
|----------|-----------------------|---------------|--------|------------|------|---------------|--------|------------|------|
| | | GP | HOV 2+ | GP | ETL | GP | HOV 2+ | GP | ETL |
| I-405 NB | AM Peak 3-hour Period | 33.5 | 17.2 | 16.0 | 11.9 | 35.9 | 17.6 | 22.7 | 12.5 |
| | PM Peak 3-hour Period | 15.7 | 13.4 | 12.4 | 12.1 | 16.9 | 13.9 | 14.7 | 12.4 |
| I-405 SB | AM Peak 3-hour Period | 14.0 | 12.0 | 12.0 | 11.5 | 17.5 | 12.9 | 14.4 | 12.3 |
| | PM Peak 3-hour Period | 21.8 | 14.8 | 14.1 | 12.4 | 21.9 | 14.8 | 19.0 | 13.3 |

ETLs = express toll lanes; GP = general purpose; NB = northbound; SB = southbound

In most directions and peak hours, ETL users would have a travel time benefit, although in most cases only a few minutes. I-405 northbound in the AM peak hour in 2045 is the only direction and time where the travel time difference could be more than 10 minutes.

Almost all users would benefit from reduced travel times with the Project as compared to No Build. The exception is carpools with two people who choose not to pay a toll. In 2045, these carpools would be traveling in the GP lanes, and some trips in the GP lanes in 2045 would be a little slower than trips in the HOV2+ lanes under the No Build Alternative. In 2025 a northbound trip on I-405 during the morning peak period using the GP lanes would take about 16 minutes with the Project, compared to about 34 minutes with the No Build. In 2045, this trip would take nearly 23 minutes with the Project, compared to nearly 36 minutes with the No Build.

This leads us to conclude that, while the cost of the tolls and all-electronic toll system would have a disproportionate adverse effect on environmental justice populations, that effect would be offset by improved travel times for most motorists during most times of the day, even for motorists who do not use the ETLs.

Would the Project result in disproportionately high and adverse effects on environmental justice populations?

The three residential displacements and one commercial displacement associated with the Project would disproportionately affect environmental justice populations. WSDOT will mitigate for these effects, as described in Section 6, Measures to Avoid and Minimize Effects. With the mitigation listed in Section 6, the Project is not expected to cause disproportionately high and adverse effects to environmental justice populations.

Would the Project have other effects that may be delayed or distant?

An indirect effect is caused by the proposed action, but would take place later in time than the direct effects, or would have an effect outside the project study area. Indirect effects may include future changes to land use patterns or population growth. According to the WSDOT Environmental Manual (WSDOT 2017a) in general, projects in new locations or that cause dramatic changes to the transportation facility are more likely to contribute to indirect effects than projects in areas that are already developed or that rely primarily on existing right of way.

To determine if the Project would contribute indirect effects, we examined local and regional comprehensive plans that affect the study area. We looked for whether the Project would support or adversely affect changes in the type, rate, or timing of planned growth. According to the land use section of the I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project EA, the Project is consistent with Puget Sound Regional Council's (PSRC's) VISON 2040 (PSRC 2009) and Transportation 2040 (PSRC 2010), 2012 King County's Countywide Planning Policies (King County 2012), and local policies for the cities of Tukwila, Renton, Newcastle, and Bellevue. Not all of the comprehensive and long-range plans consider the effects of these plans on environmental justice populations.

We also looked at future effects on environmental justice populations that are reasonable and foreseeable. As described earlier in Section 2, Project Description, the ETLs for the Project would—in combination with the I-405, Downtown

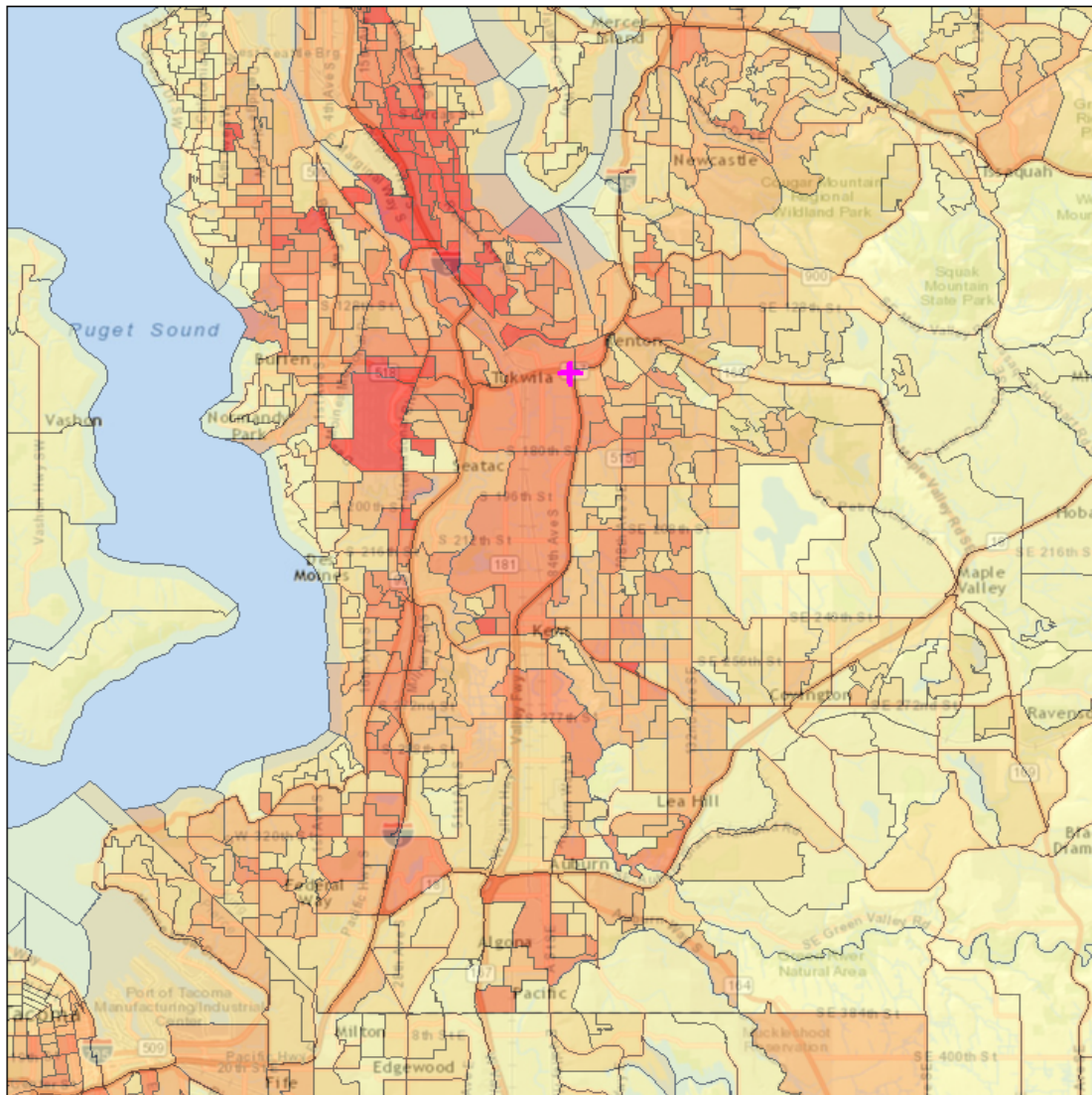
Bellevue Vicinity Express Toll Lanes Project, the Bellevue to Lynnwood ETLs, and SR 167 HOT Lanes—create a 40-mile-long tolling system from Auburn on SR 167 to Lynnwood on I-405. The WSTC has not yet set toll policy and toll rates for the entire SR 167/I-405 ETL system, so we do not know how much it would cost a motorist to travel from Auburn to Lynnwood in the ETLs. For more information on current rates of the existing system please see www.wsdot.wa.gov/Tolling/TollRates.htm. Regardless of the toll policy, the cost to use the entire ETL system would disproportionately affect low-income users, for whom the total cost would represent a higher proportion of annual household income.

