



MEETING AGENDA

TRANSPORTATION TASK FORCE

August 23, 2012

5:00pm – 8:00pm

**Tualatin Police Department Training Room
8650 SW Tualatin Road**

1. WELCOME AND CALL TO ORDER

Purpose of the Meeting: TSP meeting focused on the Refinement Area discussions

2. COMMUNICATION FROM THE PUBLIC

Limited to 3 minutes

3. GENERAL ITEMS

- A. Accept Meeting #13 Summary
- B. Announcements

4. PROJECT UPDATE: TRANSPORTATION SYSTEM PLAN

5. REVIEW OF REFINEMENT TOPIC AREA ANALYSIS

- A. North / South Connectivity
- B. Tualatin-Sherwood Road
- C. Boones Ferry Road
- D. Downtown

6. TUALATIN TRANSPORTATION SYSTEM PLAN NEXT STEPS

7. COMMUNICATION FROM THE PUBLIC

Limited to 3 Minutes

8. NEXT MEETING

Community Transportation Summit - September 20, 2012, 5:00pm - 8:30pm
Transportation Task Force Meeting - October 4, 2012, 5:00pm - 8:00pm



City of Tualatin

**Tualatin Transportation Task Force
DRAFT Meeting #13 Summary
August 16, 2012, 5:00-8:00pm
Tualatin Police Department
8650 SW Tualatin Road
Tualatin, OR 97062**

Committee Members Present

Alan Aplin – *TPC Representative*
Allen Goodall – *Business Representative*
Brian Barker – *TVF&R*
Bruce Andrus-Hughes – *TPARK Advisory*
Candice Kelly – *Alt. Tualatin Tomorrow Rep.*
Charlie Benson – *Citizen Representative*
Cheryl Dorman – *Tualatin Chamber of Commerce*
Deena Platman – *Metro*
Julia Hajduk – *City of Sherwood*
John Howorth – *Alt. Citizen Representative*
Joelle Davis – *City Councilor*
Kelly Betteridge – *TriMet*
Jan Giunta – *CIO Representative*
Monique Beikman – *City Councilor*
Nancy Kraushaar – *Citizen Representative*
Ray Phelps – *Business Representative*

Ryan Boyle – *Citizen Representative*

Committee Members Absent

Amanda Hoffman – *City of Wilsonville*
Bethany Wurtz – *Tualatin Tomorrow Rep.*
Bill Beers – *TPC Representative*
Gail Hardinger – *Alt. Business Representative*
Judith Gray – *City of Tigard*
Karen Buehrig – *Clackamas County*

Lidwien Rahman – *ODOT*
Mike Riley – *CIO Representative*
Nic Herriges – *Alt. Citizen Representative*
Steve L. Kelley – *Washington County*
Travis Evans – *Citizen Representative*
Wade Brooksby – *City Councilor*

Public in Attendance

Brett Hamilton
Dolores Hurtado
Kathy Newcomb
Kevin Ferrasci O'Malley
Linda Moholt
Joe Lipscomb
June Bennett
Mark Fryburg

Staff, Project Team and Special Guests

Alice Rouyer – *City of Tualatin*
Ben Bryant – *City of Tualatin*
Aquilla Hurd-Ravich – *City of Tualatin*
Cindy Hahn – *City of Tualatin*
Kaaren Hofmann – *City of Tualatin*

Theresa Carr – *CH2M Hill*
Matt Hastie – *Angelo Planning*
Eryn Kehe – *JLA Public Involvement*
Kelly Skelton – *JLA Public Involvement*

WELCOME AND CALL TO ORDER

Eryn Kehe from JLA Public Involvement welcomed the group and thanked them for their attendance. She explained that this was the last Task Force meeting for the Linking Tualatin project and that the last hour of the meeting will focus on the TSP and include a review of the fourth refinement area. Eryn kicked off the meeting by asking everyone at the table to introduce themselves and share one thing they like about our hot weather.

