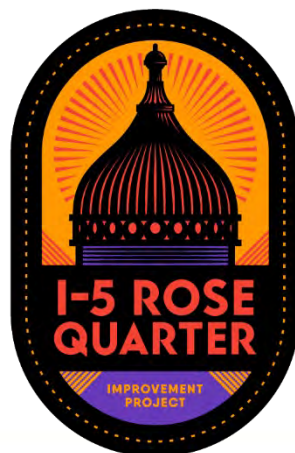


# SOCIOECONOMICS SUPPLEMENTAL TECHNICAL REPORT

Oregon Department of Transportation  
June 30, 2022



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## Contents

Executive Summary .....	1
1.0 Introduction .....	2
2.0 Build Alternative Design Changes .....	2
2.1 Design Process .....	2
2.2 Project Area .....	5
2.3 I-5 Mainline Improvements Changes.....	7
2.4 Highway Cover Changes.....	7
2.5 Related Local System Multimodal Improvements Changes .....	9
3.0 Regulatory Framework.....	12
4.0 Methodology and Data Sources.....	12
4.1 Area of Potential Impact.....	12
4.2 Resource Identification and Evaluation.....	12
4.3 Assessment of Impacts .....	14
5.0 Affected Environment.....	15
5.1 Population Characteristics.....	15
5.1.1 Demographics.....	15
5.1.2 Neighborhoods.....	17
5.1.3 Education.....	17
5.1.4 Income and Housing.....	17
5.1.5 Transportation.....	18
5.2 Public Services.....	20
5.3 Economy .....	20
5.4 Employment.....	20
5.5 Business Activity .....	20
6.0 Environmental Consequences.....	21
6.1 No-Build Alternative .....	21
6.1.1 Direct Impacts.....	21
6.1.2 Indirect Impacts.....	21
6.2 Revised Build Alternative.....	21



6.2.1	Direct Impacts.....	21
6.2.2	Indirect Impacts.....	27
6.3	Cumulative effects.....	27
6.4	Conclusion.....	27
7.0	Avoidance, Minimization, and Mitigation Measures.....	28
8.0	Preparers.....	28
9.0	References.....	29

## Tables

Table 1	Population: Gender and Age.....	16
Table 2	Population: Hispanic/Latino and Race.....	17
Table 3	Household Income and Poverty .....	18
Table 4	Housing Units and Occupancy .....	18
Table 5	Means of Travel to Work, Workers Age 16 and Older .....	19
Table 6	Travel Time to Work, Workers Age 16 and Older.....	19

## Figures

Figure 1	Hybrid 3 Highway Cover Design Concept.....	4
Figure 2	Previous and Current Project Area.....	6
Figure 3	Building Parameters on the Cover.....	8
Figure 4	Major Local System Multimodal Design Changes .....	11
Figure 5	Project Census Tracts .....	14
Figure 6	Estimated ROW Impacts.....	23



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# Executive Summary

This technical report supplements the 2019 Socioeconomics Technical Report (ODOT 2019a) with an evaluation of the socioeconomic impacts of the Revised Build Alternative. This Socioeconomics Supplemental Technical Report concentrates on how the design updates under the Revised Build Alternative would impact regional socioeconomic characteristics in the Area of Potential Impact (API) compared to the No-Build Alternative. This report also includes updates to economic and demographic information using the most recent available data.

The Revised Build Alternative would provide regional economic benefits and improve the movement of goods and people by reducing congestion and improving safety on I-5. Construction impacts of the Revised Build Alternative are different from the Build Alternative with additional impacts to some parcels and fewer impacts to others. The Revised Build Alternative would expand the highway cover, increase building capacity, and provide updated active transportation facilities which would improve social cohesion and the overall business environment in the new cover area. The cumulative socioeconomic impacts of the Revised Build Alternative would be the same as reported in the 2019 Socioeconomics Technical Report, except for the benefits associated with the Clackamas bicycle/pedestrian overcrossing to east-west connectivity that would have accrued under the Build Alternative. The increased building capacity on the new cover would provide development opportunities. Future development on the cover would be determined through a Community Framework Agreement process led by the City of Portland with the participation of organizations that represent the Albina community and Black residents and involvement of ODOT, other state agencies and local jurisdictions as necessary.

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# 1.0 INTRODUCTION

The I-5 Rose Quarter Improvement Project (Project) Environmental Assessment (EA) was released in February 2019. The Federal Highway Administration (FHWA) published a Finding of No Significant Impact (FONSI) and Revised EA (REA) for the Build Alternative on November 6, 2020. Since the issuance of the FONSI, the Oregon Department of Transportation (ODOT) has made changes to the design of the proposed Build Alternative to create a Revised Build Alternative and re-evaluated the changes in the context of the FONSI/REA. At the conclusion of the re-evaluation, FHWA and ODOT agreed that the design changes require additional analyses beyond what was presented in the REA, and FHWA rescinded the FONSI on January 18, 2022. This technical report supplements the 2019 Socioeconomics Technical Report (ODOT 2019a) with an evaluation of the socioeconomic impacts of the Revised Build Alternative compared to the No-Build Alternative and Build Alternative.

## 2.0 BUILD ALTERNATIVE DESIGN CHANGES

Changes to the Build Alternative include modification to the highway cover design and changes associated with advancements in other elements of the project design, some of which require expansion of the Project Area. This section describes the highway cover design changes and design changes that resulted from advancements in project engineering. The evaluation of these changes is presented in Section 6.2 of this supplemental technical report.

### 2.1 DESIGN PROCESS

Through 2021, ODOT facilitated an Independent Highway Cover Assessment, as directed by the Oregon Transportation Commission, that engaged the Project's advisory committees and community members in a series of collaborative workshops to explore the design opportunities for the highway cover. The purpose of the Independent Highway Cover Assessment was to understand stakeholder goals and objectives within the Project Area, generate potential highway cover scenarios, and assess the impacts and benefits of these scenarios. The Independent Highway Cover Assessment team worked directly with local community members from the historic Albina neighborhood to understand how the highway cover design concepts might best serve the historic Albina community. The Project's Historic Albina Advisory Board (HAAB), Executive Steering Committee (ESC) and the Community Oversight Advisory Board (COAC) also provided input as part of the Independent Highway Cover Assessment process. These sessions explored potential opportunities for economic development in the Albina community and the highway cover design concepts.

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In July 2021, Oregon Governor Brown convened a series of meetings with Project stakeholders and community organizations to discuss the design concepts developed in the Independent Highway Cover Assessment. In August 2021, the HAAB—as supported by the ESC and the COAC, and through the Governor-led process—recommended “Hybrid 3” as the preferred highway cover design concept (Figure 1). The Hybrid 3 highway cover design concept represents a proposed community solution to maximize developable space on a single highway cover. The Hybrid 3 highway cover design concept maintains the commitment for the Project to create opportunities for the local community to grow wealth through business ownership and long-term career prospects through the Project’s Disadvantaged Business Enterprise and workforce program. Following the community and stakeholder recommendations, in September 2021, the Oregon Transportation Commission directed ODOT to advance further evaluation of the Hybrid 3 highway cover design concept, with conditions related to the Project’s funding process and other technical analyses.

