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TECHNICAL MEMORANDUM

March 8, 2024 Project# 25837.009

To: Hope Pollard, Associate Planner; City of Tigard

From: Nick Gross, Erika Adams, Susan Wright, PE, PMP

RE: Washington Square Regional Center
Multimodal Gap Summary & Highway Impact Summary DRAFT

Washington Square Regional Center

The City of Tigard is proposing zone change and text amendments to the City Comprehensive Plan (Reference 1) as part of the Maintain, Advance, Diversity, and Employment (MADE) Project. Several proposed zone changes are located within the Washington Square Regional Center (WSRC) – a Metro Region 2040 Center. Metro Region 2040 Centers. The City is also proposing a boundary amendment to the WSRC. These proposed changes are triggering the need to conduct a Multimodal Transportation Gap Summary and Highway Impact Summary according to Oregon Administrative Rule (OAR) 660-012-0325 which applies to Climate-Friendly Areas (CFAs) and Metro Region 2040 Centers.

MULTIMODAL TRANSPORTATION GAP SUMMARY

According to the latest round of draft amendments to Chapter 660 – Division 12 Transportation Planning documented as part of the Climate-Friendly and Equitable Communities Corrections & Clarifications Rulemaking, Rulemaking Advisory Committee Meeting 4, Cities and counties considering amendments to comprehensive plans or land use regulations to adopt or expand a climate-friendly area as provided in OAR 660-012-0310 through OAR 660-012-0320, or a Metro Region 2040 Center, must make findings as provided in OAR 660-012-0325, including:

> (a) A multimodal transportation gap study as provided in section (4); and
>
> (b) The multimodal transportation gap study must include a highway impacts summary as provided in section (5) if the designated climate-friendly area as provided in OAR 660-012-0315 or Region 2040 center contains a ramp terminal intersection, state highway, interstate highway, or adopted ODOT Facility Plan."

The Multimodal Transportation Gap Summary summarizes the existing facility gaps for the automobile, truck/freight, pedestrian, bicycle, Americans with Disability (ADA), and transit networks.

This Highway Impact Summary is intended to address the potential effects on ODOT facilities within the Metro Regional Center or nearby that may occur from proposed changes to the current Project area.

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Study Area

Proposed changes to an existing Metro Region 2040 Center are subject to transportation review per OAR 660-012-0325. The existing WSRC is partially located in the City of Beaverton, the City of Tigard and Unincorporated Washington County. The existing boundary follows Fanno Creek to the west, Beaverton Tigard Highway (OR 217) on the southwest, Redtail Golf Course to the northeast, and OR 141 to the east.

Proposed zone changes are located throughout the WSRC including along the Portland and Western Railroad corridor to the southwest, Ash Creek and Beaverton Tigard Highway (OR 217) to the south, and past SW Hall Boulevard to the southeast.

The primary boundary adjustments occur in the southwest and southeast areas of the WSRC. In these locations, the proposed boundary is expanded. Smaller boundary expansions are also proposed along SW Hall Boulevard. Figure 1 illustrates the study area including the existing and proposed WSRC boundary.

EXISTING ZONING[1]

Existing designations for zoning located within the WSRC, and the following definitions are based on the City of Tigard Comprehensive Plan.

- Professional Commercial (C-P)
  - These areas are deemed appropriate for business and professional offices and related uses.
- Mixed Use Employment 1 (MUE-1) and Mixed Use Employment 2 (MUE-2)
  - These areas are intended to accommodate development concepts characterized by retail, office, and commercial services use, with business park and research facilities. High-density residential development will be encouraged.
- Mixed Use Commercial (MUC)
  - These areas are intended to accommodate high-density office buildings, retail, and service uses, as well as mixed use developments and medium high and high-density (25 to 50 units to the net acre) residential uses. Larger buildings with parking under, behind, or alongside the structures will be encouraged.
- Mixed Use Residential 1 (MUR-1) and Mixed Use Residential 2 (MUR-2)
  - The MUR-1 and MUR-2 zones are designed to apply to predominantly residential areas where mixed-uses are allowed when compatible with the residential use. These areas are intended to accommodate mixed uses with medium high and high-density residential development. Limited commercial and retail services that provide benefits and amenities to the residents are allowed. These areas should have a high degree of pedestrian amenities, recreation opportunities, and access to transit.

[1] Residential zoning is not included

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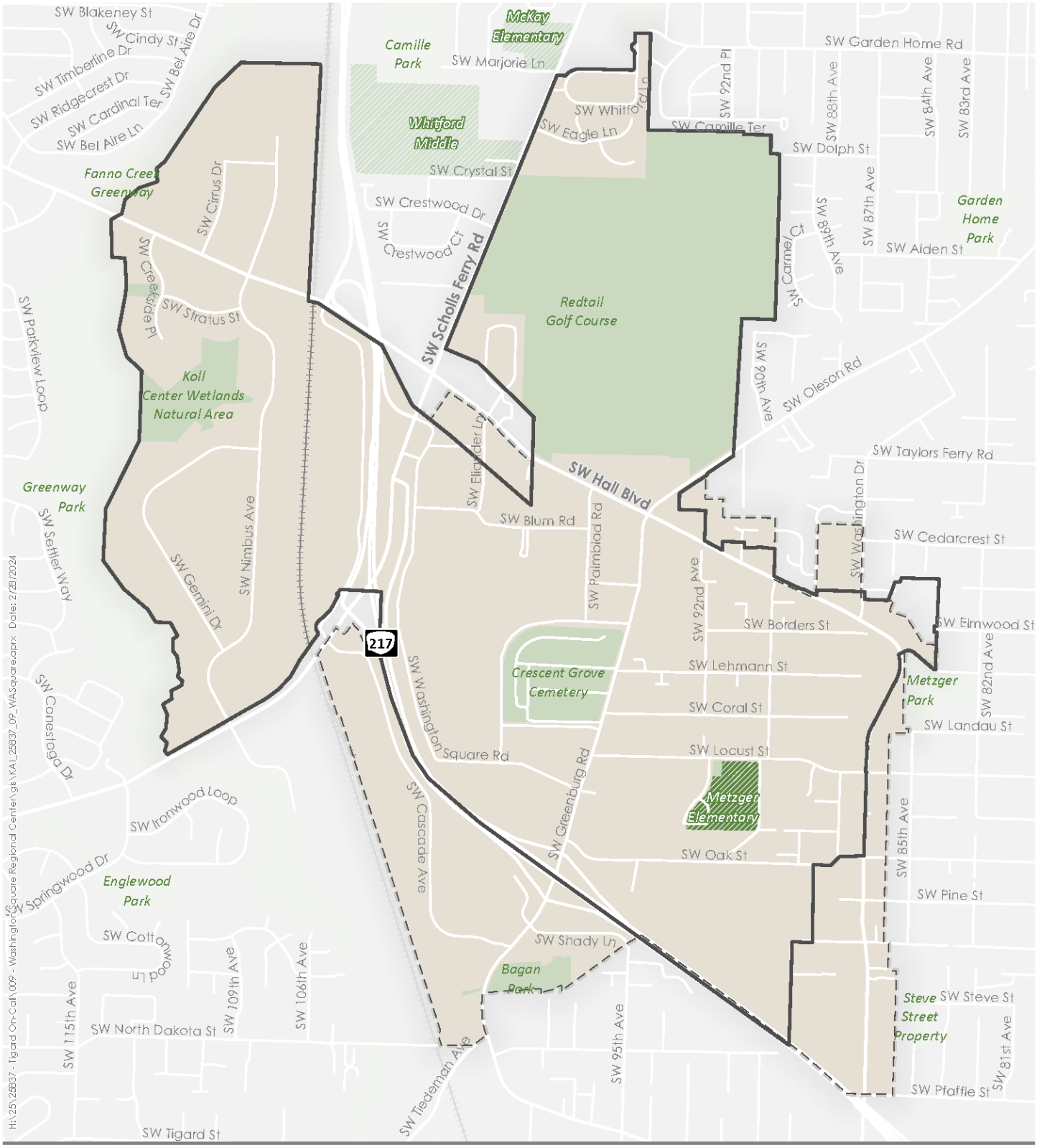