COMMUNICATION FROM THE PUBLIC

None

GENERAL ITEMS

Accept Meeting #12 Summary

- There were some suggested changes from Kathy Newcomb sent via email to Eryn.
 - o Typo on page six should say “regional transportation plan” (not “regional travel plan”)
 - o Corrections to Kathy Newcomb’s public comment – she wanted to clarify what she said. Those corrections were provided by email.
- Julia Hajduk requested a clarification that Sherwood does not have one full time employee working on transportation, and Julia cannot answer any questions about Linking Tualatin.
- Jan Giunta commented that it was her recollection was that option 3 was not approved and that it would be brought back for approval. Jan remembers clearly that the group did not come to consensus on the 65th refinement area. Eryn clarified that “approval” in this case meant that the Task Force agreed to move the project forward for further discussion online and at the September Transportation Summit. She remembered the Task Force agreeing to move this refinement area forward. She asked the rest of the group, and several remembered it being moved forward for further discussion with full consensus from the Task Force. Eryn said the meeting recording would be reviewed for a definitive answer.
- The minutes were approved.

Announcements

- o Ben Bryant said the Basalt Creek Transportation project will have a meeting with CIO6 next Wednesday, August 22nd. The next Policy Advisory Group meeting for Basalt Creek will be on September 13th in Wilsonville at 6:30 pm.
- o There will be an open house for the ODOT Oregon Passenger Rail project on September 13th, at 5:00 pm at the Lake Oswego Phoenix Inn.
- o Update from TPARK (Bruce Andres-Hughes)
 - TPARK discussed the TSP at their last meeting and passed several recommendations and resolutions that will be discussed at the next meeting. They discussed:
 - Option 1 of the north-south connectivity plan, TPARK is recommending that the option be completely eliminated due to impacts to Tualatin Community Park.
 - Recommend that Option B18 (build a bridge over 99W) be reinstated into the TSP. This option was eliminated early on due to anticipated costs. TPARK believes there would be funding sources for a bridge.

- TPARK recommends that the TSP include a new cross-section of a transportation facility where a multi-use path is included inside the road right-of-way.
- Eryn said all of these issues will not be discussed tonight but will be addressed at next week's TSP meeting on August 23, 2012.

Project Update: Linking Tualatin by Cindy Hahn

Cindy showed the Process diagram and indicated that the project is at step four "Develop a Draft Plan". She clarified roles of the group for tonight's meeting:

- o Receive and review the Linking Tualatin Conceptual Plan, comments due to Cindy by **August 31st**. Cindy passed out copies of the plan, printed and on disc.
- o Hear about potential changes to Transit Ready Places.
- o Receive a briefing on the Plan adoption process.
- o **Accept** implementation actions.
- o Make a statement about linking public transit in Tualatin to the rest of the region.

Matt Hastie from Angelo Planning said the plan contains a lot of content that this group has seen before at the previous meetings and workshops.

The Linking Tualatin Conceptual Plan includes:

- Introduction and background
- Transit ready places overview
- Transit ready places recommendations
- Relations to SW Corridor Plan
- Implementation actions and next steps (a copy of this section was attached to the meeting packet)

Additions and Refinements:

- Reflect Task Force, TPC, TPARK, Council, and community feedback
- Add list of transportation improvements
- Create Phasing Plan
- Clarify Adoption Approach

Transit Ready Places:

Comments and Potential Changes identified by various groups:

- Meridian Park mixed use, road improvements (TTF) - there were concerns about effects on transportation and roads. The TSP team is evaluating the possible impacts and will report back on how to address the issues at the next task force meeting.
- Clarify areas where mixed-use is allowed (TTF). These changes will be implemented on the transit ready areas maps.
- Multiple area trail additions (TPARK). They had suggestions for adding future potential trails; maps now reflect these additional trails.
- Off-street bicycle paths to key transit facilities and destinations (Planning Commission). Technical team will look into it.