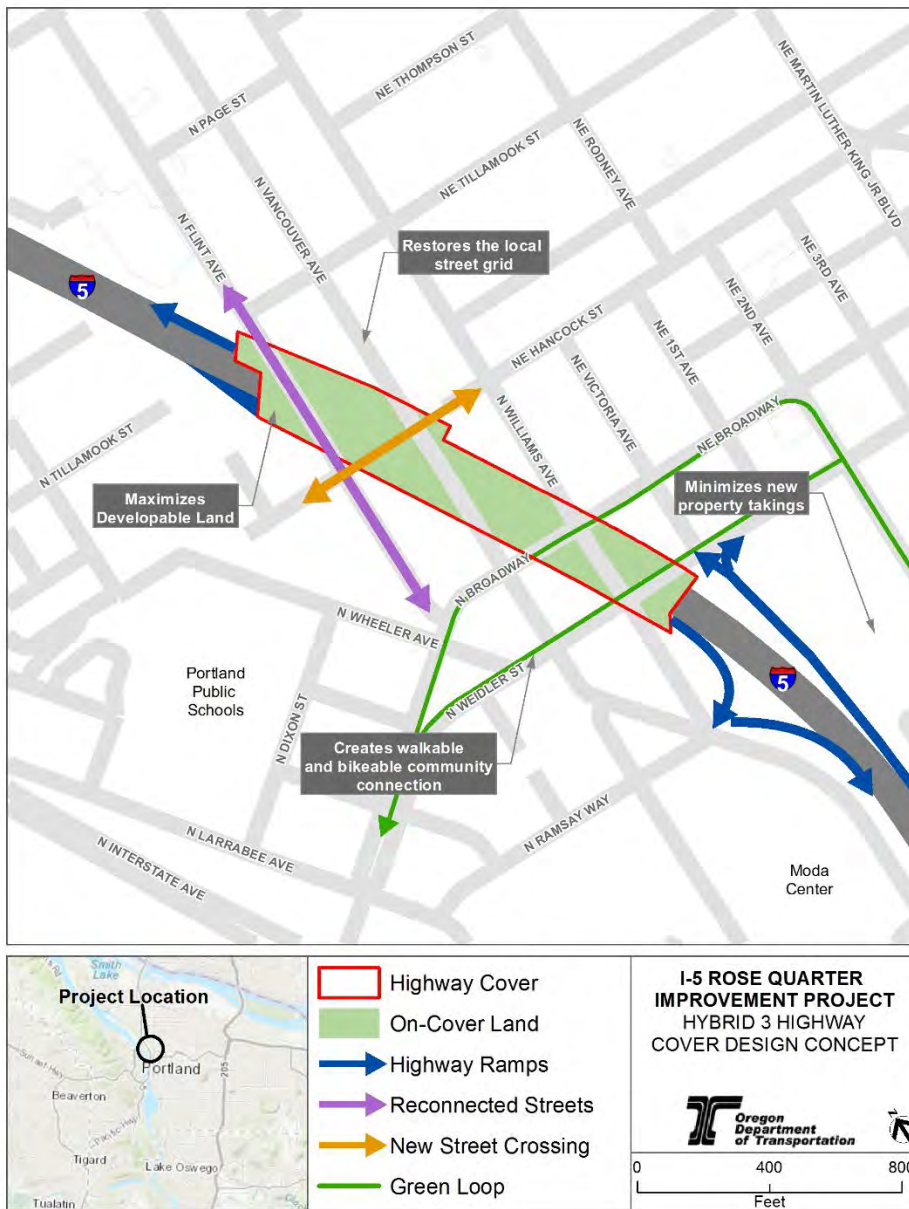
In January 2022, Governor Brown entered into a Letter of Agreement with the City of Portland, Metro, and Multnomah County that demonstrated their shared understanding and collective support for the Hybrid 3 concept as part of the Project. The Letter of Agreement specifically highlights the desire to connect the Lower Albina neighborhood, create buildable space, and enhance wealth-generating opportunities for the community, while simultaneously addressing the area’s transportation needs. Additionally, the Letter of Agreement supports the development of a process to define the future development vision for what could ultimately be built on top of the highway cover upon Project completion – this process is referred to as a Community Framework Agreement. The Letter of Agreement states that the City of Portland will lead a Community Framework Agreement process and that it should be between the City of Portland, ODOT, other state agencies and local jurisdictions as necessary, with the participation of organizations that represent the Albina community and Black residents. Any future real estate or open space development on top of the cover would require executing long-term air rights and lease agreements, and that any such actions or decisions are subject at all times to applicable local, state, and federal laws including but not limited to land use and NEPA processes.

In June 2022, ODOT and the City of Portland executed an Intergovernmental Agreement (IGA), building upon the January 2022 Letter of Agreement. The IGA further states that the City will lead the future highway cover land use, programming and development processes and development of a Community Framework Agreement, in consultation with the ODOT to ensure the highway, local streets and resulting land parcels within the Project are coordinated. As such, ODOT would construct the highway cover as part of the Project and the City of Portland would lead the process to define what is ultimately built on the new land created by the Project’s highway cover. In the IGA, both ODOT and the City agreed that ODOT will retain ownership of

the highway cover structure and the new developable area created on the highway cover structure upon Project completion.

The sections below describe the highway cover design changes and the design changes that resulted from advancements in project engineering and are incorporated into the Revised Build Alternative.

Figure 1 Hybrid 3 Highway Cover Design Concept





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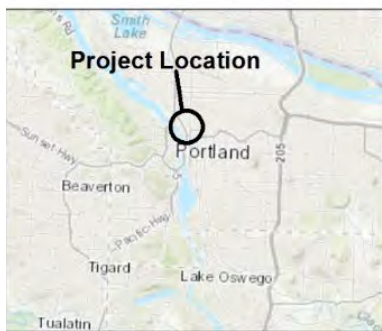
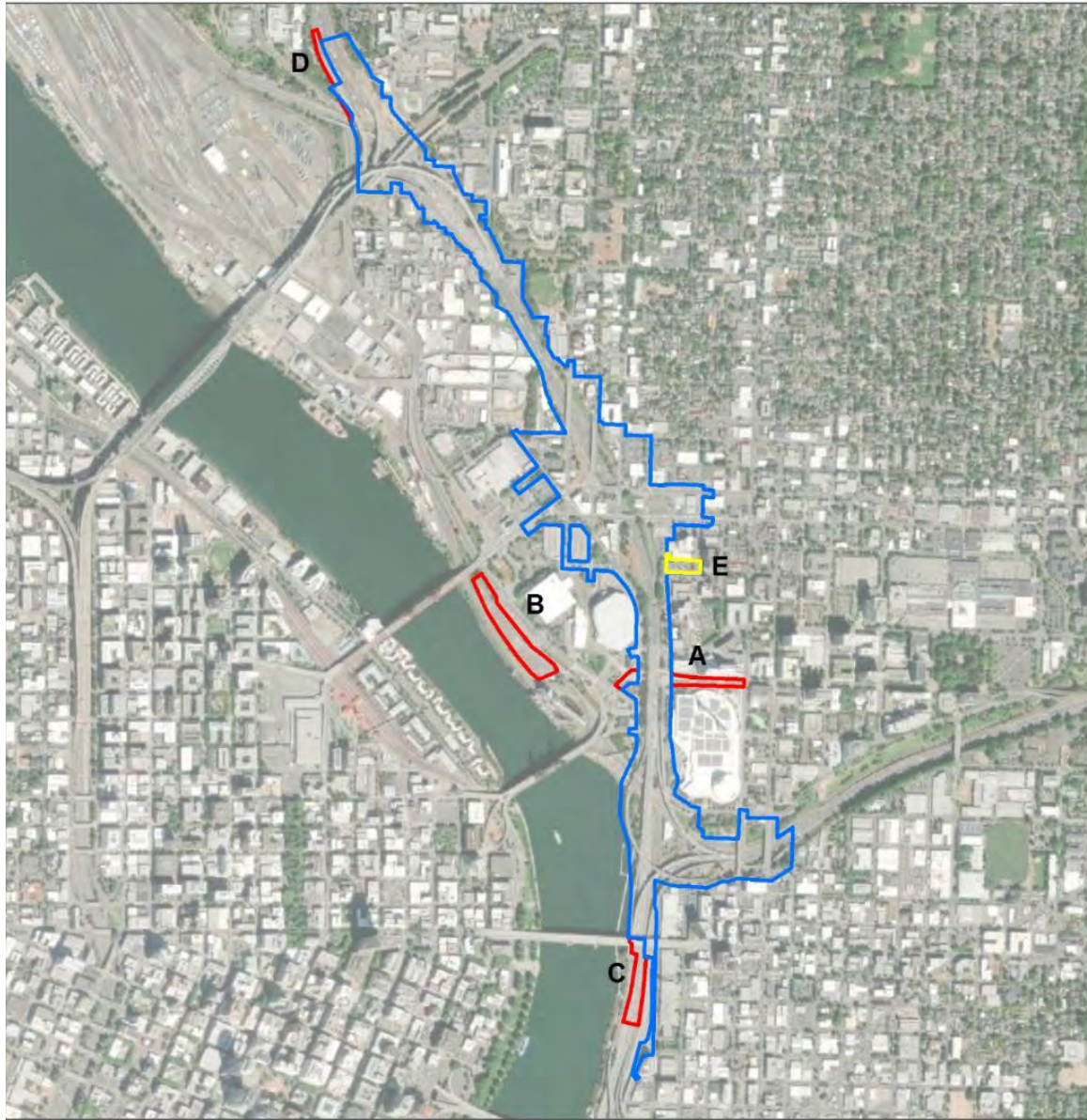
This section describes the highway cover design changes and design changes that resulted from advancements in project engineering and are incorporated into the Revised Build Alternative.