Existing WSRC Boundary

Proposed WSRC Boundary

School Grounds

Parks

0 0.25 Miles

Figure 1

Study Area
Existing and Proposed WSRC
Tigard, Oregon

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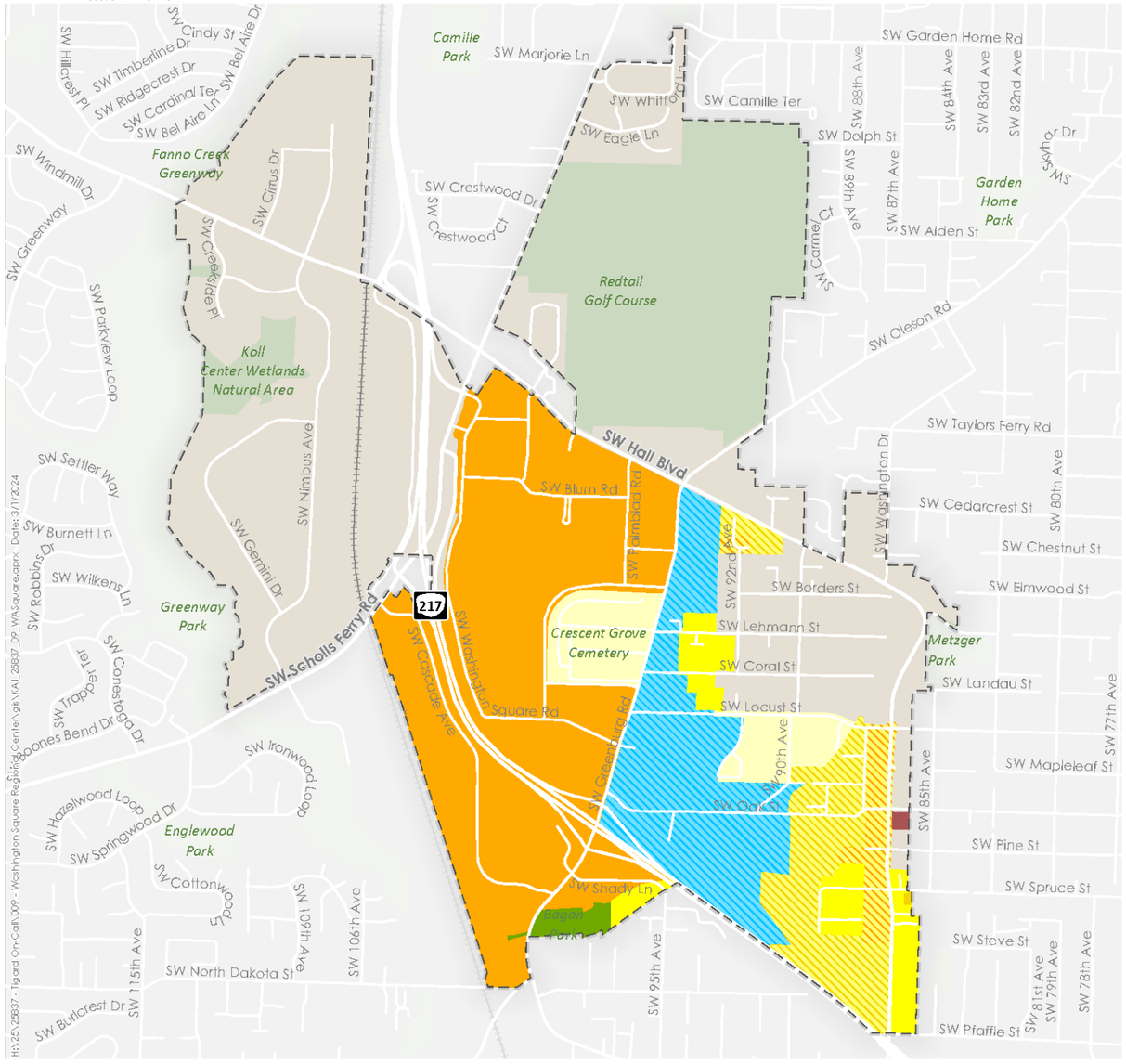

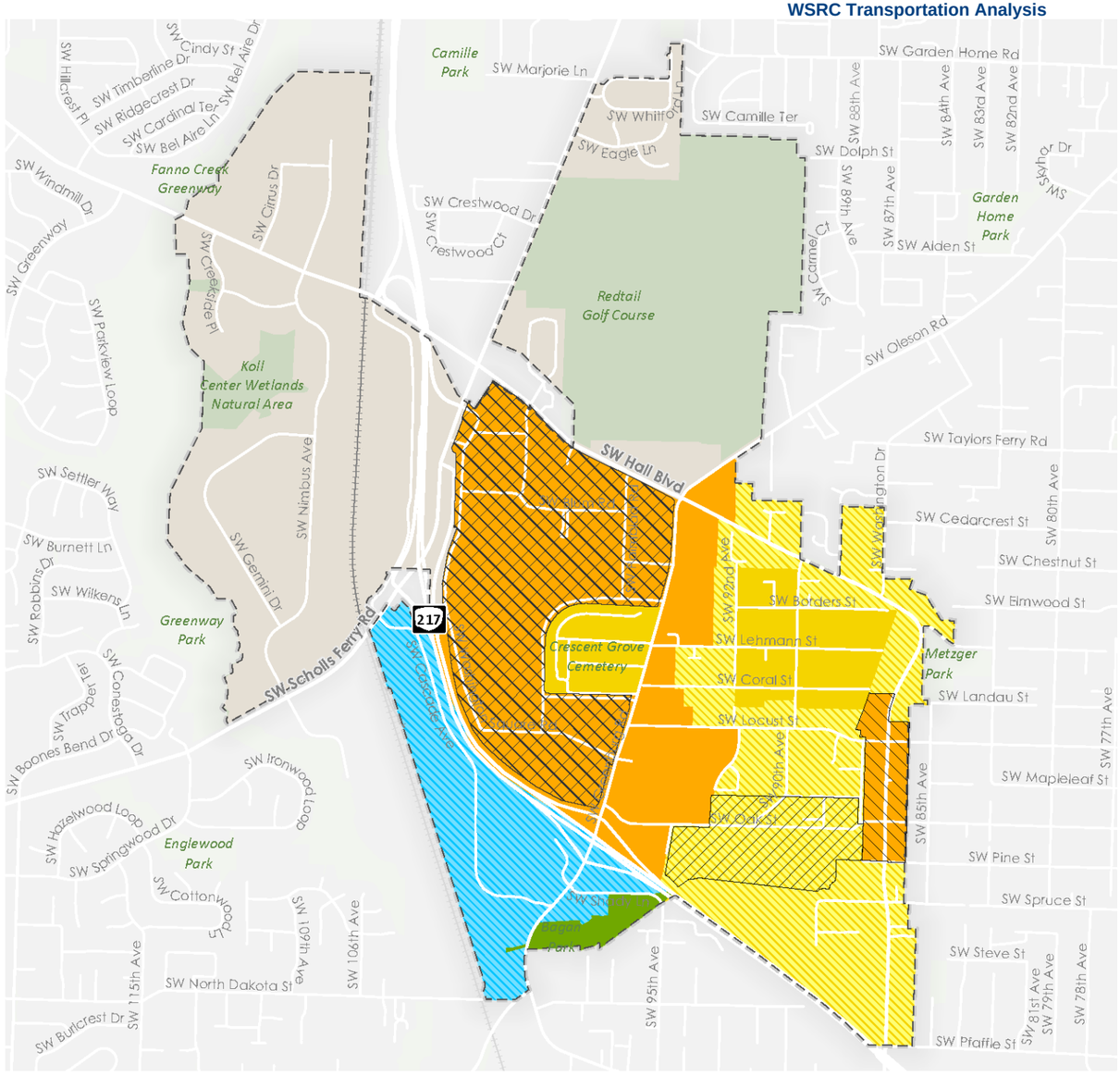

Existing Zoning

- Professional Commercial
- Residential-B
- Residential-D
- Residential-E
- Mixed-Use Commercial
- Mixed-Use Employment 1
- Mixed-Use Residential 1
- Mixed-Use Residential 2
- Parks-Recreation
- Washington Square Analysis Center
- Parks
- Water

Planned Zoning

- Residential
- Mixed-Use Commercial; MU-CBD
- Mixed-Use Employment
- Mixed-Use Residential
- Parks-Recreation

Subdistricts

- Apartment
- Design Review
- Metzger Main Street

0 0.25 0.5 Miles

Figure 2

Zoning
Tigard, Oregon

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PROPOSED ZONING

Proposed zoning designations located within the WSRC, and the following definitions are based on the City of Tigard code amendments:

- Mixed Use Commercial (MUC)
  - The MUC zone is a consolidation and overhaul of the two current MUC zones intended to allow a wide range of commercial and residential activity as standalone or mixed-use development.
- Mixed-Use Residential (MUR)
  - The MUR zone is a consolidation and overhaul of the two current MUR zones where predominantly residential uses are allowed along with mixed-uses that are directly supportive of the residential use.
- Mixed Use Employment (MUE)
  - The MUE zone is a consolidation of all three current MUE zones into a single zone intended to allow the broadest range of low impact uses to locate near each other including residential, commercial, and some industrial and manufacturing uses.

In addition to the above base zones, parts of the plan district will also be contained within subdistricts, as follows:

- Design Review Subdistrict
  - Development in the Design Review Subdistrict is subject only to the use standards and height standards provided in this chapter. Development in this subdistrict is evaluated using the discretionary criteria provided in the new Chapter 18.725, Development Design Reviews, in the place of other standards.
- Apartment Subdistrict
  - Development in the Apartment Subdistrict is subject to the use and development standards of the MUR base zone, with the exceptions of housing types and building height. The only housing type allowed in the apartment subdistrict are apartments and development is required to be at least three stories tall.
- Metzger Business Subdistrict
  - Development in the Metzger Business Subdistrict is subject to the use and development standards of the MUC base zone, except for building height and residential uses. Development in this subdistrict is intended to be smaller in scale than development in the MUC zone outside the subdistrict and residential is only allowed as part of a mixed-use building.

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Planned Transportation Improvements

There are several planned transportation improvements facilities and investments within the study area that support vehicular capacity improvements, mode shift from single occupancy vehicles (SOV) to active transportation modes, and safety improvements. These improvement projects are documented in the plans and projects summarized below with additional detail described in Appendix A.

- City of Tigard Transportation System Plan 2022
- City of Tigard Safety Action Plan 2019
- TriMet Pedestrian Plan 2020
- Washington County Transportation System Plan 2019
- Statewide Transportation Improvement Plan 2021-2024
- Metro Regional Transportation Plan 2023

Existing Transportation Network

The following sections describe specific modal infrastructure for automobile, pedestrian, bicycle, and transit networks, and identifies gaps in those networks. These summaries rely on information published in the City of Tigard 2020 Transportation System Plan, ODOT's TransGIS website, and Metro Regional Land Information System (RLIS) Discovery website.

AUTOMOBILE NETWORK

The Project area is generally bounded by OR 217 and Fanno Creek to the west, OR 217 to the south, OR 141 (SW Hall Boulevard/Beaverton-Tualatin Highway) to the east and SW Greenburg Road running through the center.

State Facilities

OR141 (SW Hall Boulevard/Beaverton-Tualatin Highway)

OR141 (SW Hall Boulevard/Beaverton-Tualatin Highway) is a 2-lane Urban Minor Arterial with paved shoulders and a posted speed of 40 mph between OR 217 (MP 2.7) and Beaverton City limits (MP 3.4) and 30 mph from Tigard City limits (MP 3.4) to Oak Street (MP 4.25). Two-way left turn (TWLT) lanes and dedicated left-turn lanes are located intermittently.