Comments and Potential Changes from City Council:

- Clarify "adoption" process, impact on future land use decisions.
- Ensure proposed land use (e.g. Meridian Park) changes don't preclude other city priorities.
- Address previous concerns about controversial areas (e.g. Meridian Park expansion).
- Discuss site-specific ideas with property owners and others (community colleges, parks).

Matt asked the group if anyone felt like something was missing. There were no comments.

Adoption Strategy (presented by Aquilla)

- Land use options
 - Adopt by reference (means that in the transit section of TSP there would be a copy of the document as reference, land use codes still apply)
 - Accept the plan (acknowledges the work; can be used to feed into the SW corridor process, also will include a list of projects in the TSP; doesn't have the same level of endorsement as adopting)
- Transit related options
 - Include identified improvements in TSP

She said that this will be a topic of discussion with City Council at their September 10th work session.

IMPLEMENTATION STRATEGIES

Eryn and Matt explained that they were looking for the committee's reaction to the following lists of potential implementation strategies. Most would require further action and public involvement before they were used.

Development Code Amendments - these changes would require a planning commission and city council adoption process:

- Expand mixed-use commercial overlay district to other areas
- Allow for more types of business, greater flexibility:
 - Refine industrial business park overlay planning district
 - Use manufacturing business park commercial services overlay
 - Relax restrictions on commercial uses in manufacturing districts along arterial roads (T-S Road, 124th, Hwy 99)
 - Expand uses allowed in manufacturing and other industrial districts
 - Rezone specific properties to allow expanded types of development
- Adopt "Planned Unit Development" provisions in city's development code. Allows more flexibility.

Task Force reaction: All green signs

Other Land Use and Development Actions

- Work with property owners, employers, and residents to better assess needs and desires:
 - Land assembly
 - Phase development
- Consider different funding tools to pay for public facilities:
 - Urban renewal
 - Local improvement districts (LID)
 - Bond measures
- Explore specific ideas with prospective buyers and others:
 - Community college concept
 - Design standards

Task Force reaction: All green signs

Transit Services and Facilities

- Allow increased densities/density bonuses or transfers to create higher employment densities
- Reduce regulatory barriers and improve communications about
 - Permitting
 - Review processes
 - Development fees
 - Design standards
- Promote state, regional, or federal programs that provide tax incentives or subsidies.

Initial Task Force reaction: Mixed signs

General discussion and questions:

- Concerns about increasing densities near wetlands and neighborhoods
- What is a density transfer?
 - Matt clarified that you can transfer density to another property. This is not currently allowed in the City of Tualatin but some cities use this strategy.
- Are there other places to talk about higher density or is just around employment?
 - Matt said it could be applicable in mixed-use areas. Higher residential density was struck from an earlier portion of the plan.
- Increased residential density can increase transportation use. Don't water down architectural design standards.
- Councilor Davis had concern about "reducing regulatory barriers". She wants to get good development without tossing all regulation aside.
 - After discussion the group agreed to change the language to: **Improve communication and continuously review regulatory requirements.**

Final Task Force reaction: All green signs

Transit Services and Facilities:

- Determine type of transit service needed in specific locations
 - Estimated number of residents and businesses in area
 - Coordination of local employees and institutions
 - Consideration of different transit models, e.g. flexible shuttles vs. fixed routes, TriMet vs. local system
- Refine and prioritize plans and locations for suggested transit facilities
- Coordinate with TriMet, Metro, and other cities to advocate for city needs
- Determine the most appropriate approaches to service provision and funding

General discussion and questions:

- What are you referring to when talking about transit models?
 - Matt clarified that this refers to: routes, stops, fixed service, and shuttles.
- How does this relate to TriMet planning?
 - Matt said it's hard to say, partly because we don't have good numbers from TriMet regarding things like required employees. There are rules of thumb that allow the technical team to estimate what they think is needed.