These disproportionate adverse effects would be offset by improved travel time, reliability, and travel conditions in both the GP lanes and the ETLs systemwide. All lanes of I-405 would see improved travel times with the Project, although individual trip travel times could vary. Most users of I-405 would benefit from these improved travel times. The exception is carpools with two people who choose not to pay a toll. In 2045, these carpools would be traveling in the GP lanes, and some trips in the GP lanes in 2045 would be a little slower than trips in the HOV2+ lanes under the No Build Alternative. As concluded in the analysis of ETLs on these and other segments of I-405, we do not anticipate the full ETL system would result in disproportionately high and adverse indirect effects on environmental justice populations.

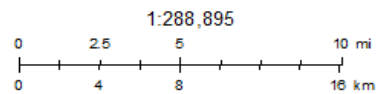
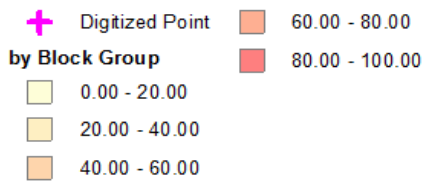
We also considered whether there could be Project effects outside the study area. With the Project, lower congestion on southbound I-405 would allow higher traffic volumes to access SR 167, which would worsen congestion at the SR 167/S 277th Street interchange during afternoon peak periods. Traffic congestion at this interchange would also worsen under No Build, but the transportation analysis assumes the congestion would be more severe with the Project. On the other hand, we anticipate speeds on northbound SR 167 as it approaches I-405 to improve in the GP lanes over No Build. When the direct connector between SR 167 and I-405 (a separate project) is open to HOV traffic, speeds in the ETLs should also be much faster than in the HOV lanes under No Build.

The SR 167 travelshed has substantial proportions of minority, low-income, and limited English proficient residents. Exhibits 5-4 through 5-6 show the percentage of the population in the