According to ODOT's TransGIS, the AADT on OR141 within the Project area, near TriMet WES Commuter Rail At-Grade Crossing (MP 2.57) to SW Greenburg Road (MP 3.31), is approximately 24,861 with a range of 20,001 to 30,000. OR 141 AADT from SW Greenburg Road (MP 3.31) to SW Washington Drive (MP 3.33) is approximately 13,708 with a range of 10,001 to 15,000. OR 141 AADT from SW Washington Drive (MP 3.33) to SW Oak Street (MP 4.25) is approximately 10,489 with a range of 10,001 to 15,000. OR 141 AADT from SW Oak Street (MP 4.25) to OR 217 (MP 4.69) is approximately 12,296 with a range of 10,001 to 15,000.

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OR217 (Beaverton Tigard Highway)

OR 217 (Beaverton Tigard Highway) is a 4-lane Urban Other Freeway with a posted speed of 55 mph within the WSRC. (OR 141 MP 3.81 to MP 5.64). Shoulders are provided along OR 217 within the WSRC.

According to ODOT's TransGIS the Average Annual Daily Traffic (AADT) within the WSRC on OR 217, from the OR141/OR217 interchange (MP 3.82) to the OR217/OR210 interchange (MP 4.27) is approximately 90,690. OR 217 from the OR 217/OR 210 interchange (MP 4.27) to SW Greenburg Road (MP 4.95) has an AADT of 103,779. OR 217 from SW Greenburg Road (MP 4.95) to the OR 217/ 99W interchange (MP 5.9) has an AADT of 107,364.

OR 210 (Scholls Ferry Road)

OR 210 (Scholls Ferry Road) is a 4-lane Urban Minor Arterial with a posted speed of 35 mph within the Project area. SW Scholls Ferry Road is considered an ODOT facility before SW Cascade Avenue (MP 9.03) to OR 141 (MP 9.6). Sidewalks and bike lanes are available on both sides from MP 9.03 to 9.13. Sidewalk and bike lanes are provided on the east side of the road from MP 9.32 to OR 141 (MP 9.6).

Interchanges

All OR 141/OR 217 ramp terminals, OR 217/OR 210 northbound and southbound ramp terminals and OR217/ SW Greenburg Road northbound and southbound ramp terminals are located in the WSRC boundary. The OR 217/99W terminal is located within 100 feet east of the WSRC boundary.

Primary Local Jurisdiction Streets

The primary local jurisdiction streets within the WSRC are Greenburg Road, Olsen Road, Blume Road, Oak Street, Locust Street, Cascade Avenue, Lincoln Street, and Nimbus . A summary of the roadway characteristics including functional classification, number of lanes, posted speed and on-street parking for the primary local streets is summarized in Table 1.

Table 1: Primary Local Jurisdiction Street Characteristics

Roadway	Jurisdiction	Functional Classification	Number of Travel Lanes	Posted Speed (MPH)	On-Street Parking
SW Greenburg Road	Washinton County	Arterial	2	35	No
SW Oleson Road	Washington County	Arterial	2	35	No
SW Blume Road	Tigard	Collector	2	15	No
SW Oak Street	Tigard	Collector	2	25	No
SW Locust Street	Tigard	Collector	2	30	Partial
SW Cascade Avenue	Tigard	Collector	2	30	No

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SW Lincoln Street	Tigard	Collector	2	N/A	No
SW Nimbus Avenue	Beaverton	Collector	2	35	No

Truck/Freight Network

OR 217 is classified as a freight route in the Oregon Highway Plan (OHP) and is part of the National Freight network. OR 217 within the WSRC is identified as a Reduction Review (ORS 366.215) Route; however, it is not identified as a High Clearance Route. OR 217 is a Critical Urban Freight Corridor.

Trucks compose approximately 3.7 percent of traffic on OR 217 within the WSRC. None of the local streets within the WSRC are part of the National or OHP freight network.

PEDESTRAIN NETWORK AND NETWORK GAPS

The City of Tigard's TSP documents the pedestrian network and network gaps within the WSRC. For areas within the WSRC but outside of the City of Tigard city limits, Metro's RLIS data was used to populate the pedestrian network facilities and gaps.

Figure 3 illustrates the existing pedestrian network for the WSRC.

Within the WSRC, there are streets with complete sidewalks on both sides, one side, and streets with no complete sidewalks. WSRC also contains a connection to Fanno Creek Trail from SW Creekside Place off of SW Nimbus Avenue within the City of Beaverton's portion of the WSRC.

The presence of sidewalks along SW Hall Boulevard vary throughout the WSRC. Sidewalks are curb time and also set back from the curb with street trees or landscaping.

SW Hall Boulevard has sections with sidewalk on both sides and a majority of sections with a sidewalk on only one side, and there are sections that have no sidewalk on either side. A large section of no sidewalks exist on SW Hall Boulevard from SW Oak Street to SW Spruce Street. Other smaller gaps exist along SW Hall Boulevard.

Larger portions of SW Washington Square Road, SW Oak Street,and SW Cascade Avenue, and other neighborhood routes do not provide sidewalks. Most of these streets are located in residential areas to the southeast of the WSRC.

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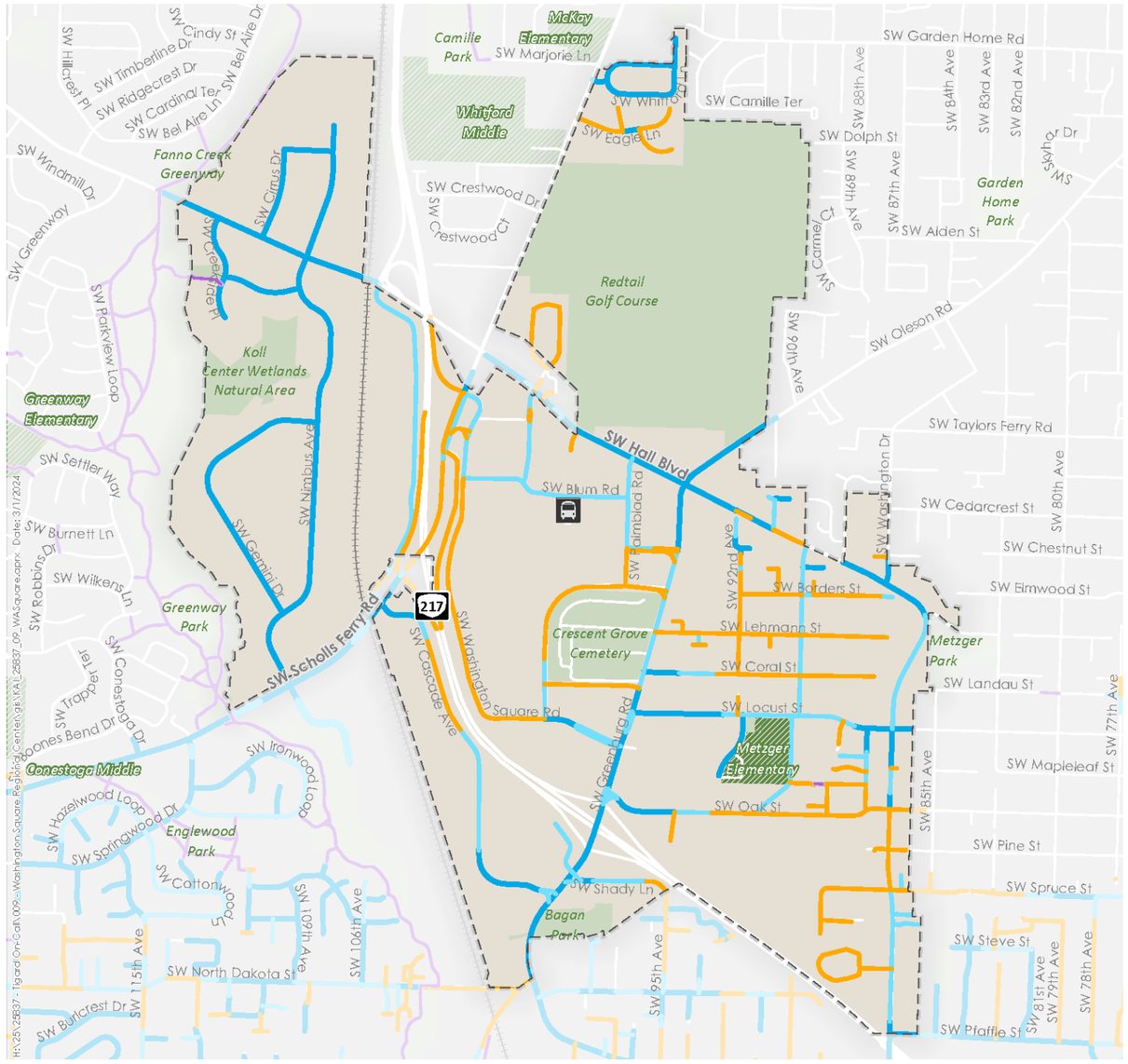

Existing Pedestrian Network

- Existing Sidewalk on Both Sides
- Existing Sidewalk on One Side
- No Existing Sidewalks
- Existing Trails
- Transit Center
- School Grounds
- Parks
- Washington Square Analysis Center

Planned Pedestrian Network

- Planned Pedestrian Corridor
- Planned Neighborhood Greenway
- Planned Trail
- Proposed Active Transportation Connection

0 0.25 0.5 Miles

Figure 3

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Pedestrian Facilities
Tigard, Oregon

BICYCLE NETWORK AND NETWORK GAPS

The City of Tigard's TSP documents the bicycle network and network gaps within the WSRC. For areas within the WSRC but outside of the City of Tigard city limits, Metro's RLIS data was used to populate the bicycle network facilities and gaps.

Figure 4 illustrates the existing bicycle and planned bicycle network for the WSRC.

On-street bicycle lanes are located on SW Hall Boulevard, a small portion of SW Scholls Ferry Road near SW Hall Boulevard and SW Greenburg Road near Bagan Park and from SW Washington Square Road and the bridge over OR 217.

For the remaining street network within the study area, bicyclists must share the roadway with vehicles. SW Nimbus Avenue and SW Cascade Avenue have shared lanes but are also considered high traffic streets. SW Oak Street, SW Locust Street and SW Washington Square Road have shared lanes but are considered moderate traffic streets. There are three spans of roadways that are considered difficult connections, two are along SW Greenburg Road and one is along SW Schools Ferry Road.