Task Force reaction: All green signs

Other Transportation Improvements:

- Include a refined list of improvements in the TSP
- Prioritize suggested improvements
- Coordinate with property owners, businesses, and residents to refine proposed location and other details
- Require dedication of Right of Way (ROW) as development occurs and where appropriate
- Construct selected improvements as part of the development process
- Seek support and funding for improvements in existing developed areas

General discussion and questions:

- Concern about required dedication of ROW and constitutional/legal issues
- Will bike paths include safe crossings near transit stops?
 - Matt said he's unsure. That needs to be addressed and captured in the TSP.

Task Force reaction: All green signs

SW Corridor Plan – Task Force Statement

Alice Rouyer asked the group to individually make a statement about the SW Corridor Plan. She asked them to think about what message this group wants to send to regional leaders. There is currently a project looking at High Capacity Transit options from Sherwood to downtown Portland. That project is 1/3 the way through its process and a decision will be made by June 2013. After that decision, discussions will begin regarding alternatives or options.

What message do we want to send regional leaders? The following are the responses shared by the group:

- Better east-west connections.
- Respect our time (a number of people supported this comment).
- Transit has to make sense time-wise and be reliable.
- Respect people's time, transit must be convenient to use.
- It is imperative to Tualatin's economy and livability to improve transit in Tualatin. Improve WES ridership, and bus service. Pay attention to the "last mile".
- Wider range of hours and more of a loop for WES. Consider rail where appropriate.
- TriMet focus on and provide east-west connectivity from Oregon City, and north-south from Wilsonville, and Yamhill County. Even with all the transit modes there is little interconnectivity.
- Express routes, define the hub in Tualatin (at least one) where people know they can move to/from Tualatin.
- Define a transit hub.
- Emphasize/understand that not everyone is traveling to/from Portland.
- No more rail, it's fixed and is not compatible with today's mobile society, and it's too expensive. Dedicated bus lanes for peak hours. More flexible hours and routes for buses.
- Be flexible when partners are unable/unwilling to do the things we need done in our community. Be creative and flexible to implement other solutions. Make things happen.
- Timing is imperative—we are an aging population and we need options for seniors. Once we have a hub, ensure that folks can get around.
- The group agreed that they'd like a firm commitment from TriMet to evaluate Tualatin's routes within the next few years. Cheryl mentioned that there is talk about forming a committee to look at bus service options in Tualatin again.

Jan Giunta thanked staff for their hard work on Linking Tualatin, and for an outstanding experience and a great job by all.

Public Comment

Joe Lipscomb has been looking at figure 33 (on page 69) on the transit map, and he thinks only having one bus going south is a big mistake. The 96 bus isn't convenient and frequent enough, especially for seniors. He would like to see a local system added in the southern part of city. The city's master plan for parks is out of date; he wants this group to support the update of the parks master plan. He would hate to see implementation of some of the Boones Ferry Road and Tualatin Road ideas without looking at impacts to the Community Park.

Mark Fryburg, Government Affairs for PGE. PGE is a growth employer in the area (over 400 employees in Tualatin), and they try to be environmentally conscious. PGE almost didn't get gold LEED certified on their recently built facility in Tualatin because of a lack of transit options for employees. There are employees from all over their region at their facilities. Employees have said that transit requires so many transfers so it is too big of a hassle.

Kathy Newcomb said that she is happy to hear the enthusiasm from this group. We never had a chance to set priorities, she thinks they are important and that needs to happen. One urgent need that should be a priority is for park and rides and those were not even mentioned today. They are essential to the success of transit. By the time City Council gets onboard and gives their approval there will not be any land available to build the park and rides. There needs to be a park and ride on 99W as soon as possible. Buses should not be ruled out until all the different options have been looked at.

TRANSPORTATION SYSTEM PLAN: REFINEMENT AREA DISCUSSION

Theresa Carr from CH2M Hill presented next. She led the discussion about the fourth refinement area: Options along Herman and Tualatin Roads.