## 2.2 PROJECT AREA

The Project Area is defined as the area within which improvements are proposed, including where permanent modifications to adjacent parcels may occur and where potential temporary impacts from construction activities could result. As Project design information advanced, some changes required expansion of the Project Area presented in the REA and FONSI, and in one location the Project Area was reduced (Figure 2). In total, approximately 8.7 acres would be added to the Project Area. The changes are as follows, with letter references to the areas shown in Figure 2:

- A: Utility conflicts with Light Rail Transit (LRT) along NE Holladay Street between N Interstate Avenue and NE Martin Luther King Jr. Boulevard required expanding the Project Area by 1.9 acres to include additional overhead utility relocations (label A in Figure 2).
- B: An existing parking lot (known as Aegean Lot) south of N Interstate Avenue and the Broadway Bridge may be used for contractor staging during construction and is added to the Project Area (label B, Figure 2). ODOT identified this 4.3-acre construction staging area for contractor use based on its location, size, and suitability recognizing that, because of the urban setting and high-density land development in the construction area, it would be difficult for a construction contractor to find the space needed near or next to the project work areas for equipment staging, material storage, and the required co-location space for the contractor/construction personnel. This location meets all of the Project requirements: large level open space, proximity to the project work areas, and access for staging/storage of materials and equipment. Any materials stored in the area and site runoff would be subject to the same regulations as required throughout the project site.
- C: The southern end of the Project Area is expanded by 2.4 acres to include the portion of I-5 south of the Burnside Bridge proposed for a retrofit of the existing bridge rail, restriping the existing freeway, and installation of new guide signs (label C, Figure 2).
- D: At the northernmost end of the Project Area, a 1.1-acre area of ODOT right of way along the I-5 shoulders is now included in the Project Area for fiber optic conduit (label D, Figure 2).E: In one location, the Project Area was reduced by 1.0 acre. A parking lot west of the intersection of NE Clackamas Street and NE 2<sup>nd</sup> Avenue is no longer needed for the Project due to the removal of the Clackamas Bicycle and Pedestrian Crossing (label E, Figure 2).

Figure 2 Previous and Current Project Area.



- FONSI Build Alternative
- Revised Build Alternative Additional Area
- Reduced Project Area

**I-5 ROSE QUARTER  
IMPROVEMENT PROJECT  
PROJECT AREA**



0 0.25 0.5 Miles

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## 2.3 I-5 MAINLINE IMPROVEMENTS CHANGES

The Build Alternative included relocation of the I-5 southbound on-ramp at N Wheeler Avenue to N/NE Weidler Street at N Williams Avenue via the new Weidler/Broadway/Ramsay highway cover, construction of auxiliary lanes and full shoulders (12 feet in width) on I-5 between I-405 and I-84 in both directions, and associated improvements to I-5 through the Project Area. The Revised Build Alternative includes the following changes to those elements of the Build Alternative:

- Move the I-5 southbound exit ramp termini from N Broadway to N Williams Avenue at NE Wheeler Avenue.
- Reduce the freeway median shoulder through the entire Project Area, from 12 feet to 8 feet (4 to 5 feet within highway cover). The outside shoulder width of 12 feet remains unchanged.
- Relocate Noise Wall 24 from N Commercial Avenue near Harriet Tubman Middle School to attach to Walls 1 and 2 along the east edge of I-5.
- Keep the I-5 southbound entrance ramp from NE Wheeler Avenue/N Williams Avenue/N Ramsay Way on the existing alignment rather than relocate it to parallel N Williams Avenue.
- On I-5 south of the Burnside Bridge: retrofit existing bridge rail, restripe freeway in both the northbound and southbound directions, and install new guide signs on an existing sign structure in the southbound direction.

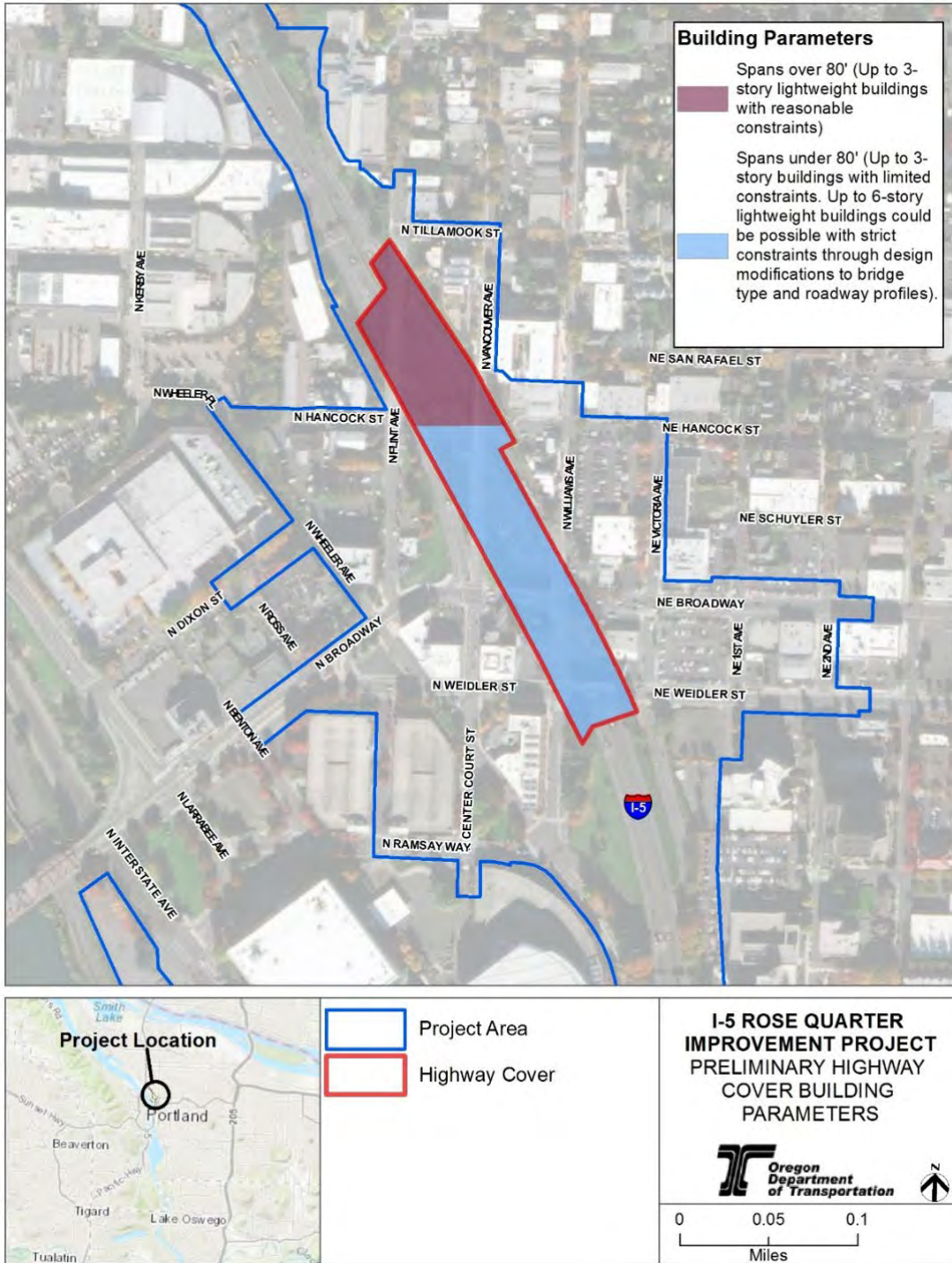
## 2.4 HIGHWAY COVER CHANGES

The Build Alternative included the construction of two highway cover structures over I-5 for roadway crossings and other purposes. The Revised Build Alternative, based on Hybrid 3 (see Figure 1), includes the following changes to the highway covers:

- Provide one continuous highway cover over I-5 rather than separate covers at the existing N Flint Avenue, NE Weidler Street, NE Broadway, N Williams Avenue, and the N Vancouver Avenue overcrossings.
- Expand the limits of the highway cover by approximately 35 feet to the west, and approximately 400 feet to the north.
- Design and construct the highway cover to accommodate multi-story buildings. Due to span length and site constraints, design would constrain building size, location, type, and use on portions of the cover (Figure 3). Generally, buildings up to three stories could be accommodated throughout the highway cover. Buildings of up to six stories could be accommodated where span lengths are shorter than 80 feet with strict design constraints.



