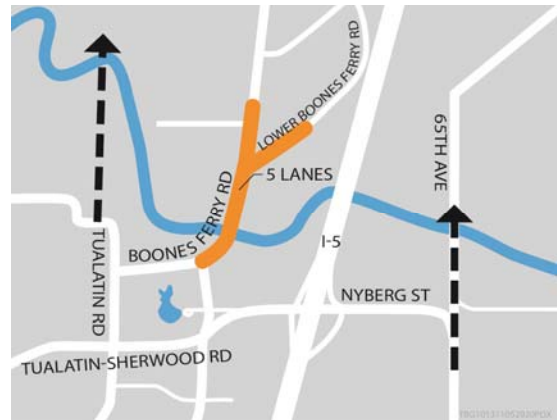


Refinement Area #3: North/South Connectivity

Option 3: Hybrid. Two-lane local road connecting to Hall Boulevard, extending 65th Avenue across the Tualatin River, and Widening Boones Ferry Road.

Goal Statement

This option improves connectivity in the north-south direction west of I-5. Connections in Tualatin west of I-5 are limited to Boones Ferry Road and 99W in the north-south direction, and Tualatin Road and Herman Road in the east-west direction. In the 2001 Tualatin TSP, there was a project to extend Tualatin Road to the north to connect with Hall Boulevard in Tigard.



Potential Solution

- An extension west of the railroad tracks, in the general vicinity of SW 86th Avenue east of the Country Club
- Road would extend northward in the vicinity of SW Celilo Road and connect with SW 85th Avenue north of the Tualatin River
- Combine extending to Hall Boulevard with widening Boones Ferry Road, and extending SW 65th Avenue north over the River

Consideration Area	Comments	Score
How would this solution affect traffic locally?	• New extension allows connectivity north/south across the Tualatin River • New two lane local roadway could carry up to 800-900 vehicles in each direction during the 2035 PM peak hour • Will increase traffic on Boones Ferry Road in front of Tualatin Community Park – uncertain whether signal warrant would be met • Tualatin-Sherwood Rd and Boones Ferry Rd V/C deteriorates slightly from 1.30, LOS F to 1.37, LOS F • Connections would increase PM Peak hour intersection volume by 400 vehicles, primarily north/south through vehicles.	

Consideration Area	Comments	Score
How would this solution affect traffic city-wide?	- Tualatin, Herman, 99W, and Boones Ferry Road (north of the Tualatin River) experience a moderate decrease in traffic - Boones Ferry Road immediately south of Celilo Road has an increase in traffic leading up to the extension	●
Design Constraints / Considerations	- Does not physically impact Tualatin Community Park - At least one, if not two railroad crossings would need crossing improvements and would require coordination with the Railroad and ODOT Rail. - North improvements to alignment would extend along the west edge of the tracks and tie into 85th Ave on the north side of the river	◐
Environmental / Policy Considerations	- An extension of Hall Boulevard into Tualatin is included in the Tigard TSP (long-term not fiscally constrained project list) and in the Washington County TSP - Potential impacts (likely temporary) to the Tualatin River and adjacent natural resources. - Potential impacts to wetlands/sensitive areas west of the existing railroad tracks north of Tualatin Road.	○

Refinement Area #5: Tualatin-Sherwood Road

Option 1: Five-Lane Section Teton to Cipole

Goal Statement

Relieve congestion and improve safety for all modes along Tualatin-Sherwood Road within the City of Tualatin.

Tualatin-Sherwood Road serves as the major east-west arterial through Tualatin. It connects residents, employees, and visitors to the I-5 freeway system, to the community of Sherwood, and areas west. Tualatin-Sherwood Road is owned and maintained by Washington County. West of 124th Avenue average daily traffic volumes are higher than 26,000 vehicles.

Though there are continuous sidewalks and bicycle lanes throughout the corridor, including a buffered bicycle lane west of downtown, the team has heard from the community that the traffic volumes still make this corridor feel unsafe from the vantage point of a bicyclist. Crossing this arterial at key intersections can be difficult for a pedestrian.

Potential Solution

Widen Tualatin-Sherwood Road to five lanes, retaining continuous buffered bicycle lanes and sidewalks between Teton to the east and Cipole to the west.