A majority of SW Scholls Ferry Road in the study area is considered a difficult bicycle connection, partial conventional bike lanes but there are gaps throughout. Conventional bike lanes are available on both sides of SW Hall Boulevard.

As shown in Figure 4, three active transportation connections are proposed to address the existing gap from the Fanno Creek Trail to Metzger Elementary; the planned connections create a connection that passes through Bagan Park and over OR 217. There is also a planned trail along SW Oak Street.

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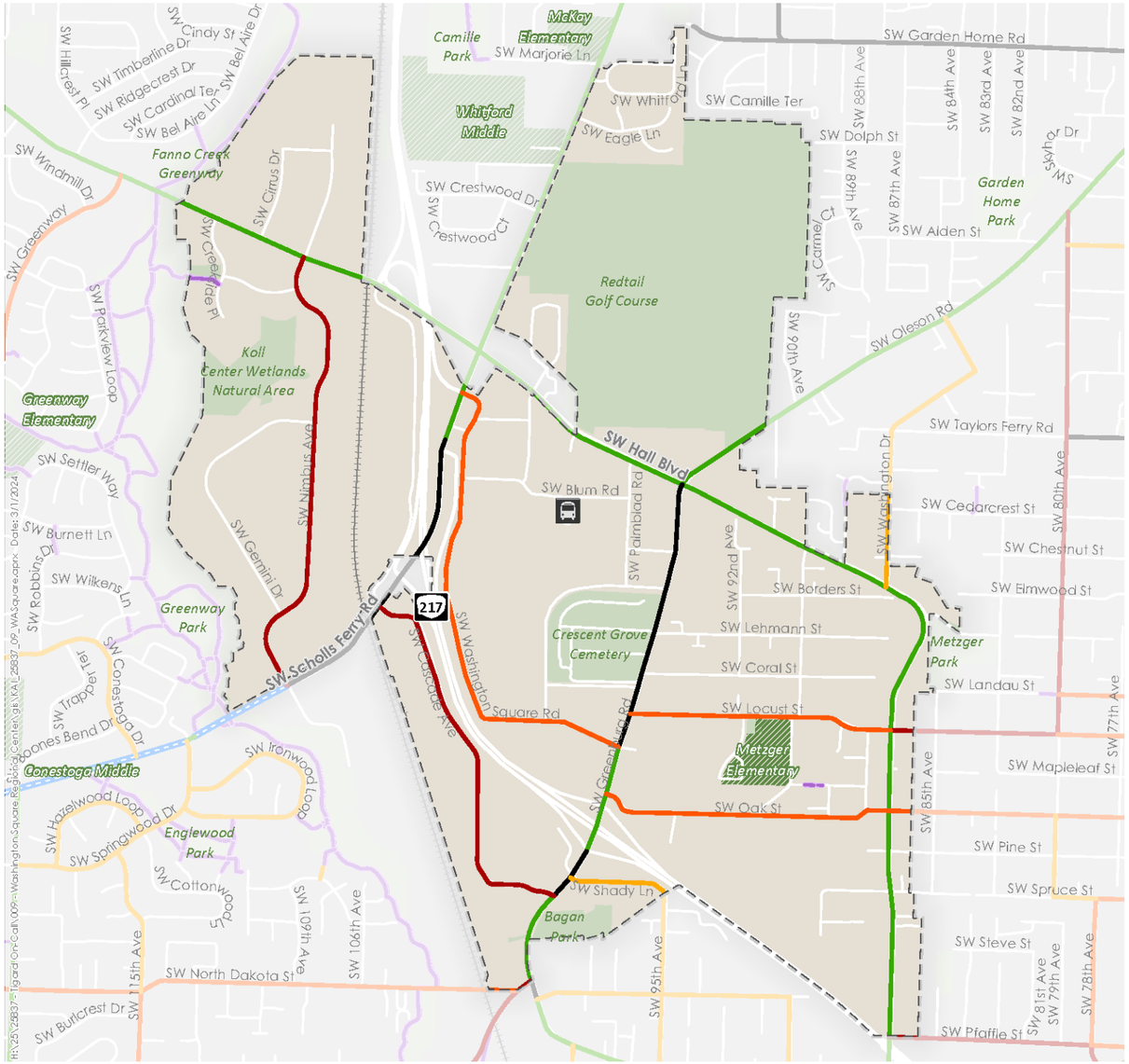

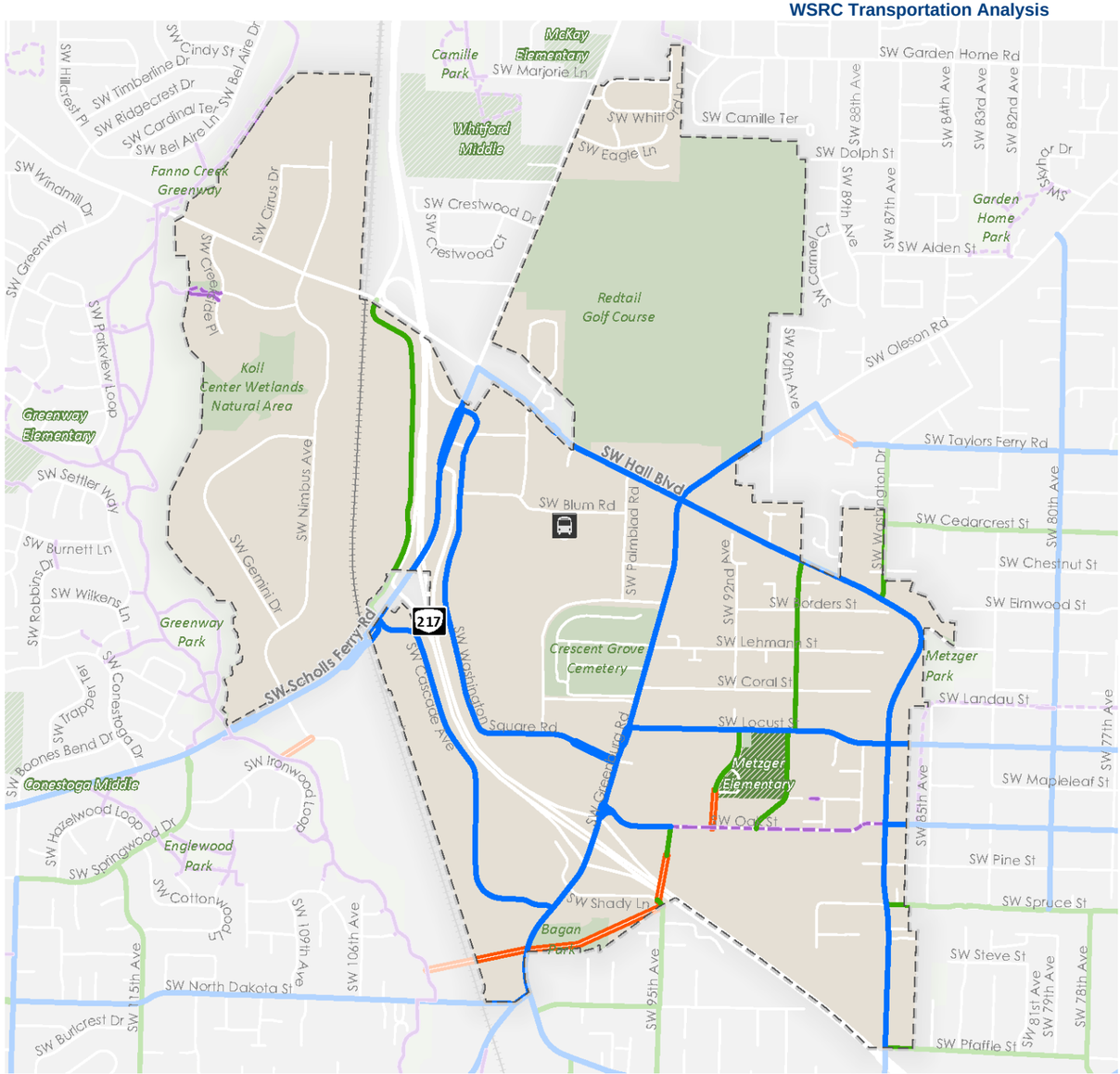

Existing Bicycle Network

- Existing Multi-Use Path
- Buffered Bike Lane
- Existing Bike Lane
- Existing Difficult Connection
- Existing Shared Lane on High Traffic Through Street
- Existing Shared Lane on Moderate Traffic Through Street
- Existing Shared Lane on Low Traffic Though Street
- Transit Center
- Parks
- School Grounds
- Washington Square Analysis

Planned Bicycle Network

- Planned Major Street Bikeway
- Planned Neighborhood Greenway
- Planned Trail
- Proposed Active Transportation Connection

0 0.25 0.5 Miles

Figure 4

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Bicycle Facilities
Tigard, Oregon

AMERICANS WITH DISABILITIES ACT (ADA) GAPS

The following section summarizes the presence and compliance of ADA facilities located along the state highways within the WSRC.

Pedestrian Ramps

The following intersections do not meet ADA ramp compliance for all corners of the intersection.

- OR141(SW Hall Boulevard/Beaverton-Tualatin Highway)/ SW Oak Street
- OR141(SW Hall Boulevard/Beaverton-Tualatin Highway)/ SW Spruce Street
- OR141(SW Hall Boulevard/Beaverton-Tualatin Highway)/ SW Pfaffle Street
- OR 210 (Scholls Ferry Road) / SW Washington Square Road
- OR 210 (Scholls Ferry Road) / OR 217 (Beaverton-Tigard Highway) southbound terminal
- OR 210 (Scholls Ferry Road) / SW Cascade Avenue
- OR 217 (Beaverton-Tigard Highway) southbound terminal /SW Greenburg Road
- OR 217 (Beaverton-Tigard Highway) northbound terminal /SW Greenburg Road

The following intersections do not meet ADA ramp compliance for some corners of the intersection.