Theresa responded to some questions that were raised at last meeting, and then she discussed the package of projects proposed along Herman Road and Tualatin Road.

Questions from the last TSP meeting:

- Concerns about safety with painted bike lines through the Nyberg interchange, what is the precedent of bike lanes on ODOT roads, and who maintains them?
 - o The technical team met with ODOT and said they are comfortable with the recommendation for the bike lanes going into the TSP.
 - o The technical team contacted the City of Portland and asked how they maintained the lanes and bike boxes, and any noted safety issues. The City of Portland confirmed that initially there were issues with maintenance and slippery surfaces. They have learned how to best do the painting (a thermoplastic method), which extends the paint life and reduces slippery issues.
 - o ODOT also suggested having the colored bike lanes through the intersections, not over the bridge structure itself, which would help with maintenance. Also, drivers notice the change in paint, it catches their eye.
- Concerns about extending the right turn only lane and how it impacts Fred Meyer and east of the intersection.
 - o The technical team evaluated and stated that there are no impacts to parking or any structures due to displacements. Because of the materials used in the current

retaining wall, additional retaining walls would be fairly expensive. Currently, this project is considered long-term. Improved signage west of the area is also recommended. There are still concerns about this item, but it will be carried forward for additional discussion.

- Concerns about the pedestrian crossing on Nyberg between Kmart and Fred Meyer. The technical team looked at a “Z” crossing, which creates a two-phased crossing. The technical team was worried about signal timing and narrowing the intersection with a straight pedestrian crossing and this option doesn’t have the same negative impacts.
- Technical team is meeting with the City of Lake Oswego next month to discuss the 65th Street extension.
- Concerns were raised about impacts of improvements around the new tennis facility; the technical team has decided that there here should not be any impacts.
- Cost estimates will be available at next week’s meeting.

Refinement Area #4 Options for Herman Road and Tualatin Road

Goal Statement

- Encourage through car and truck traffic to move onto Herman Road and off of Tualatin Rd.

The first step was reviewing the functional classification, which looks at how the road is used, and how it is supposed to be used. Most of Herman Road is a major collector, which is the same function classification at Tualatin Road. A collector is a mid-sized classification, connecting to neighborhoods and regional streets. There are minor and major collectors, the difference being the level of traffic on the road. Arterial streets are regional facilities, bringing people in/out of Tualatin.

Design standards are also reviewed (i.e.: number of lanes, parking, sidewalks, and what speeds). Herman and Tualatin Roads are currently classified the same.

Potential Solution:

- A. Reclassify Herman Road as a Minor Arterial, and retain Tualatin Road’s classification as a Major Collector.
- B. Upgrade the remaining section of Herman Road as a 3-lane cross section between Tualatin Road and Teton Road.
- C. Lower speeds on Tualatin Road.
- D. Eliminate the free right turn at Tualatin Road at the intersection with Herman Road, and consider a roundabout at this location.
- E. Add signals at the east and west ends of Tualatin Road, such as in the vicinity of 115th Ave. and Jurgens Ave.
- F. Remove trees at the intersection of Tualatin Road and 108th Avenue to improve sight distance at this location.
- G. Modify channelization of 124th Ave. and Tualatin Road to encourage traffic to proceed along 124th Ave to the intersection with Herman Road. Consider a roundabout at this location.
- H. Signage that indicates that Tualatin Road is for local traffic.

With these changes the technical team saw adequate changes in traffic to forward as a package. They suggest moving this option forward to the Summit.

Task Force reaction: many yellow signs, a few red.