Exhibit 5-4. Percent Minority in SR 167 Travelshed



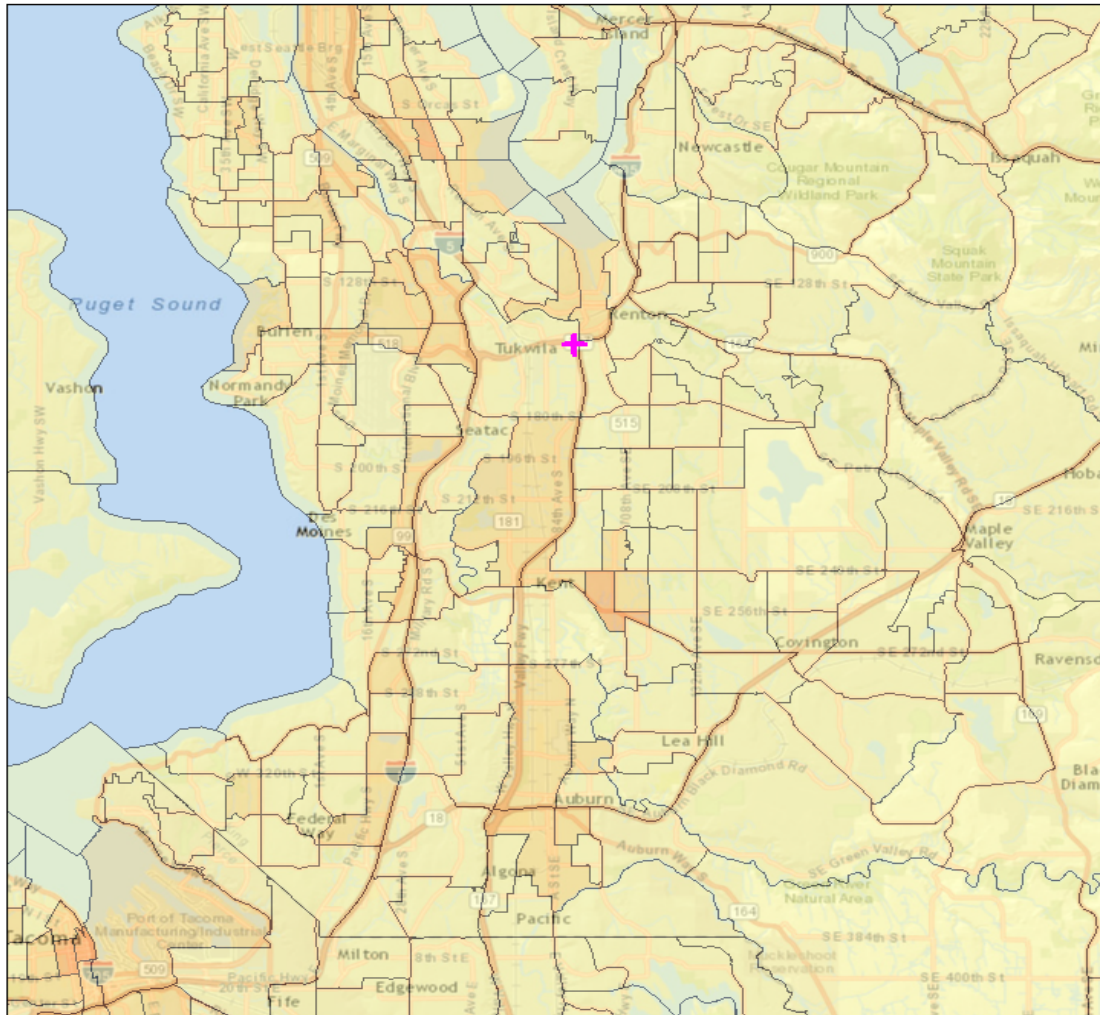
September 13, 2017



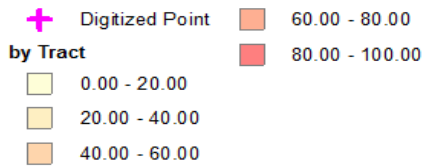
EPA
 Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan,
 Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),
 MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User
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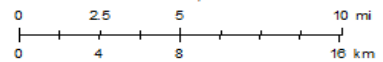
Exhibit 5-5. Percent Low-Income in SR 167 Travelshed