- OR141(SW Hall Boulevard/Beaverton-Tualatin Highway)/ SW Palmblad Road
- OR141(SW Hall Boulevard/Beaverton-Tualatin Highway)/ SW Washington Drive-
- OR141(SW Hall Boulevard/Beaverton-Tualatin Highway)/ SW Hemlock Street
- OR141(SW Hall Boulevard/Beaverton-Tualatin Highway)/ SW Locust Street
- OR 210 (Scholls Ferry Road) / OR 217 (Beaverton-Tigard Highway) northbound off ramp

Push Buttons

The following push buttons are in “good” functional condition and have audible signal, making them in compliance to ADA standards:

- OR141 (SW Hall Boulevard/Beaverton-Tualatin Highway)/ OR210 (Scholls Ferry Road)
- OR141 (SW Hall Boulevard/Beaverton-Tualatin Highway)/ SW Palmblad Road
- OR141 (SW Hall Boulevard/Beaverton-Tualatin Highway)/ SW Greenburg Road
- OR141 (SW Hall Boulevard/Beaverton-Tualatin Highway)/ SW Locust Road

The following push buttons are in “poor” conditions.

- OR141 (SW Hall Boulevard/Beaverton-Tualatin Highway)/ SW Eliander Lane
- OR141 (SW Hall Boulevard/Beaverton-Tualatin Highway)/ Washington Square Target Entrance
- OR141 (SW Hall Boulevard/Beaverton-Tualatin Highway)/ SW Oak Street
- OR141 (SW Hall Boulevard/Beaverton-Tualatin Highway)/ SW Oak Street
- OR210 (Scholls Ferry Road)/SW Washington Square Road
- OR 210 (Scholls Ferry Road) / OR 217 (Beaverton-Tigard Highway) northbound off ramp
- OR 210 (Scholls Ferry Road) / OR 217 (Beaverton-Tigard Highway) southbound terminal
- OR 210 (Scholls Ferry Road) / SW Cascade Avenue

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- OR 217 (Beaverton-Tigard Highway) southbound terminal /SW Greenburg Road
- OR 217 (Beaverton-Tigard Highway) northbound terminal /SW Greenburg Road

ADA information including ramp compliance, push button information is provided on ODOT's TransGIS website: [ODOT TransGIS (state.or.us).]

TRANSIT NETWORK AND NETWORK GAPS

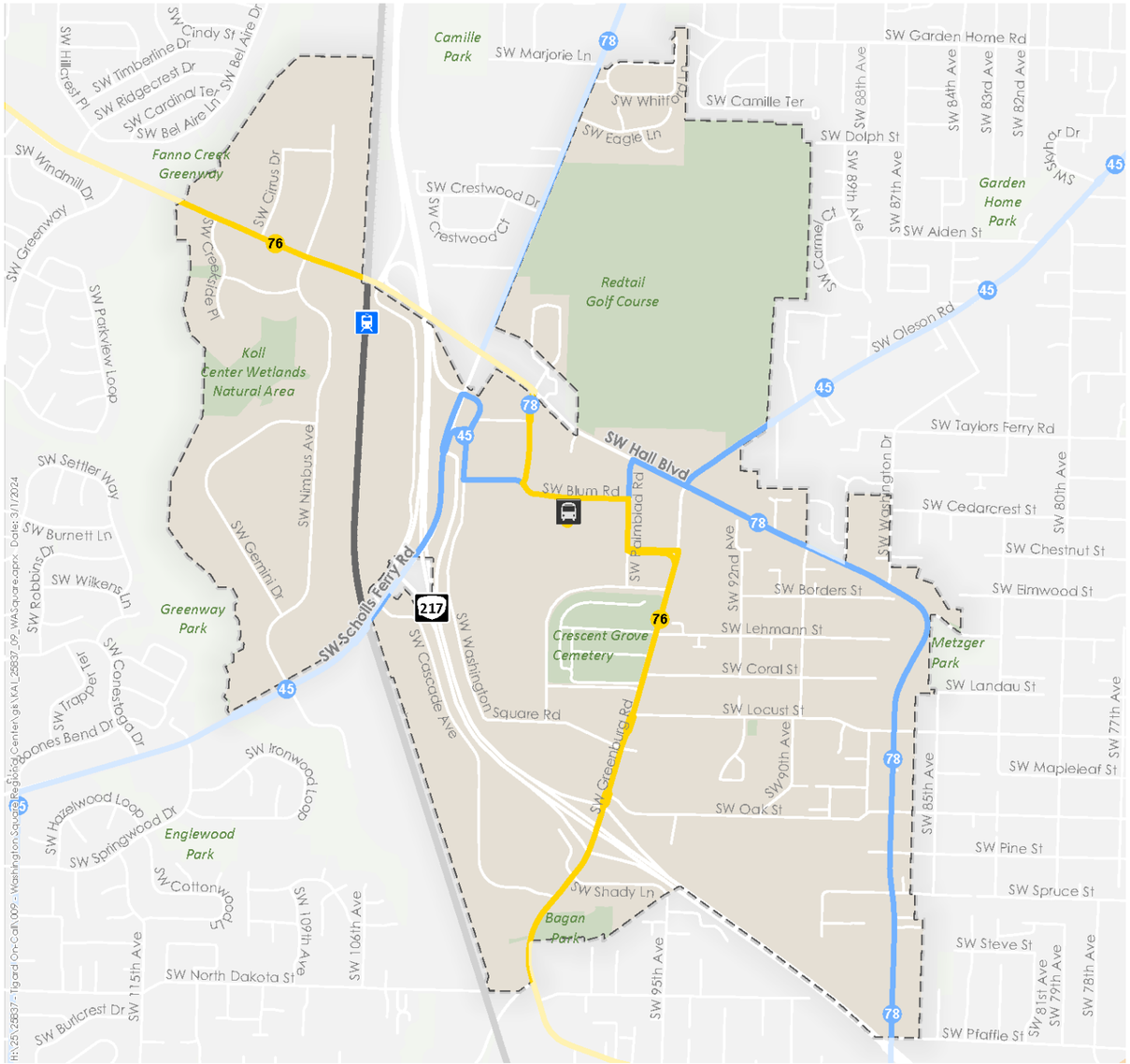
Transit service in the WSRC is provided by TriMet. There are three bus lines and one commuter rail line that serve the area. This includes one frequent service TriMet bus route (Line 76). The core area of the WSRC is also identified as a transit-oriented development (TOD) priority area.

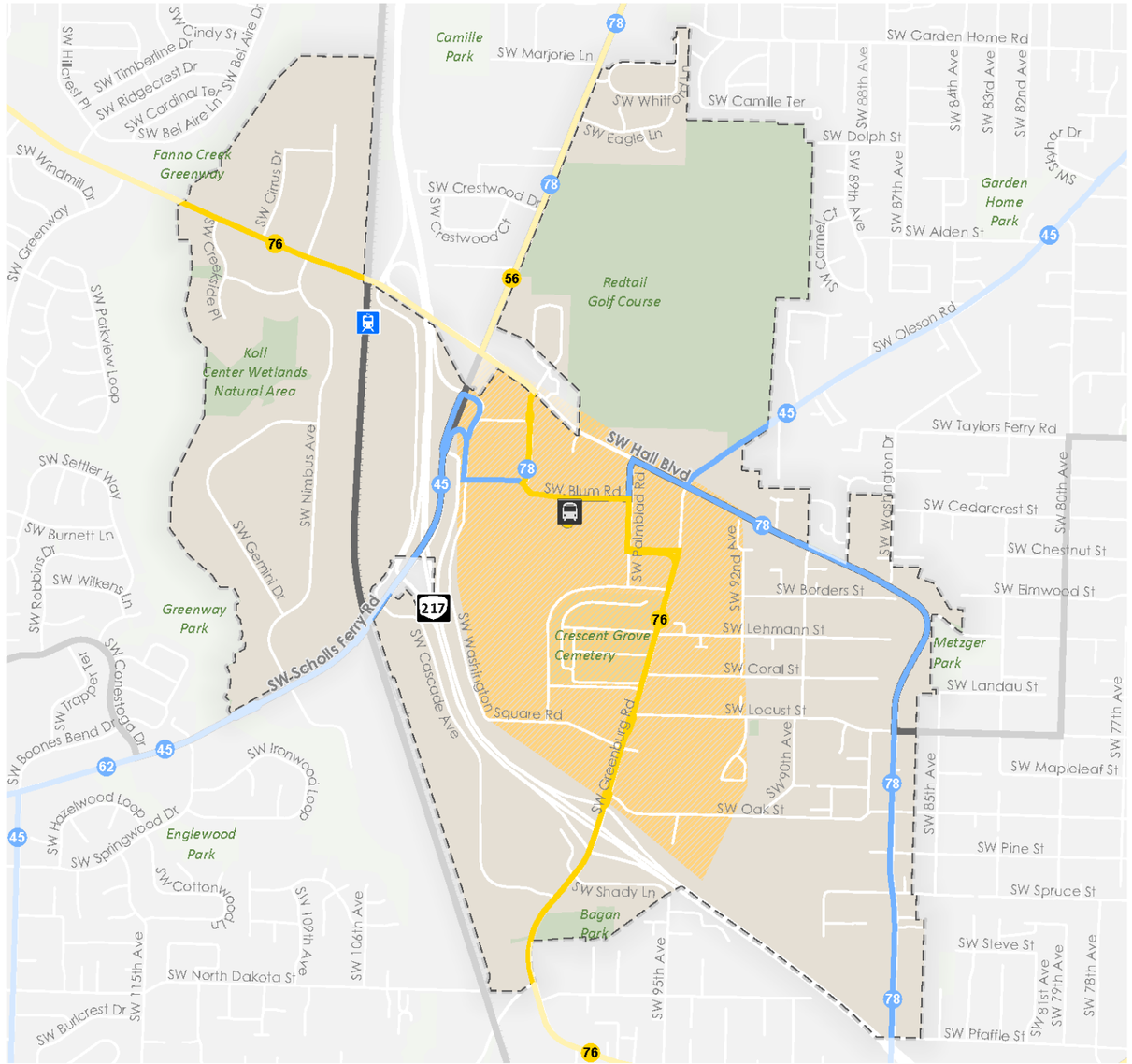
Table 2 includes service details for each transit route within the WSRC.