Consideration Area	Comments	Score
How would this solution affect traffic locally?	- Serves future demand that is beginning to be seen today - Minor to moderate increases in traffic seen on Avery Street, 124th Avenue, and new connection between 112th and Myslony - Widening Tualatin-Sherwood Road from 3 to 5 lanes changes V/C and LOS at the following intersections: - Improves 124th Ave: from 1.33, LOS F to 0.92, LOS C - Improves Avery St: from 0.99, LOS E to 0.92, LOS D - Teton Ave deteriorates slightly: from 0.95, LOS E to 1.03, LOS E	
How would this solution affect traffic city-wide?	- Draws traffic away from Hwy 99W, Tualatin Road, Herman Road, and the Cipole Rd extension - New traffic on Tualatin-Sherwood Road forecasted to be approximately 200-350 vehicles in each direction during afternoon rush hour	

Consideration Area	Comments	Score
Design Constraints / Considerations	- Right-of-way setbacks likely allow widening with minor impacts to properties from Teton west to Cipole - Some drainage/water quality basins that would likely need to be relocated - Major design complications not anticipated	
Environmental / Policy Considerations	- Most widening impacts would be to landscaping - Project is included in Washington County TSP - Any widening west of Cipole would require coordination with Sherwood.	



Refinement Area #5: Tualatin-Sherwood Road

Option 2: Transportation System Management

Goal Statement Relieve congestion and improve safety for all modes along Tualatin-Sherwood Road within the City of Tualatin.

Tualatin-Sherwood Road serves as the major east-west arterial through Tualatin. It connects residents, employees, and visitors to the I-5 freeway system, to the community of Sherwood, and areas west. Tualatin-Sherwood Road is owned and maintained by Washington County. West of 124th Avenue average daily traffic volumes are higher than 26,000 vehicles. The intersection of Tualatin-Sherwood Road and Boones Ferry Road is the most congested intersection in the community of Tualatin, and serves as a activity hub, with the WES Commuter Rail station and commercial businesses on all four corners. Crossing this arterial at key intersections can be difficult for a pedestrian.

Potential Solution The team explored keeping Tualatin-Sherwood Road as a three-lane section west of Teton, improving travel conditions via coordinated signal timing and intersection-specific treatments that would reduce overall conflicts and delay.

Consideration Area	Comments	Score
How would this solution affect traffic locally?	- There could be a modest shift of traffic to utilize Tualatin-Sherwood Road if TSM type enhancements occur and make the corridor more efficient. - Likely shift in traffic would come from Herman Road, Tualatin Road, and Avery Street.	
How would this solution affect traffic city-wide?	Most impacts would be local with little city-wide effect.	
Design Constraints / Considerations	N/A.	N/A
Environmental / Policy Considerations	None	

Refinement Area #5: Tualatin-Sherwood Road

Drilling Down on the Tualatin-Sherwood Road / Boones Ferry Road Intersection

Goal Statement

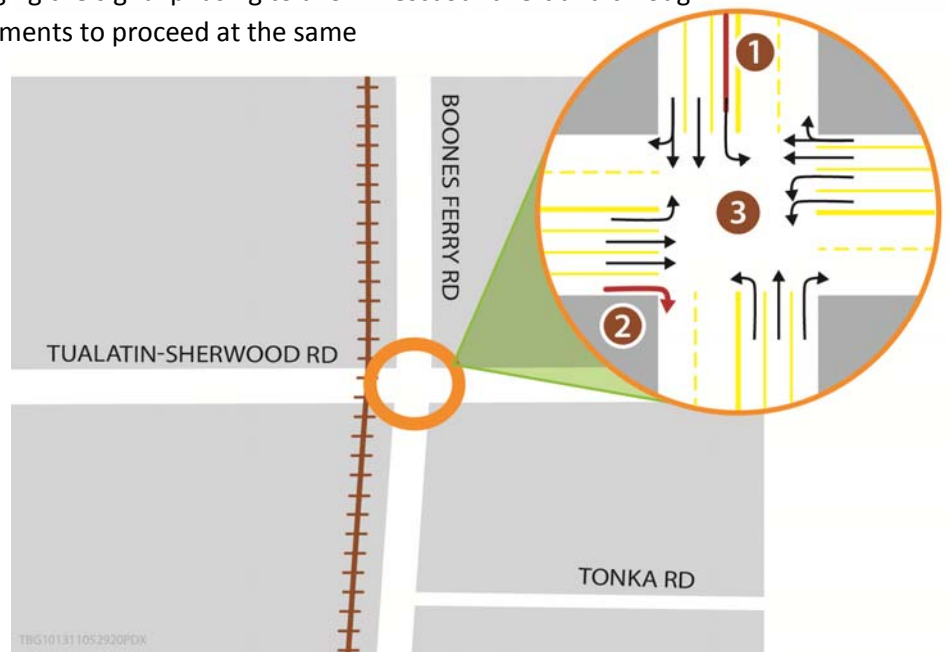
The intersection of Tualatin-Sherwood Road and Boones Ferry Road is one of the busiest in the City. It is the junction of two major arterials, serves traffic moving north-south and east-west, has commercial businesses on all four corners, and is the location of WES commuter rail service. The intersection is already wide and intimidating to pedestrians. Right-of-way is limited for further widening.