September 13, 2017



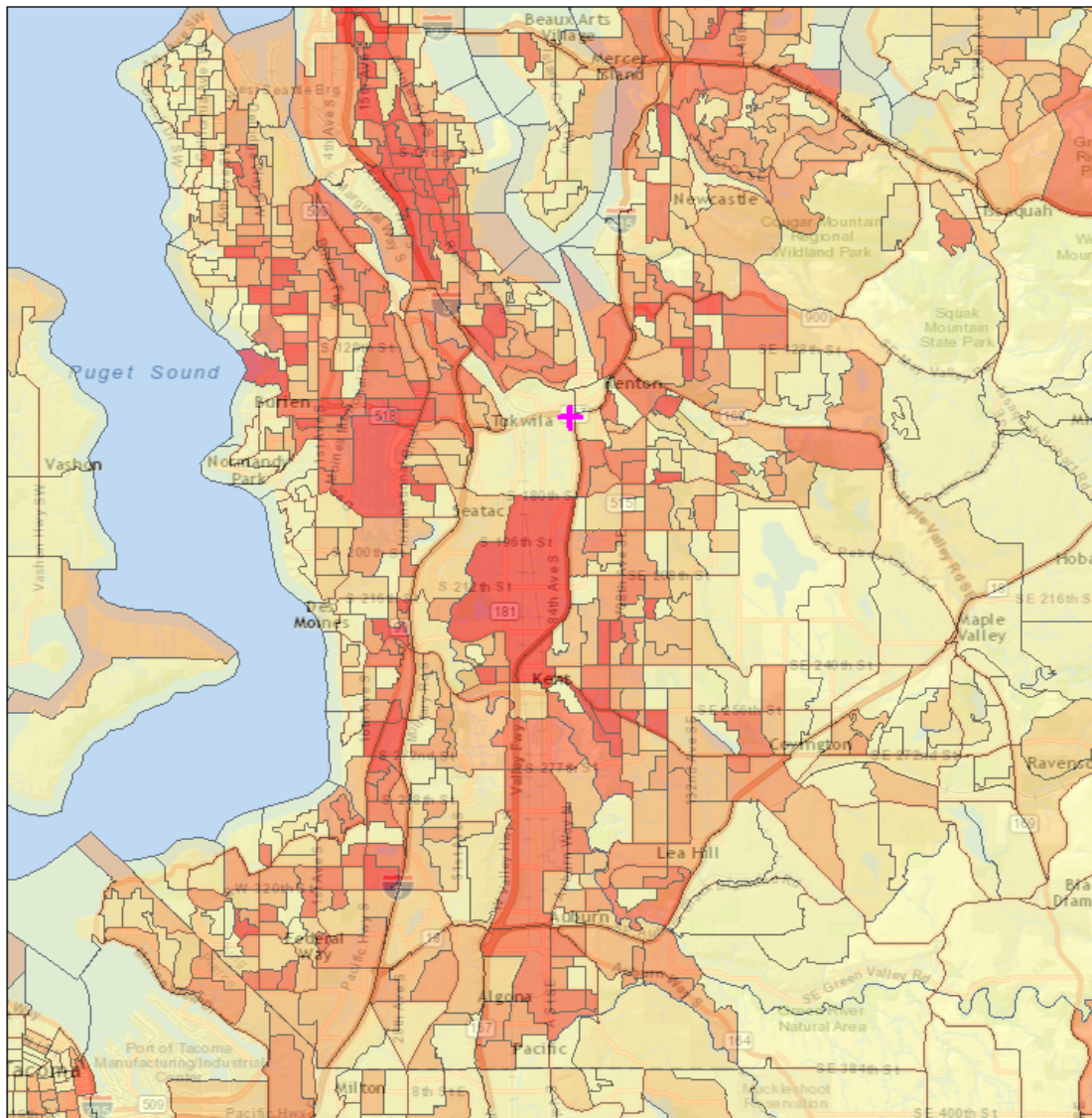
1:288,895



EPA
 Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

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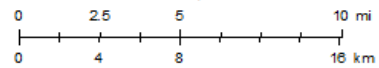
Exhibit 5-6. Percent Limited English Proficient in SR 167 Travelshed



September 13, 2017

- + Digitized Point
- by Block Group**
- 0.00 - 0.00
- 0.00 - 1.92
- 1.92 - 3.47
- 3.47 - 5.81
- 5.81 - 9.76
- 9.76 - 17.37
- 17.37 - 100.00

1:288,895



EPA
 Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

EJSCREEN 2017

SR 167 travelshed who identify as minority, have incomes at or below the federal poverty level, or are limited English proficient, respectively. These exhibits show that many of the census block groups between Kent and the SR 167/I-405 interchange are composed of more than 60 percent to 80 percent minority populations, which is substantially more than King County overall. There are also a few census block groups with 20 percent to 40 percent low-income populations, which is also higher than King County. There are a number of census block groups with over 20 percent linguistically isolated populations. Outcomes from the interviews with social service providers validate these findings; social service providers report that a lot of low-income, minority, and limited English proficient clients have moved south to access more affordable housing and face increasing traffic congestion on SR 167.

Given the demographics of the SR 167 travelshed, the congestion on SR 167 could disproportionately affect environmental justice populations. On the other hand, residents of the SR 167 travelshed would also benefit from improved northbound travel times because of the Project. While the effects of the Project would cause some additional inconvenience for motorists, we do not believe this would be a disproportionately high and adverse effect.

How would construction affect environmental justice populations?

WSDOT expects Project construction to take 5 years, but construction activities in some areas would take less time. WSDOT is expected to construct the I-405, Downtown Bellevue Vicinity Express Toll Lanes Project at the same time.

Construction of the Project would have the following benefits and adverse effects:

The Project, along with I-405, Downtown Bellevue Vicinity Express Toll Lanes Project, would cost \$750 to \$800 million to construct, which would require construction jobs that could benefit all populations.

Construction vehicles would increase traffic delay on the I-405 mainline, ramps to and from I-405, and local arterials in the study area during the construction period. The exact haul routes and quantity of construction vehicles will not be known

until a construction contract is signed, but we anticipate most construction vehicles would use I-405, SR 167, and I-90 to bring materials to and from construction sites. This would affect all I-405 users and motorists on local streets, including minority, low-income, and limited English proficient motorists.

Construction of the Project would require temporary construction easements for 10 residential properties and 10 commercial properties. As with all real estate acquisitions, WSDOT would conduct property acquisition in accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended and implemented by FHWA under 49 Code of Federal Regulations, Part 24, and according to Chapter 468-100 Washington Administrative Code Uniform Relocation and Assistance and Real Property Acquisition. At least one of the affected residential property owners identifies as minority. The temporary construction easements would not have a long-term effect on the owners' or tenants' use of the property, however, so we do not believe these temporary construction easements would have a disproportionately high and adverse effect on environmental justice populations.

Two property owners, including one property owner who identifies as a minority, would experience temporary loss of sewer use while WSDOT relocates their sewer lines. The disruption could occur for up to 30 days.

At the time of publication of this document, there were no known homeless encampments along this stretch of I-405. However, it is possible that homeless encampments could be located in construction areas when construction begins. WSDOT works with law enforcement to ensure WSDOT-owned property is used as it is intended. If there is a homeless encampment that requires clearing, WSDOT and/or its construction contractors post signage in English and Spanish at least 72 hours prior to construction activities, conduct a visual assessment of the area to determine the specific needs for clearing an encampment, and contact advocacy groups to enlist their help in notifying and relocating homeless populations.

The at-grade roadway construction work would include the removal of existing asphalt and concrete surfaces, clearing and grading adjacent areas, laying the aggregate roadway

foundation, and placing of asphalt and concrete surfaces. Changing the alignment of the I-405 mainline would require substantial earthwork

Construction equipment such as backhoes, excavators, front loaders, pavement grinders, jack hammers, pile drivers, trucks, and grading and paving equipment would be used. Additional equipment used would include cranes, drilling rigs and augers, concrete pumping equipment, and slurry processing equipment.

Staging areas in unused right of way would provide room for employee parking, large equipment storage, and material stockpiles. Construction staging would not be permitted within the Zone 1 area of the City of Renton's sole source aquifer, but would occur within areas of existing or newly acquired right of way adjacent to the I-405 mainline. The contractor may also find other locations for staging.

Transit riders—including minority, low-income, and limited English proficient riders—could face revised routes and closed transit stops during construction.

Additional temporary construction-related effects to neighborhoods within the study area would also include increased noise, dust, visual effects, and reduced access to community resources such as parks, recreational facilities, public services, and utilities.

WSDOT expects to construct this Project using a design-build contract. With design-build projects, contractors have the flexibility to offer innovative and cost-effective alternatives to deliver the project. Therefore, the actual project design may differ from the design presented herein. However, any design-build contractor would have to meet all WSDOT design standards, performance measures, and commitments to avoid or minimize adverse effects to the environment.