Each of the bus routes serves the Washington Square Transit Center, which is located on SW Blum Road on the northeast corner of Washington Square Mall. The WES Commuter Rail serves WSRC by the SW Hall Boulevard and SW Nimbus Avenue WES Station includes a park and ride. Figure 5 illustrates the existing and planned transit network.

Table 2: Transit Routes Serving Washington Square Regional Center

Route	Operator	Service Days	Hours	Frequency
WES Commuter Rail	TriMet	Weekdays	5:15 AM – 9:30 AM 3:30 PM – 7:45 PM	45 minutes
45	TriMet	All Days	6:00 AM – 8:30 PM (weekdays) 10:30 AM – 7:45 PM (weekends)	60 minutes (weekdays) 75 minutes (weekends)
56	TriMet	All Days	5:15 AM to 1:10 AM	30 minutes
62	TriMet	All Days	5:15 AM to 11:15 AM (weekdays) 6:20 AM to 11:10 PM (weekends)	45 minutes
76	TriMet	All Days	6:00 AM – 11:50 PM	15 minutes
78	TriMet	All Days	4:30 AM – 1:10 AM	15 minutes(PM peak) 30 minutes (all other times)





Existing Transit Network

- Existing Peak Hour Transit
- Existing Frequent Transit
- Existing Regular Transit
- Existing TriMet WES Commuter Rail
- WES Station
- Transit Center
- Washington Square Analysis Center

Planned Transit Network

- Planned Frequent Transit Route
- Planned Regular Transit Route
- TriMet WES Commuter Rail
- TOD Priority Area

0 0.25 0.5 Miles

Figure 5

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DEVELOPMENT CAPACITY OF CLIMATE FRIENDLY AREA

As described previously, the City of Tigard is proposing zone and text amendments to areas located within the WSRC. The City is also prosing to increase the size of the WSRC by modifying the existing WSRC boundary.

Existing Development Capacity

Section 18.320.1 of the City's Development Code sets the existing standards for Commercial Zone Development Standards for Nonresidential Development including Mixed-Use Employment (MUE), Mixed-Use Residential (MUR) and Mixed-Use Commercial (MUC). The existing Commercial Zone Development Standards for Nonresidential Development that are proposed for amendment are shown in Table 3.

Table 3: Existing Commercial Zone Development Standards for Nonresidential Development

Table 18.320.1 Commercial Zone Development Standards for Nonresidential Development							
Standard	C-N and C-C	C-G	C-P	MUE	MUE-2 and MUR-2 [1]	MUR-1 [1]	MUC and MUE-1 [1]
Minimum Setback (ft)							
– *Front*	None	None	None	None	10	None	None
– *Street side*	None	None	None	None	10	5	None
– *Side*	0 or 20 [2]	0 or 20 [3]	0 or 20 [3]	0 or 20 [3]	0 or 20 [3]	0 or 20 [3]	0 or 20 [3]
– *Rear*	0 or 20 [2]	0 or 20 [3]	0 or 20 [3]	0 or 20 [3]	0 or 20 [3]	0 or 20 [3]	0 or 20 [3]
Maximum Setback (ft)							
– *Front*	20	None or 10 [4]	None	None	20	20	20
– *Street side*	20	None or 10 [4]	None	None	20	20	20
Minimum Height (ft)	None	None	None	None	None	2 stories	2 stories
Maximum Height (ft)	35	45	45	45	60	75	200
Maximum Lot Coverage	85%	85%	85%	80%	80%	80%	85%
Minimum Landscape Area	15%	15%	15%	20%	20%	20%	15%
Minimum FAR [5]	None	None	None	None	0.3	0.6	1.25
Maximum FAR [5]	None	None	None	0.4 [6]	None	None	None

Note: No Commercial (COM) zoning is proposed as part of the WSRC amendments.

Proposed Development Capacity

Table 4 and Table 5 summarize the proposed Commercial Zone Site Design Standards for Nonresidential Development and Apartment Development Standards, respectively. These amendments are documented in MADE Public Review Draft (tigard-or.gov).

Table 4: Proposed Commercial Zone Site Design Standards for Nonresidential Development

Table 18.320.1 Commercial Zone Site Design Standards for Nonresidential Development				
Standard	COM	MUC	MUE	MUR
Minimum Setback (ft)				
- Front or street-facing	1	1	1	1
- Side or rear adjacent to nonresidential or RES-E zone	0	0	0	0
- Side or rear adjacent to a RES-A—RES-D zone	15	15	15	15
Maximum front or street-facing Setback (ft)	None	20	10	12
Maximum Lot Coverage	100%	100%	100%	100%
Minimum Landscape Area	0%	0%	0%	0%

Table 5: Proposed Apartment Development Standards

Table 18.230.1 Apartment Development Standards				
Standard	RES-D	RES-E	MUC	MUR
Minimum Setbacks (ft)				
- Front or street-facing	20	20	1	1
- Side or rear adjacent to nonresidential or RES-E zone	10	10	0	0
- Side or rear adjacent to a RES-A—RES-D zone	10	10[1]	15	15
Maximum Setbacks (ft)				
- Front or street-facing	None	None	12	12
Minimum Height (ft)	None	None	12	12
Maximum Height (ft)	35	45	185	60
Maximum Lot Coverage	80%	80%	None	None
Minimum Landscape Area	20%	20%	None	None
Minimum Density	11 units per acre	23 units per acre	None	None
Maximum Density	14 units per acre	30 units per acre	None	None

SUMMARY OF PRPOSED CHANGES

The focus of changes to WSRC is to encourage job growth, economic viability, and environmental sustainability through updates to the City of Tigard Development Code, which sets the regulations for where and how things can be built. The zoning and development code changes aim to promote job growth, economic equity, and environmental sustainability by:

- Expanding and modernizing allowed uses:
  - Allowing for more area-wide mixed-use development could encourage greater job density and better accommodate alternative forms of transportation, like biking and public transit.
- The proposed change's emphasis on better accommodating mixed-use development and alternative forms of transportation, additional motor vehicle traffic is not expected.
- The maximum building heights and limits on square footage of indoor retail sales result in equivalent or reduced levels of development potential with the proposed changes as compared to the existing zoning and development code.

Use Standards

The following use standards apply to development in the plan district, whether within a subdistrict or outside of a subdistrict.

In the MUC zone:

- Residential and nonresidential uses are allowed as single-use or mixed-use developments.
- Indoor sales and services are limited to 30,000 square feet per tenant except where in an existing building.
- Motor vehicle sales is an allowed use if all storage and activity is in a building. The existing exception for the development located at the northwest corner of Highway 217 and Greenburg Road will remain in place, as will allowances for accessory motor vehicle servicing.
- Many other commercial and civic uses are allowed or allowed conditionally.
- Apartments are allowed housing types anywhere zoned MUC, and rowhouses are allowed only within the Design Review Subdistrict.

In the MUE zone:

- Residential uses are allowed only as part of mixed-use buildings where at least 30 percent gross floor area is devoted to a nonresidential use.
- Indoor sales and services are allowed up to 30,000 square feet per tenant.
- Motor vehicle sales are allowed up to 25,000 square feet per tenant if all storage, including vehicle inventory, is in a building.
- Motor vehicle servicing is allowed if all activity and storage is contained in a building.
- Off-site services are allowed up to 20,000 square feet per tenant and fleet vehicles are subject to parking maximums as provided in Chapter 18.410.
- Wholesale and equipment rental is allowed up to 20,000 square feet per tenant.
- Drive-throughs are prohibited. • Gas stations are allowed.

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In the MUR zone:

- Indoor sales and services and office are allowed in mixed-use buildings.
- Other nonresidential uses are not allowed.
- All housing types except mobile home parks are allowed.

Proposed Development Standards

There are no Floor Area Ratio (FAR), maximum lot coverage, or minimum landscaping requirements in the plan district. Development is subject to maximum setbacks, minimum window coverage, and other pedestrian-friendly standards, all of which are designed to be as clear and objective as possible.

Maximum building height is the primary method of regulating density, with different maximums provided for different zones, subdistricts, or development types. Some zones or subdistricts offer height incentives for mixed-use buildings. The proposed maximum heights are largely similar or reduced compared to the existing standards.

Proposed Subdistricts

As described previously, the proposed subdistricts set additional standards and guidance for the type of land use and development within these designated subdistricts.

- Design Review Subdistrict:
  - Development in the Design Review Subdistrict is subject only to the use standards and height standards provided in this chapter. Development in this subdistrict is evaluated using the discretionary criteria provided in the new Chapter 18.725, Development Design Reviews, in the place of other standards.
- Apartment Subdistrict:
  - Development in the Apartment Subdistrict is subject to the use and development standards of the MUR base zone, with the exceptions of housing types and building height. The only housing type allowed in the apartment subdistrict is apartments and development is required to be at least three stories tall.
- Metzger Business Subdistrict:
  - Development in the Metzger Business Subdistrict is subject to the use and development standards of the MUC base zone, except for building height and residential uses. Development in this subdistrict is intended to be smaller in scale than development in the MUC zone outside the subdistrict and residential is only allowed as part of a mixed-use building.

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Table 6: Proposed Zone Change Comparison (Non Residential)

Zoning	Existing Zoning (Total Acres)	Proposed Zoning (Total Acres)	Net Difference (Total Acres)
Professional Commercial (C-P)	0.82	0	*-0.82*
Mixed-Use Commercial (MUC)	239.12	230.81	*-8.31*
Mixed-Use Employment 1 (MUE-1)	88.22	0	*-88.22*
Mixed-Use Employment 2 (MUE-2)	0.02	0	*-0.02*
Mixed Use Employment (MUE)	0	87.25	*87.25*
Mixed-Use Residential 1 (MUR-1)	48.88	0	-48.88
Mixed-Use Residential 2 (MUR-2)	15.97	0	-15.97
Mixed Use Residential (MUR)	0	184.02	*184.02*
Total	***468.32***	***574.08***	***105.76***

As shown in Table 6, C-P is removed as part of the proposed zone changes.