Figure 3 Building Parameters on the Cover



Future development on the highway cover would follow a community process according to the City-led Community Framework Agreement, as described in Section 2.1. ODOT anticipates this process could continue past completion of cover construction.

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As part of the Project, ODOT anticipates programming interim uses on the highway cover for the time period between Project completion and when the City-led development process would be implemented. Upon Project completion, the added surface space created by the highway cover over I-5 could provide an opportunity for new and modern bicycle facilities, making the area more connected, walkable and bike friendly. It could also provide opportunity for various potential types of public spaces, to be precisely determined during the Project’s final design phase and through robust community engagement, consisting of one or more of the following types of uses:

- Landscaped areas for active and passive recreation and/or to provide a buffer, backdrop and visual comfort, such as gardens, lawns or planter beds.
- Plazas and hardscaped open space for active and passive recreation, such as courts, plazas, splash pads, picnic areas, and community gathering spaces.
- Interpretive signage, historical markers, landmarks and other areas of historical recognition and narrative such as art pieces and other historical signage/kiosks and pavement focused on the historic Albina community.
- Temporary and lightweight vertical features to support episodic, mobile commercial activities such as a food market shed, eating pavilion, food carts, or picnic venues.

These features may be removed upon implementation of the development determined by the community process or may be incorporated into that development.

## 2.5 RELATED LOCAL SYSTEM MULTIMODAL IMPROVEMENTS CHANGES

The Build Alternative included construction of a new bicycle and pedestrian bridge over I-5 at NE Clackamas Street and other local street improvements. The Revised Build Alternative includes the following changes to these improvements to accommodate the Hybrid 3 design concept and related changes in traffic patterns (see Figure 4 below):

- Remove the Clackamas Bicycle and Pedestrian Crossing from the Build Alternative.
- Construct wider sidewalks and bike lanes at sidewalk level and physically separated from the roadway with a curb and provide protected bike signal phases at multiple intersections along NE Broadway and NE Weidler Street.
- Connect N Flint Avenue across I-5 from NE Tillamook Street to N Hancock Street and terminate it at N Broadway.
- Remove the NE Hancock Street overcrossing of I-5 from N Williams Avenue to N Dixon Street as proposed in the Build Alternative. NE Hancock Street would be extended across I-5

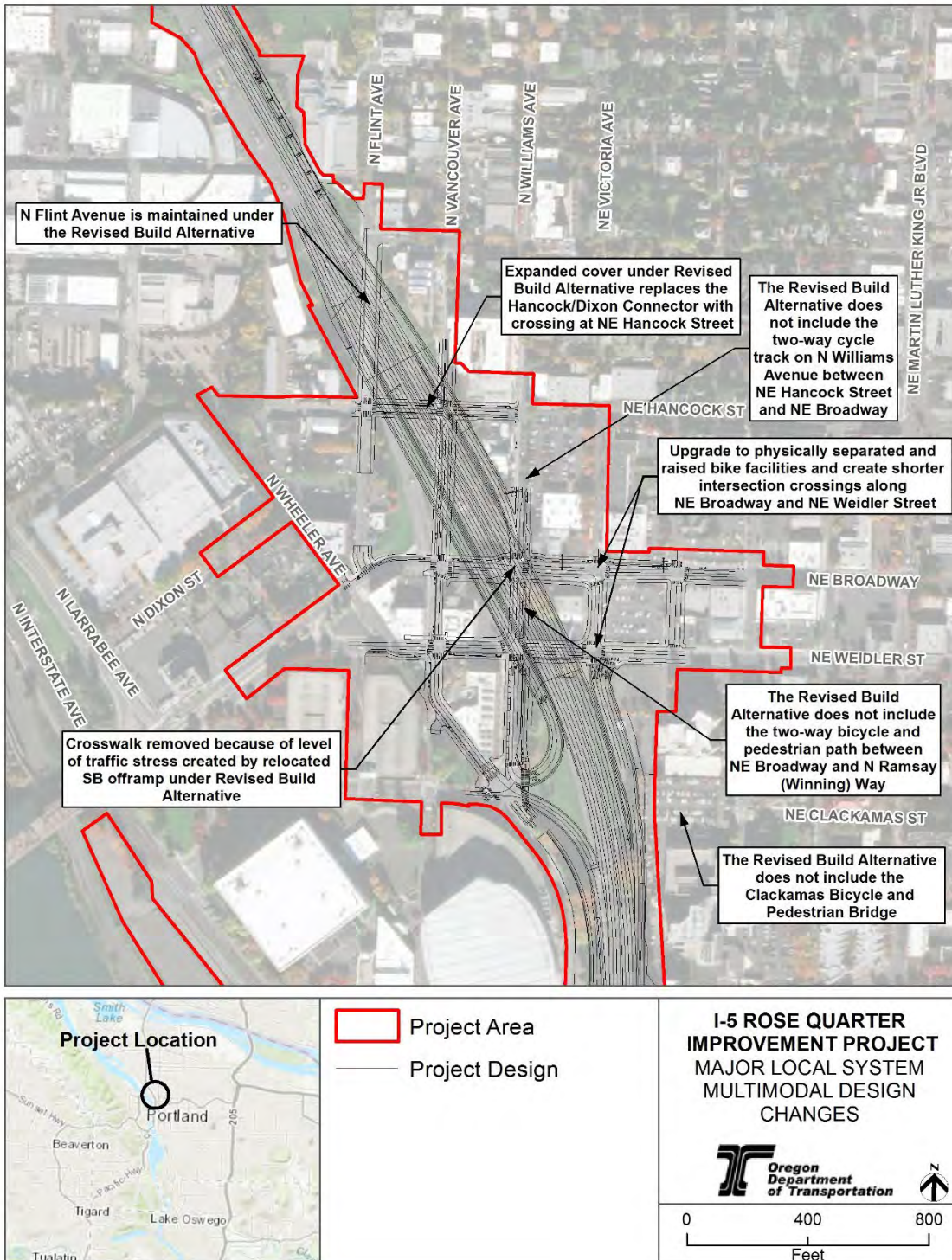
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and reconnect to NE Hancock Street west of N Flint Avenue as part of the expanded highway cover.

- Remove the two-way cycle track on N Williams Avenue between NE Hancock Street and NE Broadway and a two-way bicycle and pedestrian path between NE Broadway and N Ramsay Way from the design and instead convert the on-road bike lane to a protected bike lane, with a transition to the existing on-road bike lane south at or near NE Hancock Street.
- Close the crosswalk across NE Broadway on the west side of N Williams Avenue and the crosswalk across N Williams north of N Weidler Street.



Figure 4 Major Local System Multimodal Design Changes



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## 3.0 REGULATORY FRAMEWORK

The regulatory framework is the same as described in the 2019 Socioeconomics Technical Report.

## 4.0 METHODOLOGY AND DATA SOURCES

The methodology used to assess socioeconomic impacts is the same as described in the 2019 Socioeconomics Technical Report. The data sources<sup>1</sup> used to update information on the affected environment in this Supplemental Technical Report are the same as described in 2019 Socioeconomics Technical Report.

### 4.1 AREA OF POTENTIAL IMPACT

The Area of Potential Impact (API) is the same as the Project Area shown in Figure 2. As in the 2019 Socioeconomics Technical Report, indirect economic and employment impacts (beneficial and adverse) were considered across the Portland-Vancouver-Hillsboro Metropolitan Statistical Area (MSA)<sup>2</sup>. The neighborhoods and communities are the same as analyzed in the 2019 Socioeconomics Technical Report, even though there are slight differences in the API.