WSDOT has well-established design and construction practices for avoiding or minimizing effects resulting from environmental conditions anticipated along the Project alignment. Section 6 discusses measures to avoid or minimize effects to environmental justice populations during project construction.

Would the Project have cumulative effects on environmental justice populations?

Under NEPA, cumulative effects result from the incremental effects of a project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes the action. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time. Cumulative effects include past, present, and reasonably foreseeable future actions within the study area that, together with the Project, may have a cumulative effect on the environment. Past and present actions affecting environmental resources are reflected in the existing conditions of the study area.

To evaluate whether the Project would contribute to any adverse cumulative effects on environmental justice populations, we considered the anticipated direct and indirect effects of the Project on environmental justice populations described earlier in Section 5. We also considered the reasonably foreseeable future projects in the Project vicinity area. These current and future projects include many transportation improvements by WSDOT, Sound Transit, and cities adjacent to I-405 and local networks to address traffic congestion and safety, add bicycle and pedestrian facilities, and expand or improve transit service. Lastly, we considered regional and local trends that affect environmental justice populations, including population growth in the study area and I-405 travelshed, an increase in minority and/or low-income populations, and increasing traffic congestion.

We identified positive and negative direct and indirect effects of the ETLs on environmental justice populations in the I-405 travelshed. The ETLs would contribute to a positive cumulative effect on regional transportation and likely contribute to a negative cumulative effect on the economic burdens of low-income users of I-405. We explain how we arrived at these conclusions in the paragraphs that follow.

While projected job and population growth in the region is likely to increase traffic congestion, the ETLs—in conjunction with other reasonable and foreseeable transportation investments in the I-405 travelshed—would improve transportation conditions for most I-405 users, including environmental justice populations.

As described earlier in this section, the operation of ETLs would disproportionately affect low-income populations because the cost to use the ETLs would represent a higher proportion of their household income than middle and high income users. In combination with rising housing costs in the I-405 travelshed and Washington's regressive tax system described in Section 4, the ETLs would have a minor contribution to a negative cumulative effect on economic burdens of low-income users of I-405.

Operation of the all-electronic toll system could disproportionately affect low-income populations because they are more likely than middle and high-income populations to be unbanked or underbanked, making it more difficult to use the system. The operation of ETLs could disproportionately affect limited English proficient users of the system, who may have difficulty understanding and using all-electronic tolling. These effects would be offset by improved travel times for most users of I-405. The operation of the ETLs would have an indirect effect on congestion on southbound SR 167, which would disproportionately affect environmental justice populations in the SR 167 travelshed. Note that motorists traveling on northbound SR 167 would experience faster travel times. None of these adverse effects would contribute to cumulative effects on environmental justice populations.

The direct effects associated with property acquisition would be mitigated and would not contribute to an adverse cumulative effect. As such, we do not propose mitigation measures for cumulative effects of the Project. That said, there are state, regional, and local efforts to improve transportation and land use planning to accommodate growth and reduce adverse effects on all, including environmental justice populations. Refer to the Land Use section of the I-405, Tukwila to I-90 Vicinity Express Toll Lanes Project EA for more information about these efforts

PSRC's long-term vision for the region in *VISION 2040* and *Transportation 2040* considers regional tolling on multiple highways in the Puget Sound. Because of this, WSDOT acknowledges that more roads in the Puget Sound area may be tolled in the future and that the cumulative effects of tolls on low-income and minority populations would need to be analyzed appropriately as specific projects move forward.

SECTION 6 MEASURES TO AVOID OR MINIMIZE EFFECTS

What measures will WSDOT take to mitigate effects of the Project on environmental justice populations during Project construction?

We did not identify any construction effects for the Project that would have a disproportionately high and adverse effect on environmental justice populations. However, WSDOT will continue to conduct targeted outreach to minority populations, low-income populations, and limited English proficient residents of the study area and I-405 travelshed before and during construction. The following measures are part of WSDOT's commitment to public involvement for the Project:

- Translate project materials about construction effects if requested.
- Work with transit providers on Project materials about transit re-routes and temporary closures of transit stops.
- During Project design, translate the EA informational handout, the postcard informing the public of the EA public comment period, and other information deemed critical into Spanish and provide Spanish-language interpreters at the EA public hearing in the Renton area.
- Distribute Project materials—especially prior to construction-related closures that would affect motorists and transit riders—through social service agencies, Crossroads Mini-City Hall, community-based organizations, libraries, community groups, and schools.

What measures will WSDOT take to mitigate effects of the Project on environmental justice populations during Project operation?

Although the three full residential property acquisitions have already taken place based on the completed NEPA process for the previously approved Renton to Bellevue Project in 2008, this EA must consider the effects of these acquisitions and

identify mitigation if there are adverse impacts. The following mitigation was applied to minimize the effects of three residential property acquisitions and displacements associated with the Project:

- WSDOT conducts property acquisition in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended and implemented by FHWA under 49 Code of Federal Regulations, Part 24, and according to Chapter 468-100 Washington Administrative Code Uniform Relocation and Assistance and Real Property Acquisition. This ensures just compensation for all properties and a minimal adverse effect on the current owners and residents.
- WSDOT offers interpretation and translation services to property owners and tenants with limited English proficiency to ensure they understand the property acquisition process and are able to fully participate in negotiations. The property owner who is limited English proficient engaged their own representative—a bilingual realtor—for translation and interpretation.

WSDOT took the following steps to minimize adverse effects to the three displaced households:

- Collected information to identify the specific needs of any residents to be relocated and prepared a relocation plan in advance of actual displacements.
- Made relocation resources available, without discrimination, to all eligible residential relocatees.
- Ensured there was at least one comparable replacement property available to relocate. In other words, WSDOT cannot require a resident to move unless it makes at least one comparable replacement property available. All three displaced families relocated to comparable homes in the same neighborhood as the homes that were purchased by WSDOT.
- Reimbursed the displaced families for certain costs, including the difference between the cost of the current dwelling and the cost of the comparable replacement.