MUC includes a marginal reduction of approximately 8.3 acres. MUE-1 and MUE-2 are combined into a single MUE zone. As a result, a total of approximately 0.97 acres of MUE is reduced.

MUR-1 and MUR-2 are also combined into a single MUR zone. As a result, a total of approximately 119.17 acres of MUR is increased.

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EXISTING TRANSPORTATION ANALYSIS ZONES ASSUMPTIONS

Metro maintains the travel demand model that includes the growth allocations for housing and employment in the region. The estimates are based on the coordinated population forecast, economic forecasts, land use plans, assumptions, and desires about how areas will develop or redevelop. Model development and refinement is completed in coordination with local jurisdictions.

The proposed zone and text amendments are primarily covered by six (6) different transportation analysis zones (TAZ) in the model. Figure 6 illustrates the TAZs within WSRC where proposed changes are identified and the difference of population and employment growth for each TAZ.

Table 7 identifies the TAZs in the WSRC where changes are proposed and summarizes the difference in number of households and employment between 2015 and 2040.

Table 7: Transportation Analysis Zones – Washington Square Regional Center

TAZ	2015 Households	2040 Households	Household Increase	2015 Employment	2040 Employment	Employment Increase
1007	185	710	525	6,214	8,474	2260
1008	150	337	187	3,620	4,889	1269
1019	0	1,076	1076	1,939	3,502	1563
1032	2,342	3,019	677	676	1321	645
1033	672	1,611	939	73	92	19
1034	1,133	1,206	73	99	203	104
1140	3,064	3,949	885	645	1,222	577
Total	***7,546***	***11,908***	***4,362***	***13,266***	***19,703***	***6,437***

As shown in Table 7, growth of approximately 4,362 households and 6,437 jobs is projected in the existing Metro Travel Demand Model for areas of proposed zone and text amendment changes in the WSRC. The proposed zoning and text amendments are intended to help facilitate development and redevelopment in the Project area so that WSRC may accommodate the future growth allocated to this area. The proposed amendments area not anticipated to greatly increase the development potential of the WSRC or change the projected growth for the 20-year horizon.

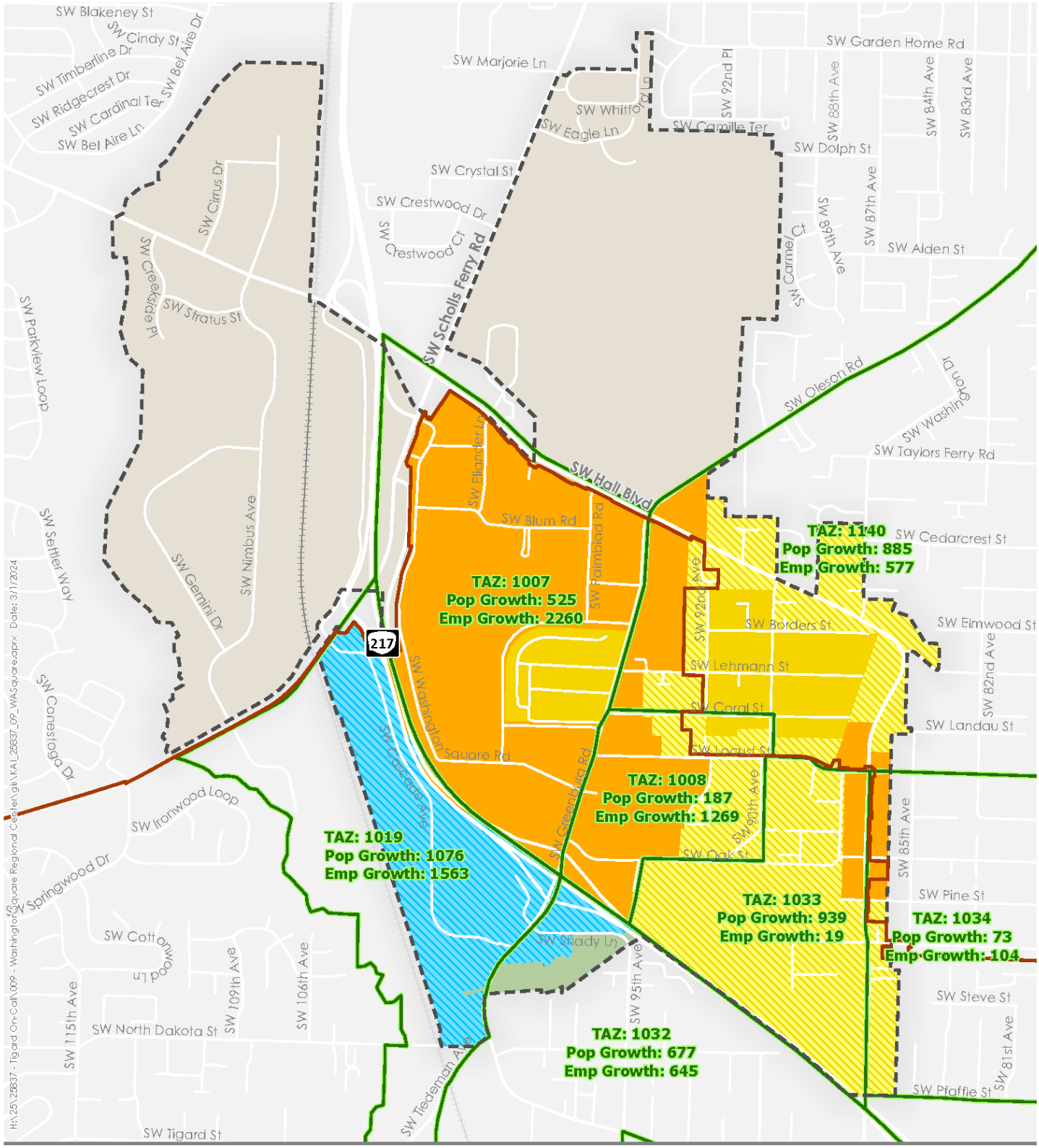

Figure 6

Proposed Zoning and TAZs
Tigard, Oregon

KITTELSON & ASSOCIATES

SUMMARY OF ADDITIONAL MOTOR VEHICLE TRAFFIC

As described earlier, the proposed zoning and text amendments are intended to help facilitate development and redevelopment in the Project area so that WSRC may accommodate the future growth allocated to this area. The proposed amendments area not anticipated to greatly increase the development potential of the WSRC or change the projected growth for the 20-year horizon.

Mixed-Use Employment (MUE) zoning is consolidated and relocated along SW Cascade Avenue. Mixed-Use Commercial (MUC) is moved from SW Cascade Avenue to the Washington Square mall area. A increase of Mixed-Use Residential (MUR) is proposed along SW Hall Boulevard and its surrounding area.

The zone and text amendments described in this memorandum are not intended to create greater intensity of the existing WSRC. Instead, these changes are proposed to more closely align with the intentions of the designated CFA, enabling the already forecasted growth shown in the Metro Travel Demand model to be achieved and removing barriers to allow the market to be more flexible in achieving what it wants to provide.

In conclusion, the proposed zone and text amendments are not anticipated to increase traffic volumes or vehicle trips on the local and state system anymore than what is already forecasted in the Metro Travel Demand Model. The proposed zone and text amendments are likely to result in less single occupancy vehicle trips (SOV) in the CFA.

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Reported Crashes

A summary of the five most recent years of reported fatal and serious injury (Injury A) crashes within the WSRC is summarized below.

A total of 642 crashes were reported within the WSRC between January 1, 2017 and December 31, 2021. Only crashes that were reported to the police are included below; crashes that resulted in minimal to no vehicular damage with no injury or possible injury may not be reported. The 642 reported crashes are summarized by injury severity below.

- 1 fatal crash
- 11 serious injury crashes
- 252 minor injury crashes
- 96 moderate injury crashes
- 282 non-injury crashes

Of the 642 reported crashes, 237 crashes were reported along Hall Boulevard and SW Scholls Ferry Road (south of SW Hall Boulevard) and 209 were reported on OR 217. There were a total of 446 crashes on SW Hall Boulevard and OR 217 alone, representing 70 percent of all crashes within the WSRC boundary from 2017 to 2021.

FATAL AND SEVERE INJURY A CRASHES

Fatal Crashes

One fatal crash was reported in the WSRC during the most recent five-year analysis period. The fatal crash was reported on July 14th 2021 at 4:00 PM under clear and dry conditions. The crash was reported at the intersection of SW Hall Boulevard and SW Oleson Road. A motorist traveling northbound on SW Hall Boulevard made an improper turn onto SW Oleson Road where the vehicle departed from the road, on to the curb and struck a traffic pole.

Serious Injury Crashes

Eleven (11) reported serious injury crashes were reported within the WSRC are summarized in Table 8. Of the 11 severe injury crashes, seven (7) occurred on an ODOT facility. None of the 11 crashes involved pedestrians or bicyclists.

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Table 8: Reported Severe Injury Crashes in WSRC (Jan. 1, 2017, to Dec. 31, 2021)

Date	Location	Crash Type	Cause
1/30/2017	OR 217 Southbound terminal and SW Greenburg Road	Turning movement	Disregarded traffic signal
8/25/2017	OR 210 bridge over OR217	Rear-End	Failed to avoid vehicle ahead
10/14/2017	SW Cascade and SW Scholls Ferry Road	Rear-End	Failed to avoid vehicle ahead
12/2/2018	SW Cascade Avenue at curve east of SW Scholls Ferry Road	Overturned- non-collision	Speed too fast for conditions (Not exceeding limit), drove left of center on two-way road; straddling the center line
2/16/2019	OR 217 north bound terminal at SW Greenburg Road	Fixed-object collision-sign	Reckless Driving (Per PAR or self-reported)
10/24/2019	SW Cascade Avenue at Tesla Driveway	Rear-End	Failed to avoid vehicle ahead
12/16/2019	SW Hall Boulevard and SW Washington Square Regional Center	Turning Movement	Disregarded traffic signal
10/12/2020	SW Hall Boulevard near Hall Boulevard Learning Tree	Side Swipe	Physical Illness, drove left of center on two-way road; straddling the center line
4/17/2021	SW Cascade and SW Scholls Ferry Road	Rear-End, Overturn	Failed to avoid vehicle ahead
6/15/2021	SW Greenburg Road at 76 gas station	Turning movement	Did not yield right-of-way
7/3/2021	OR 217 near mile point 4.45	Overturned- non-collision	Did not yield right-of-way, Improper change of traffic lanes, Other (Not improper driving)

ODOT SAFETY PRIORITY INDEX SYSTEM

The Safety Priority Index System (SPIS) is a method originally developed in 1986 by the Oregon Department of Transportation (ODOT) for identifying potential safety problems on state highways. The Federal Highway Administration (FHWA) accepted SPIS as fulfilling the requirements of the Highway Safety Improvement Program (HSIP).