### 4.2 RESOURCE IDENTIFICATION AND EVALUATION

Adopted plans, policies, and reports applicable to the API were reported as data sources in the 2019 Socioeconomics Technical Report. Most of the data sources have remained the same as reported in the 2019 Socioeconomics Technical Report. Updates to data sources that were evaluated in the 2019 Socioeconomics Technical Report include the Oregon Freight Plan (ODOT 2017), Urban Growth Management Functional Plan (Metro 2018), and the Metro Regional Industrial Site Readiness Inventory 2017 Update (Metro 2017). There are no changes in these document updates that affect the evaluation of the Revised Build Alternative. Updated U.S. Census Bureau American Community Survey (ACS) 5-year estimates (2015-2020) were used to evaluate more current social environment conditions as compared to the 2019 Socioeconomics Technical Report. U.S Department of Commerce Bureau of Economic Analysis (BEA) 2020 gross domestic product and personal income data for the Portland-Vancouver-Hillsboro MSA and

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<sup>1</sup> Data sources include updated 2020 5-year ACS data, U.S Department of Commerce Bureau of Economic Analysis (BEA) 2020 gross domestic product and personal income data, and employment data obtained from the Oregon Employment Department (OED).

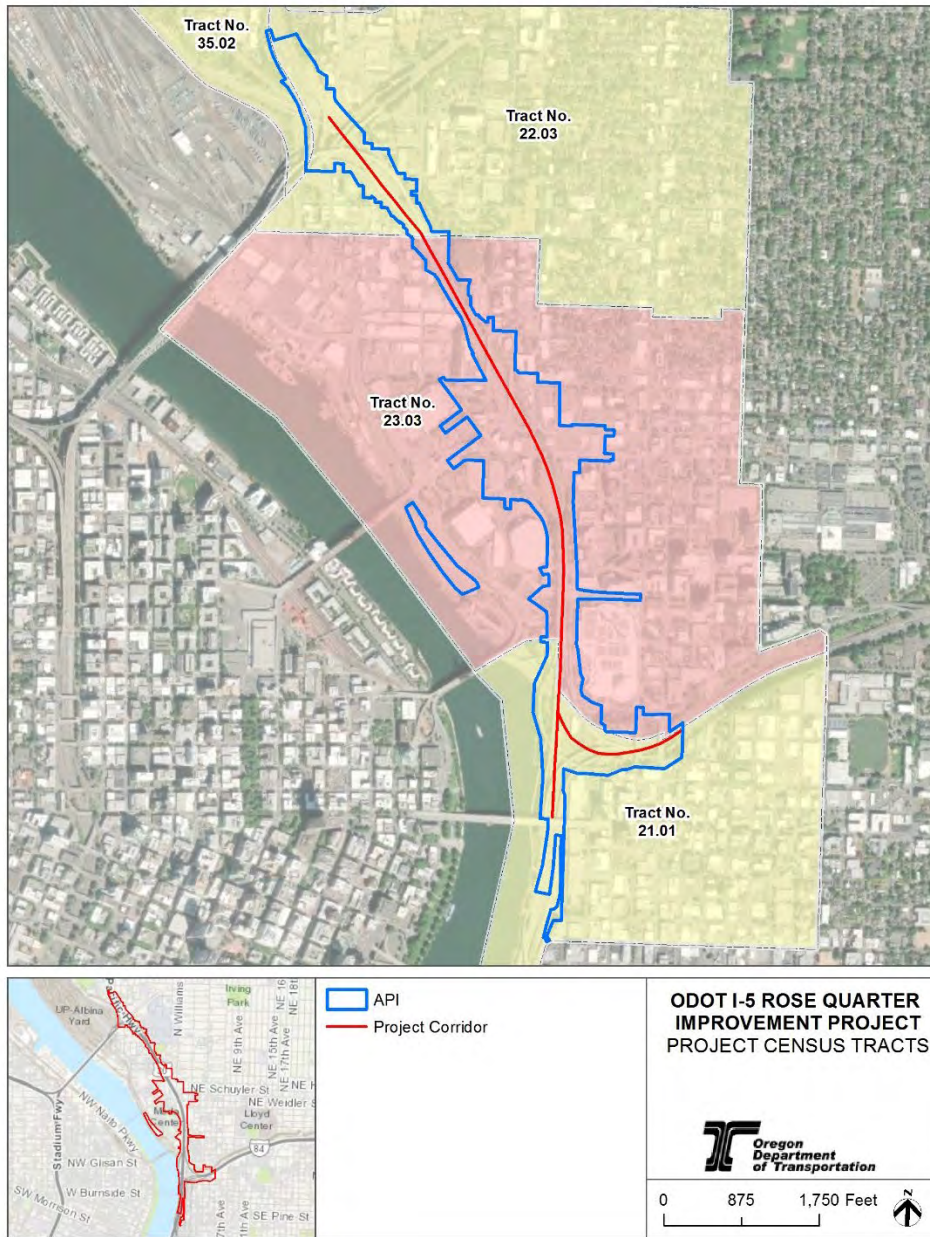
<sup>2</sup> The Portland-Vancouver-Hillsboro MSA is defined by the US Office of Management and Budget and used by the Census Bureau. It includes the large jurisdictions of Multnomah, Clackamas, and Washington Counties in Oregon and Clark County in Washington, as well as the smaller jurisdictions of Columbia and Yamhill counties, Oregon and Skamania County, Washington.



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State of Oregon were also reviewed for potential changes to the local and regional economy compared to what was reported in the Affected Environment section of the 2019 Socioeconomics Technical Report. Updated employment data from the Oregon Employment Department (OED) was obtained and included in this technical report. The API is within Census Tract 23.03, and the portions of the API that extend north and south of the API include only ODOT ROW. Like the 2019 Socioeconomics Technical Report, data from Census Tract 23.03 are considered representative of the demographic characteristics within the API. Figure 5 shows Census Tract 23.03 and surrounding census tracts.

Figure 5 Project Census Tracts



### 4.3 ASSESSMENT OF IMPACTS

The effects of the Revised Build Alternative on the social environment were analyzed using the same method as described in the 2019 Socioeconomics Technical Report and compared to the Build and No-Build Alternatives. Impacts to public services including fire, police, schools, religious institutions, business activity, and social services, were evaluated based on updated design features under the Revised Build Alternative that have potential to impact the physical

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location or operation of those services. Property Values and Tax Revenue are qualitatively assessed in the Long Term and Operational Impacts section (6.2.1) of this report because specific property impacts could not be determined until final design, and market conditions and business activity may change before acquisition occurs.

## 5.0 AFFECTED ENVIRONMENT

Section 5 describes the updated social environment, including population characteristics, neighborhoods, education, public services, economy, and employment.

### 5.1 POPULATION CHARACTERISTICS

This section describes updated population characteristics within the API, including demographics, education, and income, housing and households, and transportation.

#### 5.1.1 Demographics

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Census Bureau 2016-2020 American Community Survey (ACS) 5-year estimates (referred to herein as “2020”) characterize the affected demographic environment and are compared to the ACS 2011-2015 demographics data (referred to herein as “2015”) reported in 2019 Socioeconomics Technical Report. Table 1 presents a summary of population, gender, and age data for the API (i.e., Census tract 23.03<sup>3</sup>) and the Portland-Vancouver-Hillsboro MSA, as a regional point of comparison for characteristics of the Project Area. The population in the API increased 78.8% from 2015 to 2020 while the MSA increased 6.6% during the same timeframe. The population in the API over the age of 65, and under the age of 5 declined between 2015 and 2020, while the percentage of people of working age (21 to 64) increased.

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<sup>3</sup> The API is within Census Tract 23.03, and the portions of the API that extend north and south of the API include only ODOT ROW, data from that tract are considered representative of the demographic characteristics within the API.