Potential Solution

The team looked into several treatments that would improve conditions at this intersection while minimizing further widening.

These include:

1. Lengthening the southbound left turn pocket on Boones Ferry Road
2. Adding a right turn pocket on Tualatin-Sherwood Road
3. Changing the signal phasing to allow westbound left and through movements to proceed at the same time.



Consideration Area	Comments	Score
How would this solution affect traffic locally?	- Overall intersection operation improvements allow for better east/west traffic flow. - Capacity improvements on side streets could allow for a signal timing shift on Tualatin-Sherwood Road. - The intersection is still likely to be over capacity by 2035 (PM peak hour).	
How would this solution affect traffic city-wide?	Most impacts would be local with little city-wide effect.	
Design Constraints / Considerations	- Lengthening the southbound left turn pocket would have impacts to the northbound turn pocket at Nyberg Street and the Hagens parking lot. - Adding a right turn pocket on Tualatin-Sherwood Road would require improvements to the signal and railroad crossing and sidewalk/planter on Tualatin-Sherwood Road and available right-of-way width would need to be reviewed for adequacy.	
Environmental / Policy Considerations	- Drainage ditch impacts from the right turn pocket on eastbound Tualatin-Sherwood Rd. - Adding a turn pocket would move Tualatin-Sherwood Road closer to the business at that corner.	

Refinement Area #6: Boones Ferry Road

Five-lane option North of Martinazzi Avenue

Goal Statement

Boones Ferry Road serves as the main north-south arterial in Tualatin west of I-5. It connects Tualatin with Wilsonville to the south and Durham and Tigard to the north. Because of its length, Boones Ferry Road serves different needs – to the south it serves the many residents of south Tualatin, and the Byrom Elementary and Tualatin High Schools. Between Warm Springs and the Tualatin River, Boones Ferry Road is one of the major streets serving the core of downtown.

North of the river it transitions to Upper Boones Ferry Road to Durham and Tigard, and Lower Boones Ferry Road to serve the Bridgeport Village Regional Center. Our team's analysis has found the intersection of Boones Ferry Road and Lower Boones Ferry Road is one of the more congested intersections in the City. Overall the corridor has seen four reported crashes involving bicyclists, and two involving pedestrians, in the last three years.

Solution

The team explored widening Boones Ferry Road between the intersection of Lower Boones Ferry Road to the north and Martinazzi to the south, as well as keeping that section three-lanes. Assumes replacement of the Tualatin River bridge.

Consideration Area	Comments	Score
How would this solution affect traffic locally?	Could potentially shift traffic from Tualatin-Sherwood Road (east of Boones Ferry Road) and away from the Nyberg interchange.	
How would this solution affect traffic city-wide?	Would shift traffic from Hwy 99W/Durham Road, and from Interstate 5 between the Boones Ferry Road and Nyberg interchanges onto Boones Ferry Road	
Design Constraints / Considerations	- Would have minor (likely temporary) impacts on natural resources. - Would require little, if any right-of-way. However accesses would be affected and would need to be reconstructed. - The railroad crossing between the bridge and Lower Boones Ferry Road would require coordination with ODOT Rail and the Railroad.	
Environmental / Policy Considerations	Widening Boones Ferry Road would not impact any structures, mainly landscaping adjacent to the roadway.	