ODOT's TransGIS website provides SPIS data from 2016 to 2020. Based on a review, the following locations within the Project study area are identified as SPIS sites:

- OR210/OR141
- OR210 from Cascade Avenue to bridge over OR 217
- OR 141 between SW Palmblad Road and SW Greenburg Road
- OR141North of SW Pfaffle Street

Appendix A

City of Tigard Transportation System Plan 2022

Tigard on the Move, the city's Transportation System Plan (TSP) was completed in January 2022 and creates a list of transportation projects and programs for the city to implement with available funding over the next 20 years. Projects are grouped into six categories: stronger streets network, urban upgrades and active transportation, connectivity, transit, transportation systems management and operations (TSMO), and special study areas.

TSP Chapter 6. Recommended Investments contains the list of projects.

City of Tigard Transportation Safety Action Plan 2019

The Tigard Transportation Safety Action Plan (TSAP), completed in September 2019, examined historic crash data across the city to identify future roadway investments to address safety concerns. Of the six locations with site-specific treatments, the segment of Highway 99W from SW Main Street/SW Greenburg Road to SW Hall Boulevard falls within the Project study area.

The TSAP recognizes that there are limited opportunities for safety-focused improvements along this segment because Highway 99W is a seven-lane facility and the Highway 99W/SW Hall Boulevard and Highway 99W/SW Main Street/SW Greenburg Road intersections each have more than 40,000 vehicles that enter each day. However, the TSAP identifies two opportunities for safety-focused improvements – an access management evaluation along Highway 99W in this corridor, and an improvement pedestrian crossing at the SW Greenburg Road/SW Center Street intersection, including curb extensions and a median refuge island.

TriMet Pedestrian Plan, 2020

TriMet's Pedestrian Plan focuses on three primary objectives: Removing barriers to riding transit, improving partnership between cities, counties, and the State, as well as equipping partnering agencies with an access-to-transit lens to help inform their decision-making and support future funding request.

TriMet's Pedestrian Plan identifies needs in and around WSRC including previously identified projects (sidewalk infill, new roadways and new trails identified in existing plans) and identified gaps (sidewalk gaps identified through the TriMet Pedestrian Plan). These projects are identified in Appendix E, Appendix F, and Appendix G.

Washington County Transportation System Plan 2019

The Washington County Transportation System Plan (TSP) Update provides direct guidance on how to build, operate, and maintain Washington County's major roadway network, while addressing complementary elements of the larger transportation system – including transit, multi-use trails, state highways and freight railroads – maintained by other entities.

No projects are identified within the Project study area based on a review of the Washington Count TSP Update.

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Statewide Transportation Improvement Program 2021-2024

OR 217 Auxiliary Lanes Project | Project #: 18841

Construction for the OR 217 Auxiliary Lanes Project began in December 2021 and continues through 2025.

On OR217, add a southbound auxiliary lane from OR10 to OR99W and a northbound auxiliary lane from OR99W to SW Scholl's Ferry Rd (OR210) to improve safety and traffic reliability. Pave road, add protective screening, and bridge updates on Allen Boulevard and Denny Rd structures. Pave road, replace joints, and repair deteriorating concrete columns on OR210 over OR217 structure. Add sidewalks and bike lanes to the SW Hall Boulevard (OR141) over OR217 overcrossing to improve bicycle and pedestrian connectivity. Add bridge rail that meets the current standards to the Fanno Creek Bridge. Install signs and technology to capture traffic statistics and improve operations. Add a signal pole base and conduit to the design of the SW Hall Boulevard Bridge replacement.

OR 141 (SW Hall Boulevard): SW Spruce St - SW Hemlock St | Project #: 22647

Signalized pedestrian crossings on SW Hall Boulevard currently have significant distance between them. Project will provide 2 enhanced pedestrian crossings to increase the number of signals along SW Hall improving the visibility of pedestrians crossing the street and encouraging people to use these crossings to walk to parks and schools in the immediate area.

OR 210: SW Scholls Ferry Rd - SW Hall Boulevard ITS | Project #: 21121

Implement Adaptive Signal Control Technologies (ASCT) to adjust traffic signal to actual conditions. ASCT continuously distributes green light time equitably to all traffic movements and therefore helps to reduce congestion.

Metro Regional Transportation Plan 2023

As the metropolitan planning organization for the Portland metropolitan area, Metro is authorized by Congress and the State of Oregon to coordinate and plan investments in the transportation system for Clackamas, Multnomah and Washington counties. This is done through periodic updates to the Regional Transportation Plan – now every 5 years. The projects listed below are located within the Project study area.

Safety & Operations Projects | RTP # 12095

Description	Projects to improve safety and/or operational efficiencies such as pedestrian crossings, speed feedback signs, transit priority technology at signals on arterial roads, railroad crossing repairs, slide and rock fall protections, illumination, signals and signal operations systems, sidewalks, bicycle lanes, and other improvements that do not add motor vehicle capacity.
To	Multiple locations
From	Various
Agency	ODOT

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Primary Purpose	Increase safety
RTP Category	Roads and Bridges
Estimated Cost (2023 $)	349,000,000
Time Period	2023-2030

Washington Square Connectivity Improvements | RTP # 10746

Description	Increase local street connections at Washington Square Center based on recommendations in regional center plan.
To	Multiple locations
From	Various
Agency	Tigard
Primary Purpose	Increase travel options/alt. to driving alone
RTP Category	Roads and Bridges
Estimated Cost (2023 $)	349,000,000
Time Period	2031-2045

Greenburg Road | RTP # 10612

Description	Upgrades roadway to up to 5-lane urban standard with 3400 feet of bike lanes and sidewalks in regional center.
To	OR 217

From	Hall Boulevard.
Agency	Washington County
Primary Purpose	Increase safety
RTP Category	Roads and Bridges
Estimated Cost (2023 $)	32,500,000
Time Period	2031-2045

Washington Square Regional Center Greenbelt Shared Use Path | RTP # 10763

Description	Complete WSRC shared-use path.
To	OR 217
From	Hall Boulevard.
Agency	Tigard
Primary Purpose	Increase travel options/alt. to driving alone
RTP Category	Walking and Biking
Estimated Cost (2023 $)	4,400,000
Time Period	2031-2045

Tigard Neighborhood Greenway Bicycle Improvements | RTP # 11221

Description	Make spot improvements on key low-volume, low speed through-routes to facilitate bike & pedestrian travel; identify them as bike/pedestrian neighborhood greenway routes.
To	City-wide

From	City-wide
Agency	Tigard
Primary Purpose	Increase travel options/alt. to driving alone
RTP Category	Walking and Biking
Estimated Cost (2023 $)	9,800,000
Time Period	2031-2045

Locust Avenue Bike Lanes and Sidewalks | RTP # 10611

Description	Completes 1650 feet of bike lanes and missing sidewalks in regional center.
To	72nd Ave.
From	Hall Boulevard.
Agency	Tigard
Primary Purpose	Increase travel options/alt. to driving alone
RTP Category	Walking and Biking
Estimated Cost (2023 $)	8,100,000
Time Period	2031-2045

Scholls Ferry Rd. Improvements | RTP # 10596

Description	Widen to seven lanes with bike lanes and sidewalks

To	121st Ave.
From	Hwy. 217
Agency	Washington County
Primary Purpose	Increase travel options/alt. to driving alone
RTP Category	Roads and Bridges
Estimated Cost (2023 $)	47,800,000
Time Period	2031-2045

OR 217 Ped-Bike Crossing at SW 95th Avenue | RTP # 12168

Description	Construct a new Highway 217 overcrossing for active transportation users connecting Metzger Neighborhood and WSRC area with the Greenburg Neighborhood, Tigard Heritage Trail, Fanno Creek Trail, and Downtown Tigard.
To	Shady Lane
From	Oak Street
Agency	Tigard
Primary Purpose	Increase travel options/alt. to driving alone
RTP Category	Walking and Biking
Estimated Cost (2023 $)	24,400,000
Time Period	2031-2045

Hall Boulevard. Improvements - Locust to Durham | RTP # 11220

Description	Build protected bike facilities, complete sidewalks on both sides of the road, and provide new and improved pedestrian crossings throughout the corridor. Maximum roadway cross section of 3 lanes away from intersections. Combine and coordinate with ODOT State of Good Repair project and potential Washington County project north of SW Locust.
To	Durham
From	Locust
Agency	ODOT
Primary Purpose	Increase travel options/alt. to driving alone
RTP Category	Roads and Bridges
Estimated Cost (2023 $)	32,500,000
Time Period	2031-2045

Hall Boulevard. Improvements | RTP # 11739

Description	Improve to 2/3-lane cross section with bike lanes and sidewalks.
To	Locust
From	Oleson Rd.
Agency	ODOT
Primary Purpose	Increase travel options/alt. to driving alone
RTP Category	Roads and Bridges
Estimated Cost (2023 $)	33,500,000
Time Period	2031-2045

Hall Boulevard. Improvements | RTP # 10595

Description	Improve to 2/3-lane cross section with bike lanes and sidewalks.
To	Oleson Rd.
From	Scholls Ferry Rd.
Agency	ODOT
Primary Purpose	Increase travel options/alt. to driving alone
RTP Category	Roads and Bridges
Estimated Cost (2023 $)	5,900,000
Time Period	2031-2045

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