General discussion and questions:

- Concerns about lack of connection with the Teton solution. They are all linked. It should be a package of three: Tualatin Rd., Herman Rd., Teton Rd.
- Concerns about impacts of widening to three lanes and pushing people into the curves near residential areas.
- Concerns about coming out of Cheyenne because the traffic is so heavy. Modifying Herman Road without talking about Cheyenne doesn't make sense. A roundabout won't help.
- Improvements on east Herman Rd. won't make it more truck friendly, but more pedestrian friendly.
- Make the roundabout at "D" (shown on the map) and make it truck unfriendly so it will reduce the traffic. Trucks of certain lengths and number of axles should be limited.
- Reduce speeds to 30 mph on Tualatin Road through the curves, and then it picks up. Lowering speeds probably won't help, more signals will do a better job.
- Concerns about tree removal at 108th, don't remove entire tree grove.
- Concern about changes at Teton and impacts for the business community.
- These are small improvements to a larger problem; there won't be a big change.
- From a business owner's perspective it doesn't help, it's forcing it all the traffic downtown.
- Preserve the park but make the connection better.
- Concerns that this doesn't solve the problem west of the refinement area.
- Where is the truck traffic going to go once they get to the east end of Herman Road?

Theresa said there are several things on the table that will alleviate traffic in the downtown core; those changes just aren't on Herman Road.

Eryn asked what will make sense to those still opposed to moving this refinement area forward. Comments included:

- Make Teton part of this package.
- Opposed to widening to 3 lanes, maybe make 2 lanes and put culverts and sidewalks in (consultant team needs to look at how many driveways are within the stretch where the 3rd lane would be added).
- Taking off "C" (lowering speeds).
- More specificity on the roundabout and "G".
- Traffic modeling done on "E". (Letters refer to the map)

Theresa reminded the group that long range plans such as these don't include specifics, such as whether or not to do signals or roundabouts. Those decisions are made in the design phase.

The Task Force asked for more information. Theresa agreed to bring something back to the next Task Force meeting.

Public Comment

Kathy Newcomb said that the map for the refinement area only shows the east end of Tualatin Road. Why do people say there are so many trucks on Tualatin Road? We don't have that many trucks, just UPS and Frito Lay trucks and many single occupancy vehicles heading east. Get people onto buses. She has asked people on east end of Tualatin Road and they said they have a lot of buses that come from Herman Road. We need to sit at the corner and find out for sure where these trucks are headed and need to be moved. What happens after Herman Road ends and Tualatin Road heads east?

Brett Hamilton said it seems like reducing cars in one area will just increase traffic elsewhere, he'd like to see the bigger picture. We need to make it easier to get through, not off the road. Choke points are not on this map, they are on the east end. What route do we want them to take? He asked how much speeds will be reduced for letter C and Theresa said probably 5 MPH.

Eryn gauged Task Force reaction again based on the discussion with no changes actually being made to the refinement. There were still many yellow and red cards.

Eryn said that the topic will have to be left here because time has run out. She suggested that the team try to bring this topic back to the Task Force on August 23, 2012, if there is time.

Next Meetings

August 23, 2012 – Transportation System Plan

September 20, 2012 – Transportation Summit

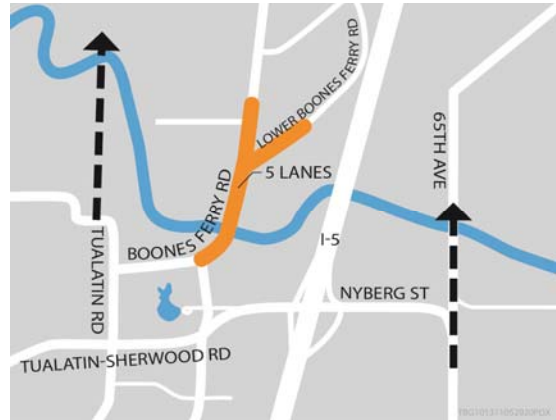
Meeting adjourned.