Table 1 Population: Gender and Age

POPULATION CHARACTERISTICS	API 2015 POPULATION/ PERCENTAGE	API 2020 POPULATION/ PERCENTAGE	DIFFERENCE API POPULATION/ PERCENTAGE	MSA 2015 POPULATION/ PERCENTAGE	MSA 2020 POPULATION/ PERCENTAGE	DIFFERENCE MSA POPULATION/ PERCENTAGE
Total Population	2,099	3,752	1,653	2,320,323	2,472,774	152,451
Total Female	1,112 / 53.0%	1,680 / 44.8%	568 / 8.2%	1,174,362 / 50.6%	1,248,347 / 50.5%	73,985 / 0.1%
Total Male	987 / 47.0%	2,072 / 55.2%	1,085 / 8.2%	1,145,961 / 49.4%	1,224,427 / 49.5%	78,466 / 0.1%
Age under 5	56 / 2.7%	42 / 1.1%	-14 / -1.6%	142,276 / 6.1%	138,733 / 5.6%	-3,543 / -0.5%
Age 5 to 20	102 / 4.9%	108 / 2.9%	6 / -2.0%	467,664 / 20.2%	442,699 / 17.9%	24,965 / 2.2%
Age 21 to 64	1,520 / 72.4%	3,037 / 80.9%	1,517 / 8.5%	1,414,629 / 61.0%	1,523,022 / 61.6%	108,393 / 0.6%
Age 65 and over	421 / 20.1%	525 / 14.0%	104 / -6.1%	295,754 / 12.7%	368,320 / 14.9%	72,566 / 1.8%

Source: US Census 2021

Table 2 presents racial characteristics of people living in the API and MSA. The percentages of Hispanic/Latino, White, and Two or More Races increased in the API between 2015 and 2020. During the same time, the percentage of Black/African American, American Indian/Alaskan Native, Some Other Race Alone, and Asian residents decreased. Racial proportions in the MSA are generally consistent from 2015 to 2020, exhibiting changes of 1% or less between the racial categories with the exception of White (3.2% increase) and Two or More Races (2.0% increase).

Table 2 Population: Hispanic/Latino and Race

POPULATION CHARACTERISTICS	API 2015 POPULATION/ PERCENTAGE	API 2020 POPULATION/ PERCENTAGE	DIFFERENCE API POPULATION / PERCENTAGE	MSA 2015 POPULATION/ PERCENTAGE	MSA 2020 POPULATION/ PERCENTAGE	DIFFERENCE MSA POPULATION / PERCENTAGE
Total Population	2,099	3,752	1,653	2,320,323	2,472,774	152,451
Not Hispanic/ Latino	2,011 / 95.8%	3,431 / 91.4%	1,420 / -4.4%	2,057,476 / 88.7%	2,171,611/ 87.8%	114,135 / -0.9%
Hispanic/ Latino	88 / 4.2%	321 / 8.6%	233 / 4.4%	262,847 / 11.3%	301,163 / 12.2%	38,316 / 0.9%
White	1,459 / 71.9%	3,018 / 80.4%	1,559 / 8.5%	1,901,910 / 82.0%	1,960,674 / 79.3%	58,764/ -3.2%
Black/African American	270 / 12.9%	185 / 4.9%	-85 / -8.0%	65,734 / 2.8%	70,604/ 2.9%	4,870 / 0.1%
American Indian/Alaskan Native	8 / 0.4%	11 / 0.3%	3 / -0.1%	18,056 / 0.8%	17,943/ 0.7%	-113 / -0.1%
Asian	121 / 5.8%	197 / 5.3%	76/ -0.5%	141,079 / 6.1%	170,953/ 6.9%	29,874 / 0.8%
Native Hawaiian/Pacific Islander	0 / 0%	17 / 0.5%	17 / 0.5%	12,282 / 0.5%	12,716 / 0.5%	434 / 0.0%
Some Other Race	29 / 1.4%	43 / 1.1%	14 / -0.3%	80,254 / 3.5%	81,428 / 3.3%	1,174 / -0.2%
Two or more races	162 / 7.7%	281 / 7.5%	119 / -0.2%	101,008 / 4.4%	158,456 / 6.4%	57,448 / 2.0%

Source: US Census 2021

### 5.1.2 Neighborhoods

Like the 2019 Socioeconomics Technical Report, the API is largely within the Eliot and Boise neighborhoods and includes part of or is adjacent to the Lloyd, Kerns, and Buckman neighborhoods.

### 5.1.3 Education

Over 97 percent of API residents have achieved at least a high school education, 11% higher than what was reported in the 2019 Socioeconomics Technical Report (86%) (U.S. Census Bureau 2020).

### 5.1.4 Income and Housing

Household income in the API and MSA is shown in Table 3. Median and mean household income rose sharply in both the API and MSA between 2015 and 2020. Median household

incomes increased over \$15,000 in the API and MSA from 2015 to 2020. Mean household incomes increased over \$25,000 in both the API and MSA during the same time period.

Table 3 Household Income and Poverty

HOUSEHOLD INCOME	API 2015	API 2020	API DIFFERENCE	MSA 2015	MSA 2020	MSA DIFFERENCE
Median Income	\$38,450	\$54,984	\$16,534	\$60,286	\$77,511	\$17,225
Mean Income	\$46,764	\$72,364	\$25,600	\$73,217	\$101,594	\$28,377

Source: US Census 2021

Table 4 exhibits housing units and occupancy figures for the API and MSA. The number of housing units increased in both the API and MSA from 2015 to 2020. The percentage of renters in the MSA decreased from 2015 to 2020, falling from 39.3 percent to 37.7 percent. The API has a much higher proportion of renters in comparison to the MSA and experienced an increase of renters between 2015 and 2020 (85.9 percent in 2015 and 89 percent in 2020).

Table 4 Housing Units and Occupancy

HOUSING UNIT TYPE	API 2015 / PERCENTAGE	API 2020 / PERCENTAGE	API DIFFERENCE / PERCENTAGE	MSA 2015 / PERCENTAGE	MSA 2020 / PERCENTAGE	MSA DIFFERENCE / PERCENTAGE
Total	1,279	2,335	1,056	886,763	957,977	71,214
Owner-occupied	180 / 14.1%	257 / 11.0%	77 / -3.1%	538,377 / 60.7%	596,820 / 62.3%	58,443 / 1.6%
Renter-occupied	1,099 / 85.9%	1,188 / 89.0%	89 / 3.1%	348,386 / 39.3%	361,157 / 37.7%	12,771 / -1.6%

Source: US Census 2021

### 5.1.5 Transportation

Table 5 presents methods of travel to work for workers in the API and MSA. The API has substantially lower percentages of workers that commute alone than the MSA overall and substantially higher percentages of workers who commute by public transportation, bicycle, and walking than the MSA. The Coronavirus Pandemic caused an increase in Work at Home commuters in both the API and MSA in 2020. Table 6 presents mean travel time to work for commuters in the API and MSA; travel times increased in the MSA but slightly decreased in the API between 2015 and 2020.

Table 5 Means of Travel to Work, Workers Age 16 and Older

MEANS OF TRAVEL TO WORK	API 2015	API 2020	API DIFFERENCE	MSA 2015	MSA 2020	MSA DIFFERENCE
Drove Alone	34.0%	40.4%	6.4%	70.5%	68.6%	-1.9%
Carpooled	5.2%	2.3%	-2.9%	9.8%	8.8%	-1.0%
Public transportation	19.7%	26.7%	7.0%	6.4%	5.8%	-0.8%
Bicycle	13.1%	10.0%	-3.1%	2.4%	2.0%	-0.4%
Walked	19.0%	10.1%	-8.9%	3.5%	3.3%	-0.2%
Motorcycle, taxicab, or other means	2.4%	1.7%	-0.7%	1.0%	1.2%	0.1%
Work at Home	6.7%	8.8%	2.1%	6.4%	10.4%	4.0%

Source: US Census 2021

Table 6 Travel Time to Work, Workers Age 16 and Older

TRAVEL TIME	API 2015	API 2020	API DIFFERENCE	MSA 2015	MSA 2020	MSA DIFFERENCE
Less than 10 minutes	18.0%	5.9%	-12.1%	11.1%	10.5%	-0.6%
10 to 14 minutes	1.2%	20.2%	18.8%	13.2%	12%	-1.2%
15 to 19 minutes	17.8%	14.6%	-3.2%	15.6%	14.9%	-0.7%
20 to 24 minutes	21.8%	27.9%	6.1%	15.8%	15.2%	-0.6%
25 to 29 minutes	2.6%	4.7%	2.1%	7.3%	7.6%	0.3%
30 to 34 minutes	7.9%	9.8%	2.1%	14.5%	14.7%	0.2%
35 to 44 minutes	4.2%	8.4%	4.2%	7.6%	8.2%	0.6%
45 to 59 minutes	9.7%	5.9%	-4.2%	8.2%	9.3%	1.1%
60 or more minutes	5.9%	2.5%	-3.4%	6.7%	7.6%	0.9%
Mean travel time to work (minutes)	23.4	22.3	-1.1	25.7	26.9	0.8

Source: US Census 2021



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## 5.2 PUBLIC SERVICES

Locations of public services within the API are the same as reported in 2019 Socioeconomics Technical Report.