A comparable replacement dwelling must be “decent, safe, and sanitary,” and should be functionally similar to the displaced person’s current dwelling. While not necessarily identical to the current dwelling, the replacement should have certain attributes:

- Similar number of rooms and living space.
 - Located in an area not subject to adverse environmental conditions.
 - Generally not located in an area less desirable than the present location with respect to public utilities and commercial and public facilities.
 - Currently available to the displaced person.
 - Land area that is typical in size for similar dwellings located in the same or similar neighborhood or rural area.
 - Within the financial means of the displaced person.
-

One of the commercial properties that WSDOT is fully acquiring is owned by a person who identifies as minority. WSDOT is mitigating for the effects by conducting the property acquisition in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended and implemented by FHWA under 49 Code of Federal Regulations, Part 24, and according to Chapter 468-100 Washington Administrative Code Uniform Relocation and Assistance and Real Property Acquisition. This ensures just compensation for all properties and a minimal adverse effect on the current owners and commercial tenants.

WSDOT is taking the following mitigation measures to minimize the effects of the displacement of the restaurant owned by a person who identifies as minority.

- Preparing a relocation plan. WSDOT has met with the tenant who owns the affected restaurant to discuss their needs specific to relocation. At the time of publication of this document, the restaurant owner had decided to relocate the restaurant to Tumwater, Washington, about 40 miles from the current location.
- Collecting information to identify the specific needs of the affected restaurant.
- Paying for the costs of relocating all personal property. As the affected property is a restaurant, some equipment cannot be relocated or requires major reconfiguration to fit in a new space. In that case, WSDOT will pay to replace the property that cannot be moved or reconfigured.
- Providing up to \$2,500 to pay for time invested in searching for an appropriate replacement site.
- Consistent with the Uniform Relocation and Assistance and Real Property Acquisition policy, providing limited funds to pay for permitting, site feasibility studies, and other costs associated with relocating to a new site.
- Consistent with the Uniform Relocation and Assistance and Real Property Acquisition policy, providing limited funds to support reestablishment in a new location.

WSDOT is not providing mitigation for the 26 restaurant employees who would likely lose their jobs because of the relocation to Tumwater, Washington.

For the residential property owners affected by partial acquisitions and permanent easements, WSDOT is taking the following measures to minimize adverse impacts:

- Conduct property acquisition in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, to ensure just compensation for all properties and a minimal adverse effect on the current owners and residents.
- WSDOT provides access to interpretation and translation for owners who need language assistance to participate in negotiations upon request. According to the agents who are working with property owners during the acquisition process, one property owner who speaks English as a second language chose to use their own representative to assist them with communication.
- For the four residential property owners who will lose a portion of their yards and have the highway closer to their properties, WSDOT has approved a noise wall for that location, which will reduce the noise impacts compared to existing conditions.
- WSDOT offered these four residential property owners the option to sell their entire properties to WSDOT at fair market value. All four residential property owners declined this option.
- WSDOT will provide temporary relocation to the two property owners who will experience short-term disruption in their sewer service.

For the commercial property owners affected by partial acquisitions and permanent easements, WSDOT is conducting property acquisition in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, to ensure just compensation for all properties and a minimal adverse effect on the current owners and tenants. In cases where WSDOT is rebuilding driveway access to tie into the newly rebuilt street at NE 44th Street,

WSDOT would maintain access to all buildings during construction.

Although there is no need for additional mitigation, WSDOT will continue to conduct targeted outreach to engage minority populations, low-income populations, and limited English proficient residents of the study area and I-405 travelshed. Ongoing public involvement activities when the Project is complete will include the following measures:

- Maintaining ongoing communications with community-based organizations and social service providers throughout design of the Project, and scheduling briefings with them at project milestones.
- Distributing Project materials through social service agencies, community-based organizations, libraries, community groups, and schools and host booths at community events in the study area.
- Planning and implementing a public information campaign in multiple languages to explain ETLs, how to obtain a *Good To Go!* pass, and how to set up an account, with the goal of increasing the proportion of passholders who identify as minority, have low incomes, or are limited English proficient.
- Including information about how to use the ETLs in Spanish and other languages, if requested, as part of the public information campaign, such as how to enter and exit the lanes, how to determine the cost, and how to obtain a free *Good To Go!* pass for carpools.
- Conducting outreach about the Project and ETLs at community fairs and festivals, including events at Bellevue's Crossroads Mini-City Hall, in one of the Eastside's most ethnically and linguistically diverse neighborhoods.
- Conducting media outreach, specifically with ethnic media outlets serving the study area.

To reduce possible barriers to obtaining and maintaining a *Good To Go!* account for persons who have low-incomes or are underbanked:

- WSDOT will continue to offer the option for low-income persons who are eligible for public benefits to

use their Electronic Benefit Transfer cards to open and maintain their *Good To Go!* accounts.

- WSDOT is working to expand the network of retail location where people can buy *Good To Go!* passes with cash, making it easier for people to purchase a pass without a bank account.

The Project would exacerbate congestion on southbound SR 167, and WSDOT has identified a project in the SR 167 corridor that would address this congestion. An auxiliary lane to southbound SR 167 between the SR 516 interchange southbound on-ramp and the S 277th Street interchange southbound off-ramp could help reduce congestion on SR 167. This project is currently unfunded.

SECTION 7 CONCLUSION

Conclusion: Would the Project result in disproportionately high and adverse effects on environmental justice populations?

The following table summarizes the effects of the Project on environmental justice populations, mitigation, and offsetting benefits.