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

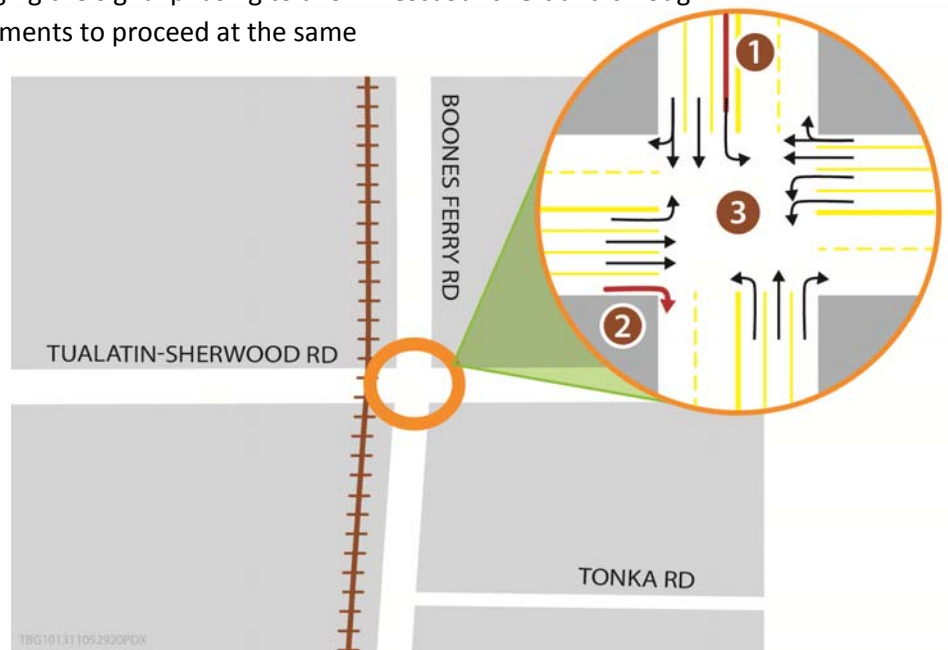
The intersection of Tualatin-Sherwood Road and Boones Ferry Road is one of the busiest in the City. It is the junction of two major arterials, serves traffic moving north-south and east-west, has commercial businesses on all four corners, and is the location of WES commuter rail service. The intersection 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