Refinement Area #6: Boones Ferry Road

Options between Martinazzi Avenue and Warm Springs Avenue

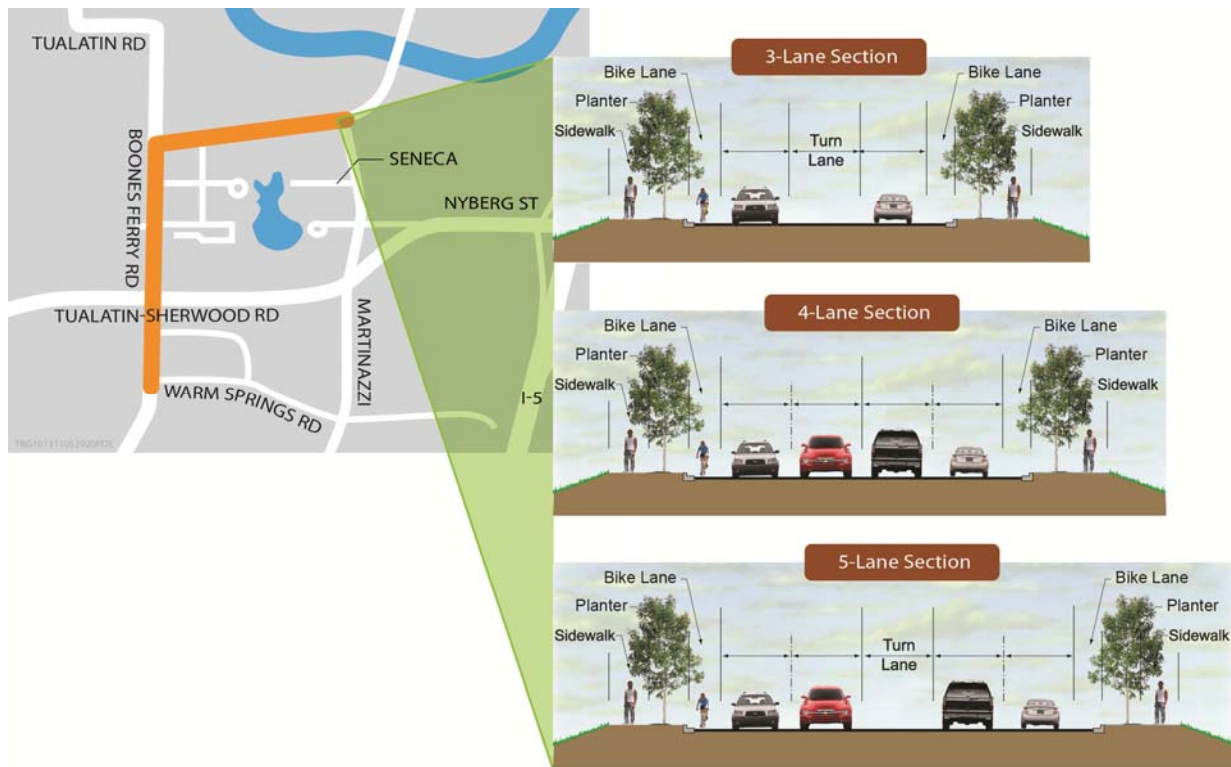
Goal Statement

Boones Ferry Road serves as the main north-south arterial in Tualatin west of I-5. It connects Tualatin with Wilsonville to the south and Durham and Tigard to the north. Because of its length, Boones Ferry Road serves different needs – to the south it serves the many residents of south Tualatin, and the Byrom Elementary and Tualatin High Schools. Between Warm Springs and the Tualatin River, Boones Ferry Road is one of the major streets serving the core of downtown. The intersection of Tualatin-Sherwood and Boones Ferry Roads is one of the most congested intersections in the city. The intersection of Tualatin-Sherwood Road and Boones Ferry road is also the site of 50 crashes in the last five years and has been flagged by Washington County as a location of safety concern. Overall the corridor has seen four reported crashes involving bicyclists, and two involving pedestrians, in the last three years.