## 5.3 ECONOMY

The most recent annual BEA gross domestic product and personal income data from 2020 was used to update economic affected environment conditions in this report. In 2020, the annual regional GDP for the Portland-Vancouver-Hillsboro MSA was approximately \$168.4 billion; the 2020 annual state GDP for Oregon was approximately \$249.6 billion (BEA 2021a). In 2016, the GDP for the MSA was \$164.5 billion and the GDP for Oregon was \$228.9 billion. Despite the Coronavirus Pandemic, which caused a spike in unemployment in the state and region, GDP increased in both the MSA and State over the four-year period.

Per capita income is often used as an indicator of the economic well-being of a region. Per capita personal income for Oregon grew from \$45,998 in 2016 to \$56,312 in 2020; a 5.7 percent annual increase. Between 2016 and 2020 the per capita personal income in the MSA grew from \$50,489 in 2016 to \$62,603 in 2020; a 5.9 percent annual increase (BEA 2021b).

The API exhibits the same urban economic characteristics as evaluated in the 2019 Socioeconomics Technical Report.

## 5.4 EMPLOYMENT

The estimated total employment in the MSA in 2020 was 1,544,000 employees, an increase of over 20,000 employees from the 1,520,613 employed in 2016 (OED 2021). The unemployment rate more than doubled from 3.8% in 2017 to 7.8% in 2020 (OED 2021). This sharp increase can be attributed to the Coronavirus Pandemic. The largest private employers were the same in 2020 as reported for 2016 in the 2019 Socioeconomics Technical Report.

## 5.5 BUSINESS ACTIVITY

The Coronavirus pandemic changed the affected environment for business activity due to alteration to operations of businesses and business closures within the API. The location of major business corridors and districts in the API are the same as reported in the 2019 Socioeconomics Technical Report.



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## 6.0 ENVIRONMENTAL CONSEQUENCES

### 6.1 NO-BUILD ALTERNATIVE

#### 6.1.1 Direct Impacts

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The No-Build Alternative would have the same direct and indirect impacts as described in the 2019 Socioeconomics Technical Report. The relocation of Harriet Tubman Middle School (located at 2231 N Flint Avenue, within the API), a reasonably foreseeable future action unrelated to project development, is an additional cumulative impact under the No-Build Alternative. There is a new temporary housing village with temporary structures on the south side of NE Weidler Street between the I-5 offramp on NE Victoria Avenue and NE 1<sup>st</sup> Avenue. Updates in plans and socioeconomic trends described in the Methodology and Affected Environment sections above are not anticipated to change the No-Build Alternative impacts.

#### 6.1.2 Indirect Impacts

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The No-Build Alternative would have the same indirect impacts as described in the 2019 Socioeconomics Technical Report.

### 6.2 REVISED BUILD ALTERNATIVE

#### 6.2.1 Direct Impacts

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The Revised Build Alternative would have socioeconomic impacts that are different from those disclosed in 2019 Socioeconomics Technical Report. This section describes the short term and long-term impacts under the Revised Build Alternative as compared to the Build and No-Build Alternatives.

##### Short Term Construction Impacts

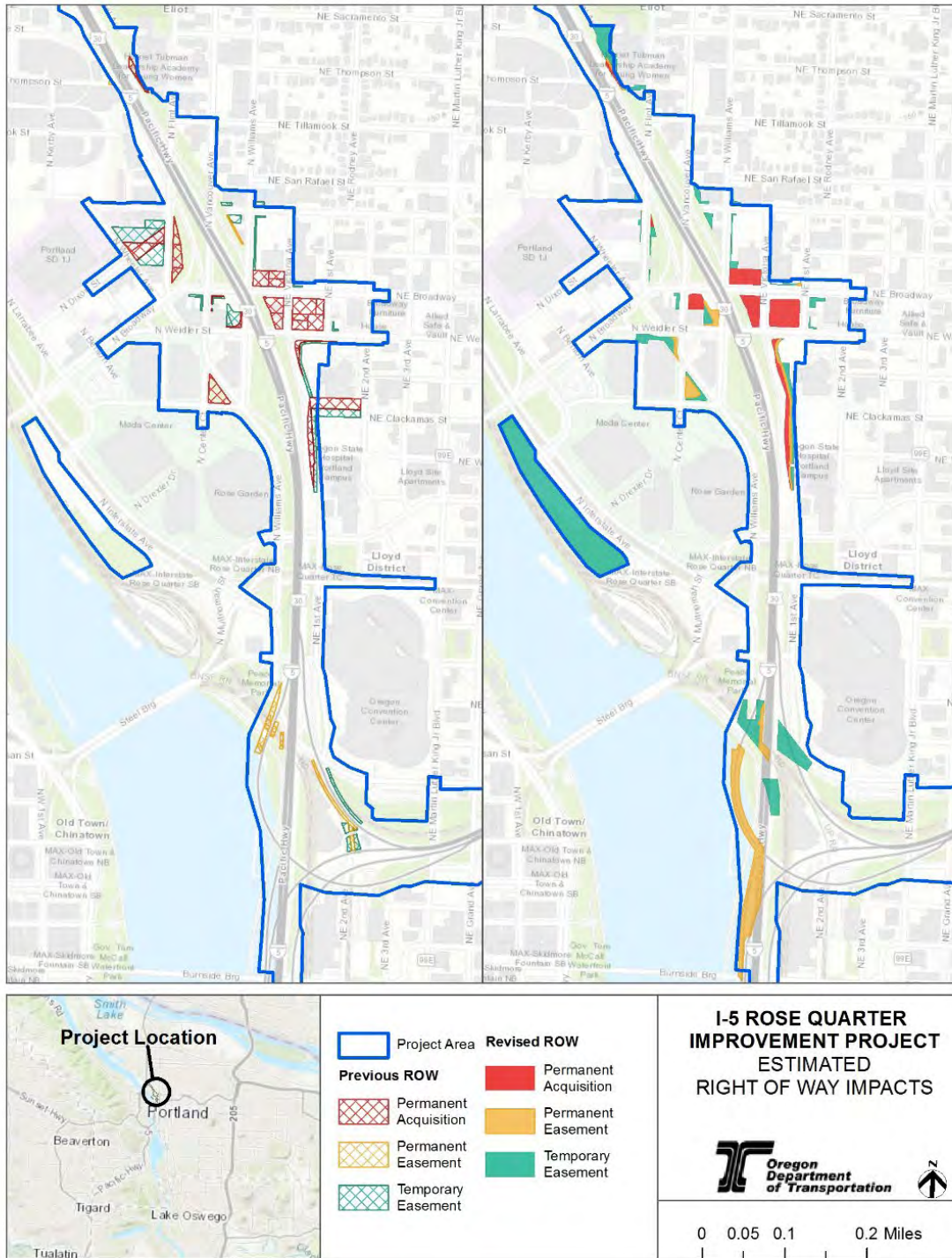
The Revised Build Alternative would pose adverse short-term effects on both the API and MSA during construction similar to the Build Alternative, including construction-related impacts (such as noise and utilities impacts), delays on I-5 and the local transportation system, diversion of traffic including transit and active transportation, and potential limitations of access to local land uses. These impacts have potential to disrupt social cohesion and have temporary adverse effects on neighborhoods, public services, and businesses within the API. Construction under the Revised Build Alternative would also come with the short-term benefits of construction employment and spending on procurement of construction materials and equipment from local vendors.

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The Revised Build Alternative has different right-of-way (ROW) impacts as compared to the Build Alternative. These differences are described in the 2022 ROW Supplemental Technical Report (Figure 6).

None of the new ROW impacts under the Revised Build Alternative would displace businesses or services that are key to local residents. The same construction standards and best management practices would be implemented during construction of the Revised Build Alternative as reported under the Build Alternative.

Figure 6 Estimated ROW Impacts



## Social Environment

In January 2020, the Oregon Transportation Commission directed the Oregon Department of Transportation to retain a consultant team that would conduct an independent assessment of the highway covers included in the I-5 Rose Quarter Improvement Project. Metro, Multnomah County, City of Portland, Portland Public Schools, and the Albina Vision Trust helped shape the formation of an independent highway cover scope of work and selection of the Independent Cover Assessment (ICA) consultant team. The ICA team worked directly with Black community members from historic Albina to understand how the highway cover design concepts could best serve the historic Albina community. The Project's Executive Steering Committee and the Historic Albina Advisory Board<sup>4</sup> also provided input into the Independent Highway Cover Assessment process.