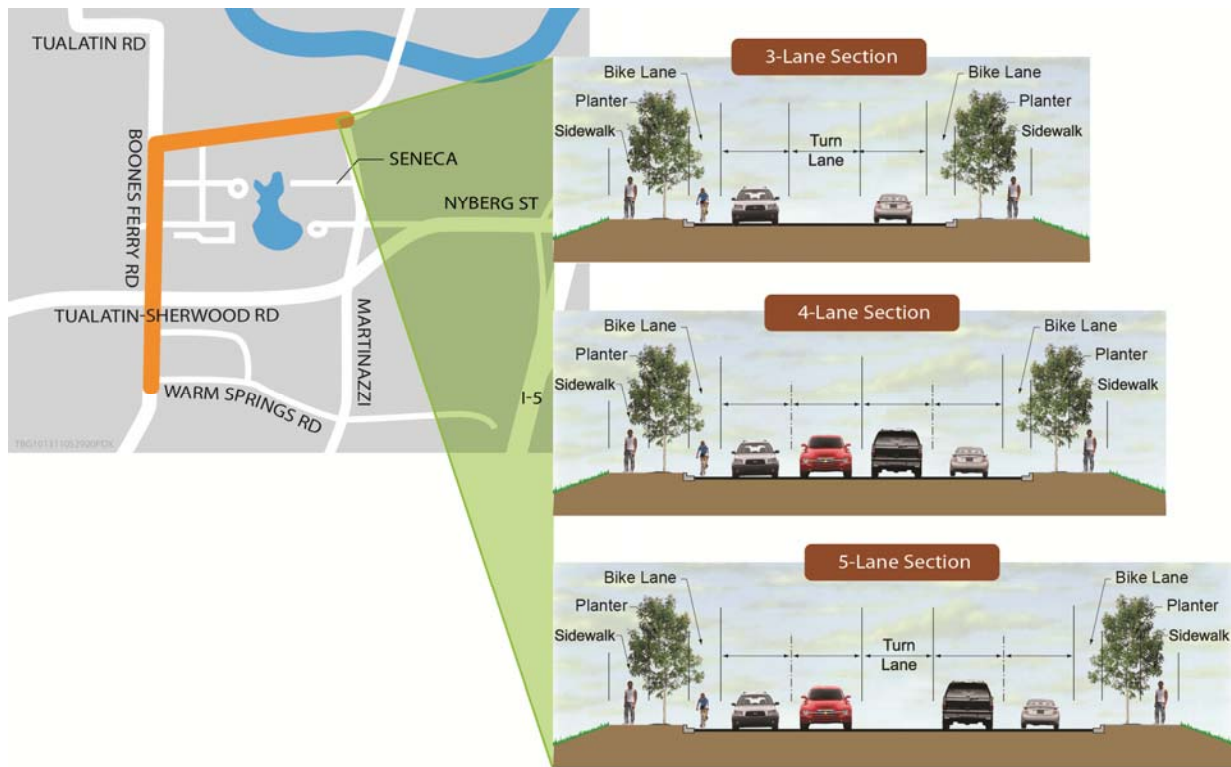
Goal Statement

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

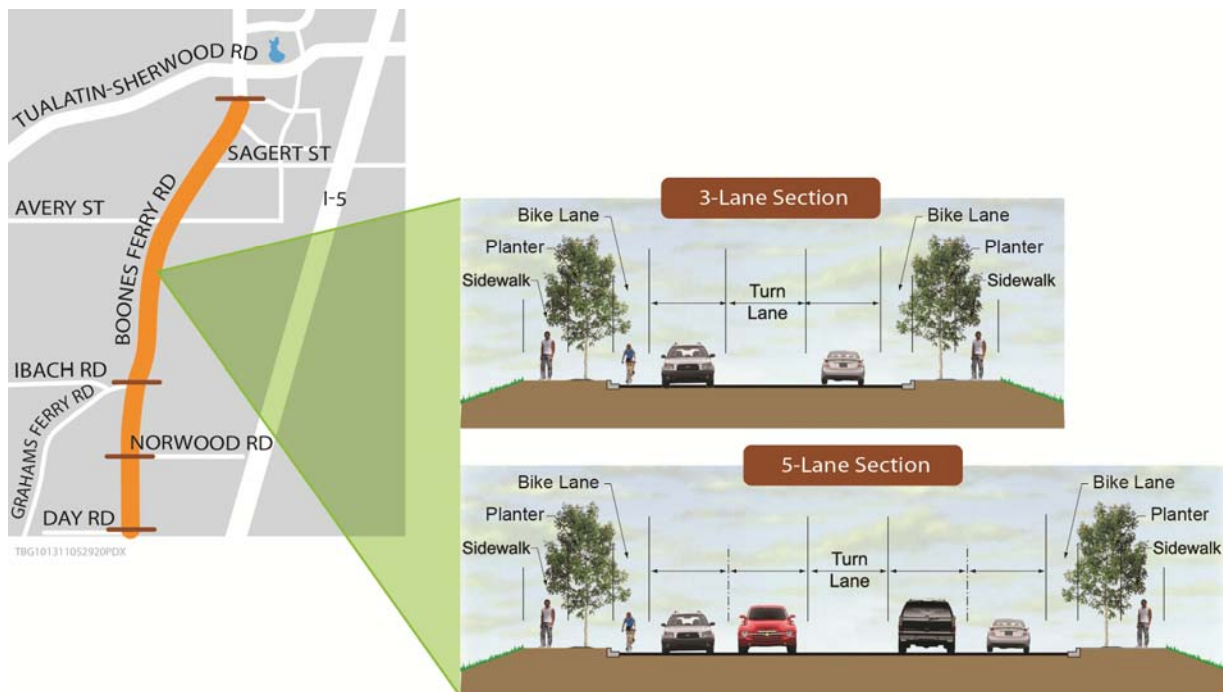
Goal Statement

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	●