Exhibit 7-1. Summary of Project Effects on Environmental Justice Populations, Mitigation, and/or Offsetting Benefits

| Project Effect | Mitigation and/or Offsetting Benefits |
|---|--|
| Effects of the ETLs | |
| The cost of the toll to use ETLs would disproportionately affect low-income populations. | <ul style="list-style-type: none"> – These effects would be offset by faster travel times for most users—including environmental justice populations—with the Project. – WSDOT would continue to conduct targeted outreach to engage environmental justice populations in the study area and the I-405 travelshed. |
| Use of the electronic toll collection system could disproportionately affect persons with limited English proficiency and/or low-income populations. | <ul style="list-style-type: none"> – WSDOT would continue to offer the option for low-income persons who are eligible for public benefits to use their Electronic Benefit Transfer cards to open and maintain their <i>Good To Go!</i> accounts. The use of Electronic Benefit Transfer cards allows users who do not have bank accounts to obtain a <i>Good To Go!</i> pass and avoid extra charges for the pay by mail option. – WSDOT is working to expand the network of retail locations where people can buy <i>Good To Go!</i> passes with cash, making it easier for people to purchase a pass without a bank account. |
| The cost to use the entire length of the ETL system would disproportionately affect low-income users, for whom the total cost would represent a higher proportion of annual household income. | <ul style="list-style-type: none"> – This effect would be minor and improved travel times for almost all users—including environmental justice populations—would offset this effect. |
| Effects of Property Acquisitions | |
| Three households who identify as minority have been displaced. ⁶ | <ul style="list-style-type: none"> – WSDOT collected information to identify specific needs of the residents, made relocation resources available, ensured at least one comparable property was available to relocate, and reimbursed displaced families for certain relocation costs. |

⁶ All three full residential property acquisitions and some of the partial residential and commercial property acquisitions have already taken place under the completed NEPA process for the previously approved Renton to Bellevue in 2008; however, this EA must consider the effects of these acquisitions in making an environmental justice determination.

Exhibit 7-1. Summary of Project Effects on Environmental Justice Populations, Mitigation, and/or Offsetting Benefits

| Project Effect | Mitigation and/or Offsetting Benefits |
|---|---|
| <p>Thirteen residential property owners—including one minority property owner—would experience loss of use of a portion of their yards, closer proximity of their dwellings to the highway, and two would experience a temporary disruption in sewer service.</p> | <ul style="list-style-type: none"> – WSDOT is conducting property acquisition in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, to ensure just compensation for all properties and a minimal adverse effect on the current owners and tenants. – Areas that qualified for a noise wall, would maintain noise levels close to current conditions. – WSDOT discussed the impacts of the properties with the owners and they indicated a desire for a partial acquisition instead of a full acquisition. – WSDOT would provide temporary relocation to the two property owners who would experience short-term disruption in their sewer service. |
| <p>One commercial property owner who identifies as minority must sell his property to WSDOT.</p> | <ul style="list-style-type: none"> – WSDOT is conducting property acquisition in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, to ensure just compensation for the adverse effect on the current owner and tenants. |
| <p>One commercial business owned by an individual who identifies as minority is being displaced.</p> | <ul style="list-style-type: none"> – WSDOT prepared a relocation plan, collected information to identify the specific needs of the affected business, paid for the costs of relocating or replacing all property, provided up to \$2,500 to pay for time invested in finding a replacement site, and provided limited funds to pay for costs associated with relocating and reestablishing. |
| <p>For the displaced, minority-owned business, 26 restaurant employees—including some employees who are environmental justice populations—will lose their jobs.</p> | <ul style="list-style-type: none"> – Per the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 employees are not eligible for benefits |
| Indirect Effects, Transportation | |
| <p>With the Project, increased capacity on southbound I-405 would allow higher traffic volumes to access southbound SR 167, which would worsen congestion at the SR 167/S 277th Street interchange during afternoon peak periods.</p> | <ul style="list-style-type: none"> – Although there are no funded projects to mitigate for this congestion, WSDOT has identified a project in the SR 167 corridor that would address this congestion. |

After analyzing the totality of the impacts and associated mitigation, we have determined that the Project would not have a disproportionately high and adverse effect on the study area’s environmental justice populations.

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GIS Data

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APPENDIX A ACRONYMS AND ABBREVIATIONS

| Term | Meaning |
|-------------|---|
| ACS | American Community Survey |
| ADA | American with Disabilities Act |
| ARCH | A Regional Coalition for Housing |
| EA | Environmental Assessment |
| EIS | Environmental Impact Statement |
| ETL | express toll lane |
| FHWA | Federal Highway Administration |
| GIS | geographic information system |
| GP | general purpose |
| HOT | High-occupancy toll |
| HOV | high-occupancy vehicle |
| HUD | United States Department of Housing and Urban |
| I-405 | Interstate 405 |
| I-5 | Interstate 5 |
| I-90 | Interstate 90 |
| ITEP | Institute on Taxation and Economic Policy |
| MP | milepost |
| NAC | noise abatement criteria |
| NEPA | National Environmental Policy Act |
| OEO | Office of Equal Opportunity |
| PSRC | Puget Sound Regional Council |
| ROD | Record of Decision |
| SOV | single-occupant vehicle |
| SR | State Route |
| USDOT | United States Department of Transportation |
| WSDOT | Washington State Department of Transportation |
| WSTC | Washington State Transportation Commission |