Potential Solution

The team explored three options between Martinazzi and Warm Springs:

- Retaining a three-lane section with intersection improvements and coordinated signal timing;
- Widening to four lanes, limiting turning pockets to intersections; and
- Widening to five lanes, with two travel lanes in each direction and a center-turn lane transitioning to a turn pocket at intersections.



Consideration Area	Three-Lane Section with Intersection Improvements and Signal Timing		Four-Lane Section with Turn Pockets at Intersection		Five-lane Section with Center Turn lane	
How would this solution affect traffic locally?	Signal timing improvements alone have a minor improvement, but there would still be intersection deficiencies.	☐	- Would improve operations along the corridor to better meet demand, while shifting traffic from Interstate 5 and away from the Nyberg interchange. - Could add delay on the corridor due to turning vehicles in the travel lane	☐	Would improve operations along the corridor to better meet demand, while shifting traffic from Interstate 5 and away from the Nyberg interchange.	●
How would this solution affect traffic city-wide?	Effects are mostly local with signal timing improvements.	☐	- The effects are mostly local - Shifts traffic away from I-5 and the Nyberg Interchange	☐	The biggest effect is the shift from traffic away from Interstate 5 and the Nyberg interchange.	☐
Design Constraints / Considerations	- Would not impact natural resources. - Minor impacts associated with intersection improvements.	●	- Would have minor (likely temporary) impacts on natural resources. - Would require right-of-way, and would impact accesses.	☐	- Would have minor impacts on natural resources. - Would require additional right-of-way and reconstructed accesses.	☐
Environmental / Policy Considerations	Few impacts – maintains the existing cross-section	●	- Would impact businesses and parking between Martinazzi and Warm Springs - Would make it more difficult for turning vehicles to access driveways in this section.	☐	Would impact businesses and parking between Martinazzi and Warm Springs.	○