The ICA concluded their work in July 2021. The findings of the ICA assessment formed the basis for recommendations made by the Historic Albina Advisory Board and the Executive Steering Committee to the Oregon Transportation Commission. In July and August 2021, the Governor also convened a series of meetings with Project stakeholders and community organizations to discuss the ICA's highway cover design concepts. The Historic Albina Advisory Board's, Executive Steering Committee's and ICA community workshop participant preferences and community priorities formed the basis for the Governor-led discussions. The Historic Albina Advisory Board, as supported by the Executive Steering Committee and the Community Oversight Advisory Committee, and the Governor-led convening recommended the Hybrid 3 (Revised Build Alternative) as the preferred highway cover design concept.

Direct impacts to the Social Environment under the Revised Build Alternative are different than the Build Alternative. As noted in Section 2.1, the development on the highway cover of the Revised Build Alternative would be determined through a Community Framework Agreement process that would be led by the City of Portland zoning and involve the participation of organizations that represent the Albina community and Black residents. The interim use of the expanded cover (i.e., until the results of the city-led process would be implemented), could provide an opportunity for new and modern bicycle facilities, making the area more connected, walkable and bike friendly. It could also provide opportunity for various potential types of public spaces, to be precisely determined during the Project's final design phase and through robust community engagement.

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<sup>4</sup> The Historic Albina Advisory Board (HAAB) was formed in December 2020 in response to feedback from project partners and the community, including the project's former Community Advisory Committee. The Board advises the I-5 Improvement Project on the needs and perspectives of the Black and historic Albina community.

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With the expanded highway cover, the Revised Build Alternative would reduce the physical and visual barrier I-5 presents to the surrounding urban area and provide space and opportunity for greater continuity of the surrounding urban forms when compared to the Build and No-Build Alternatives. The expanded cover with upgraded active transportation facilities provided by the Revised Build Alternative would enhance conditions for pedestrians and cyclists in the API (see the Active Transportation Supplemental Technical Report for additional information on active transportation connections). The Revised Build Alternative would continue to be consistent with applicable laws, plans, and policies (see the Land Use Supplemental Report for more information on land use compliance). Therefore, the Revised Build Alternative would not have a long-term direct effect on population, demographic, housing, or income in the API or the MSA.

## Public Services

Similar to the Build Alternative, the Revised Build Alternative would have a long-term beneficial effect on police, fire, and rescue services by reducing delays and crashes on I-5 compared to the No-Build Alternative. The expanded cover of the Revised Build Alternative would provide improved community connection to public services by providing better walking and biking conditions in the API compared to the Build and No-Build Alternatives. Updated design elements of the local street network under the Revised Build Alternative such as the new southbound offramp at N Williams Avenue and overcrossing connection on NE Hancock Street would alter emergency vehicle routing in the API local street network.

## Economy

Improvements to the I-5 and the Broadway/Weidler interchange areas under the Revised Build Alternative would benefit both regional and local transportation networks similar to the Build Alternative and would improve transportation networks compared to the No-Build Alternative. Like the Build Alternative, the Revised Build Alternative would be consistent with economic development goals for the API, the City of Portland, and the Portland region; it is consistent with adopted plans and policies, including the N/NE Quadrant Plan (part of the Central City 2035 Plan which is, in turn, part of the City's Comprehensive Plan), Metro's updated 2018 Urban Growth Management Functional Plan (Title V), and the 2017 Revised Oregon Freight Plan. Overall, long-term direct economic benefits under the Revised Build Alternative would be similar to benefits under the Build Alternative reported in the 2019 Socioeconomics Technical Report and improved compared to the No-Build Alternative. Like the Build Alternative, the Revised Build Alternative is consistent with the goals of adopted economic development plans and policies, and as such, would support economic development in the API.



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## Employment

The construction of the Revised Build Alternative would generate short-term construction employment throughout the duration of construction. The Revised Build Alternative would require a greater number of commercial or service-related business relocations (five) than the Build Alternative (four) which would reduce the number of jobs in the API under the Revised Build Alternative if displaced businesses cannot be relocated in the API. The exact amount of property acquisition for the Project would be determined during final design and would be subject to negotiations between ODOT and affected property owners.

## Business Activity

The two new potential business displacements under the Revised Build Alternative are a caterer in an event center and a plumbing distribution business. These impacts have potential to further disrupt social cohesion in combination with displacement of the gas station, paint store and real estate office<sup>5</sup> and may have ongoing adverse effects on businesses within the API. Displaced businesses can change character of the neighborhood/business community and disrupt the patterns of transit and active transportation commuters in the API. The displacement of the day care center identified as a part of the Build Alternative would not be required under the Revised Build Alternative.

ODOT has committed to contracting with Disadvantaged Business Enterprise (DBE) firms throughout construction of the Project as a part of a jobs creation program for DBE firms with a focus on creating construction jobs in Portland's Black community. The Project aims to ultimately deliver a revenue stream for participating companies as soon as construction begins, and then to build capacity within DBE firms to enable them to pursue future transportation construction work, creating long-term jobs and careers. The construction of the Project under the Revised Build Alternative would have beneficial impacts to business activity for DBE firms and the Black community within the API and region during construction.

## Property Values and Tax Revenue

The 2019 Socioeconomics Technical Report found a negligible difference in tax base resulting from impacts of the Build Alternative. According to the 2022 ROW Supplemental Technical Report, changes in ROW under the Revised Build are minor and would not change the conclusion of impacts to property values. See the 2022 ROW Supplemental Tech Report for details on ROW impacts.

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<sup>5</sup> The gas station, paint store and real estate office would be displaced under both the Build and Revised Build Alternatives.

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## 6.2.2 Indirect Impacts

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Long-term indirect effects of the Revised Build Alternative include improvements to safety and reductions in congestion and delays on I-5. These effects are similar to the Build Alternative and are improved as compared to the No-Build Alternative. Improved conditions on I-5 provide regional economic benefits to freight and travel. Improvements to pedestrian facilities and increased building capacity on the expanded cover under the Revised Build Alternative would provide suitable conditions for commercial and retail development in the new cover area, subject to the city-led Community Framework Agreement process.

## 6.3 CUMULATIVE EFFECTS

The cumulative socioeconomic impacts of the Revised Build Alternative would be the same as reported in the 2019 Socioeconomics Technical Report, except for the benefits of the Clackamas bicycle/pedestrian overcrossing to east-west connectivity under the Build Alternative. Despite the removal of the Clackamas overcrossing, community connectivity in the API would still be improved under the Revised Build Alternative compared to the No-Build due to the expanded cover and updated active transportation facilities.

Although the inclusion of four acres of new buildable land was not part of the Project when the City of Portland adopted the TSP and Central City 2035 Plan, supporting buildings of up to six stories is consistent with current zoning for most of the expanded cover area. The Revised Build Alternative does not include all bicycle and pedestrian facilities envisioned in the Facility Plan: I-5 Broadway/Weidler Interchange Improvements (ODOT 2012), but it provides expanded facilities within the Project Area. The Revised Build Alternative would be consistent with applicable laws, plans, and policies (see the Land Use Supplemental Report for more information on land use compliance).

## 6.4 CONCLUSION

The analysis from this report has shown that the Revised Build Alternative would:

- Benefit the regional economy and the movement of goods and people by reducing congestion and improving safety on I-5.
- Change construction and ROW impacts with additional impacts to some parcels and fewer impacts to others.
- Benefit short-term regional employment, especially for DBE firms and the Black community throughout the duration of construction.
- Benefit Public Services such as police, fire, and rescue services by reducing delays and crashes on I-5.

- Reduce the physical and visual barrier I-5 presents to the surrounding urban area and provide open space and opportunities for greater continuity of the surrounding urban forms.
- Expand the highway cover, increase building capacity on the cover, and provide updated active transportation facilities which would improve the overall community cohesion in the new cover area.

## 7.0 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

Mitigation measures would be the same as reported in the 2019 Socioeconomics Technical Report.

## 8.0 PREPARERS

NAME	DISCIPLINE	EDUCATION	YEARS OF EXPERIENCE
Garrett Augustyn	Planner	M.S.	2





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