APPENDIX B GLOSSARY

| Term | Meaning |
|----------------------------|---|
| Environmental justice | Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. |
| Express toll lane | A limited-access freeway lane that is actively managed through a variable toll system to regulate its use and thereby maintain express travel speeds and reliability. Toll prices rise or fall in real time as the lane approaches capacity or becomes less used. This ensures traffic in the express toll lane remains flowing at express travel speeds of 45 to 60 miles per hour. Transit and carpools do not pay a toll. |
| Limited English proficient | A limited English proficient person is an individual who has difficulty speaking, reading, writing, or understanding the English language and whose difficulties may deny that individual the opportunity to meaningfully engage in the transportation decision-making process. This definition applies to an individual who: <ul style="list-style-type: none">▪ Was not born in the United States;▪ Speaks a native language other than English and comes from an environment where a language other than English is dominant; or▪ Comes from an environment where a language other than English has had a substantial effect on that individual's English language proficiency. |
| Low-income | A low-income person is an individual whose household income falls below the federal poverty guidelines, as defined by the U.S. Department of Health and Human Services. For 2017, the federal poverty guideline for a household of four in one of the 48 contiguous states and Washington D.C. is \$24,600. |
| Minority | Minority means a person who is: (1) Black: a person having origins in any of the black racial groups of Africa; (2) Hispanic or Latino: a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race; (3) Asian American: a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent; (4) American Indian and Alaskan Native: a person having origins in any of the original people of North America, South America (including Central America), and who maintains cultural identification through tribal affiliation or community recognition; or (5) Native Hawaiian and Other Pacific Islander: people having origins |

| Term | Meaning |
|-------------|---|
| | in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands |
| Travelshed | The geographic area from which I-405 users come is referred to as the I-405 travelshed. |

APPENDIX C SOCIAL SERVICE PROVIDERS INTERVIEWED BY WSDOT

City of Bellevue Human Services Division

City of Burien Department of Human Services

City of Redmond Human Services

City of Renton Department of Human Services

Coal Creek YMCA

Hopelink

Youth Eastside Services

APPENDIX D 2010 CENSUS DEMOGRAPHIC DATA ON MINORITY POPULATIONS

| Census Block Group | Percent Identifying as Minority | Percent Hispanic | Percent Black/African American | Percent American Indian/Alaskan Native | Percent Asian | Percent Pacific Islander/ Native Hawaiian | Percent Other Race | Percent Two or More Races |
|-----------------------------|---------------------------------|------------------|--------------------------------|--|---------------|---|--------------------|---------------------------|
| 235002 | 32.0% | 5.8% | 3.0% | 0.3% | 18.2% | 0.0% | 0.5% | 4.2% |
| 235003 | 28.9% | 4.4% | 1.5% | 0.5% | 18.9% | 0.2% | 0.2% | 3.1% |
| 238012 | 27.0% | 5.3% | 2.7% | 0.2% | 15.6% | 0.1% | 0.2% | 2.7% |
| 239004 | 17.7% | 3.2% | 0.4% | 0.2% | 11.6% | 0.2% | 0.0% | 2.1% |
| 247011 | 41.1% | 3.4% | 0.7% | 0.4% | 30.4% | 0.7% | 0.2% | 5.3% |
| 247012 | 41.5% | 6.1% | 3.0% | 0.1% | 27.9% | 0.3% | 0.3% | 3.9% |
| 247013 | 22.5% | 2.7% | 1.6% | 0.8% | 13.0% | 0.5% | 0.0% | 3.9% |
| 247021 | 36.5% | 4.8% | 2.5% | 0.4% | 24.7% | 0.5% | 0.3% | 3.3% |
| 247024 | 35.6% | 2.5% | 1.0% | 0.1% | 29.7% | 0.2% | 0.0% | 2.2% |
| 247025 | 34.5% | 3.8% | 3.6% | 0.0% | 23.3% | 0.1% | 0.3% | 3.3% |
| 248003 | 63.2% | 5.7% | 3.3% | 0.2% | 50.0% | 0.2% | 0.4% | 3.3% |
| 252002 | 44.6% | 8.1% | 6.3% | 0.4% | 23.1% | 0.8% | 0.4% | 5.5% |
| 253011 | 30.9% | 7.3% | 6.5% | 0.5% | 11.8% | 0.2% | 0.1% | 4.5% |
| 253012 | 25.8% | 5.2% | 3.6% | 0.1% | 12.8% | 0.1% | 0.1% | 3.8% |
| 253013 | 40.6% | 12.8% | 9.4% | 1.2% | 11.5% | 0.3% | 0.1% | 5.4% |
| 253023 | 57.5% | 17.0% | 21.7% | 2.1% | 10.2% | 1.3% | 0.3% | 4.9% |
| 254002 | 64.2% | 27.9% | 13.9% | 0.6% | 15.1% | 0.3% | 0.0% | 6.4% |
| 254003 | 53.3% | 17.1% | 13.8% | 0.7% | 14.3% | 1.0% | 0.3% | 6.2% |
| 254004 | 52.8% | 33.4% | 5.4% | 0.6% | 10.4% | 0.0% | 0.2% | 2.8% |
| 257011 | 38.7% | 8.5% | 9.5% | 0.7% | 15.7% | 0.2% | 0.2% | 3.9% |
| 257012 | 34.7% | 7.2% | 9.0% | 0.8% | 13.7% | 0.4% | 0.0% | 3.5% |
| 257015 | 50.4% | 13.9% | 16.2% | 0.7% | 12.3% | 0.9% | 0.0% | 6.5% |
| 258063 | 59.3% | 10.4% | 14.4% | 0.8% | 24.7% | 0.9% | 0.6% | 7.5% |
| 262001 | 33.2% | 11.6% | 8.8% | 2.8% | 4.4% | 0.0% | 1.1% | 4.4% |
| 262003 | 62.7% | 18.7% | 18.5% | 0.6% | 13.9% | 4.4% | 0.2% | 6.5% |
| 262004 | 55.8% | 16.2% | 14.6% | 0.4% | 17.2% | 1.9% | 0.6% | 4.8% |
| 283001 | 48.0% | 9.1% | 9.3% | 0.4% | 21.9% | 1.6% | 0.1% | 5.6% |
| Project Area Average | 44.3% | 10.5% | 8.0% | 0.5% | 19.6% | 0.8% | 0.2% | 4.6% |

Source: U.S. Census Bureau, 2010 Census