Refinement Area #6: Boones Ferry Road

Options South of Warm Springs

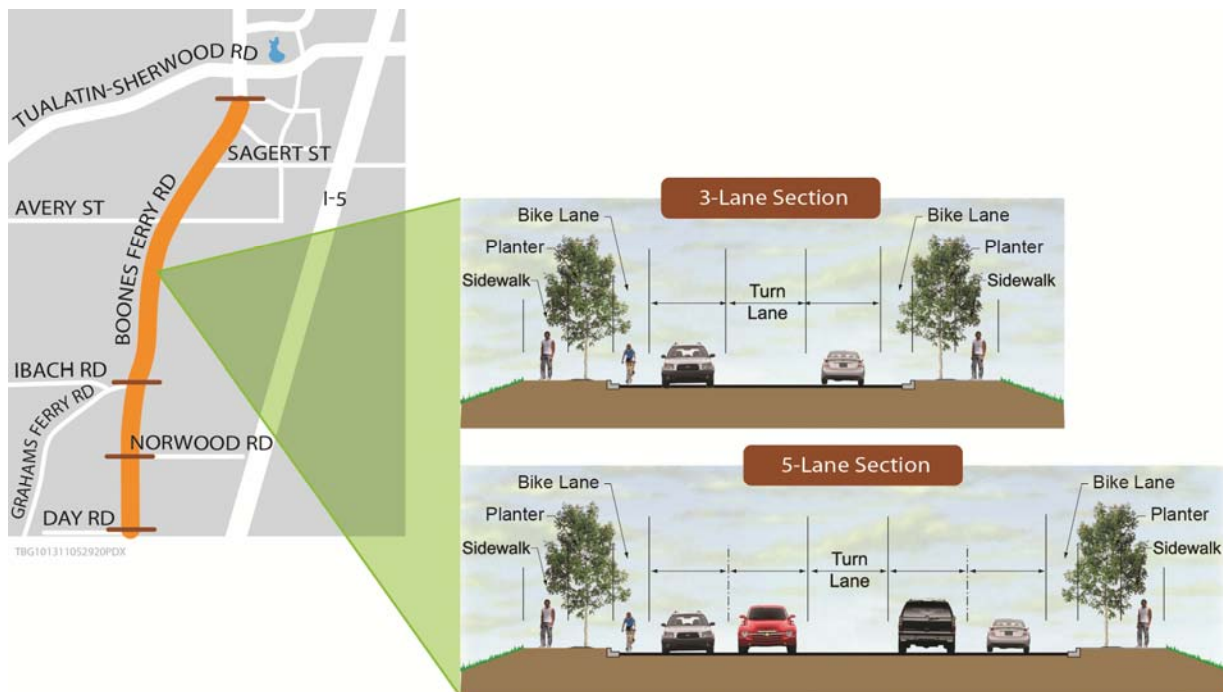
Goal Statement

Boones Ferry Road serves as the main north-south arterial in Tualatin west of I-5. It connects Tualatin with Wilsonville to the south and Durham and Tigard to the north. Because of its length, Boones Ferry Road serves different needs – to the south it serves the many residents of south Tualatin, and the Byrom Elementary and Tualatin High Schools. Overall the corridor has seen four reported crashes involving bicyclists, and two involving pedestrians, in the last three years.

Potential Solution

The team explored widening Boones Ferry Road to five lanes between Warm Springs and Ibach, and between Ibach and Norwood. Between Norwood and Day Boones Ferry Road will be expanded to three lanes (this latter project is planned for construction by Washington County).

The other option is to keep Boones Ferry Road at three lanes and improve signal timing and make targeted improvements at intersections.



Consideration Area	Three Lane Cross Section		Five Lane Cross Section	
How would this solution affect traffic locally?	- The three lane section would slightly improve intersection operations - Would not add additional vehicles on the roadway		- The 5 lane option would address 2035 PM peak hour capacity and operational deficiencies along Boones Ferry Road. - Widening would add approximately 200-300 vehicles in each direction along Boones Ferry Road. - Widening Boones Ferry Road from 3 to 5 lanes changes V/C and LOS at the following intersections: - Improves Sagert St: from 1.11, LOS E to 0.84, LOS C - Improves Avery St: from 1.15, LOS F to 0.96, LOS D - Improves Ibach St: from 0.98, LOS D to 0.88, LOS C	
How would this solution affect traffic city-wide?	Would have little effect on city-wide traffic		Moderate levels of traffic would shift from the new 124th Avenue extension, 65th Avenue, and 105th Avenue/Blake Street (a local roadway) to Boones Ferry Road.	
Design Constraints / Considerations	- Would have few impacts on right-of-way as the roadway is already 3 lanes wide. - Intersection improvements could require additional room to add turn lanes, etc, though few impacts are anticipated		- Widening to 5-lanes is relatively straight forward from Warm Springs to Norwood. - There may be some opportunities to improve vertical profiles and horizontal curves for sight distance. - Right of way varies throughout the corridor with some newer developments having full width for 5-lanes, while other areas have structures up to the ROW line.	
Environmental / Policy Considerations	None		- Some houses are very close to Boones Ferry Road between Warm Springs and Norwood. Widening Boones Ferry Road in this area would impact setbacks and landscaping; though no houses would be impacted. - Widening the roadway could have some small impacts to Little Woodrose Nature Park, depending on the design of the widening. There are no other environmental concerns as the area is already built-up residential.	

Refinement Area #7: Downtown Connectivity

Connections for Nyberg and Seneca

Goal Statement

Connectivity within the downtown core is limited by the Lake at the Commons, the railroad line, and high traffic volumes along the Boones Ferry Road and Tualatin-Sherwood Road corridors.

Potential Solution

Connect both sides of Seneca Street via a pedestrian and bicycle bridge over the lake. Connect to existing path around the lake, providing a connection for through east-west bicycle and pedestrian traffic.



Consideration Area	Comments	Score
How would this solution affect traffic locally?	No effects on local traffic	N/A
How would this solution affect traffic city-wide?	No effects on city-wide traffic	N/A
Design Constraints / Considerations	Impacts to lake are temporary and minor	●
Environmental / Policy Considerations	- Tualatin Commons and Tualatin Commons Park are City-owned parks - The lake is human-made and a bridge and is not expected to impact habitat	●