



City of Tualatin

Refinement Areas (Part 1)

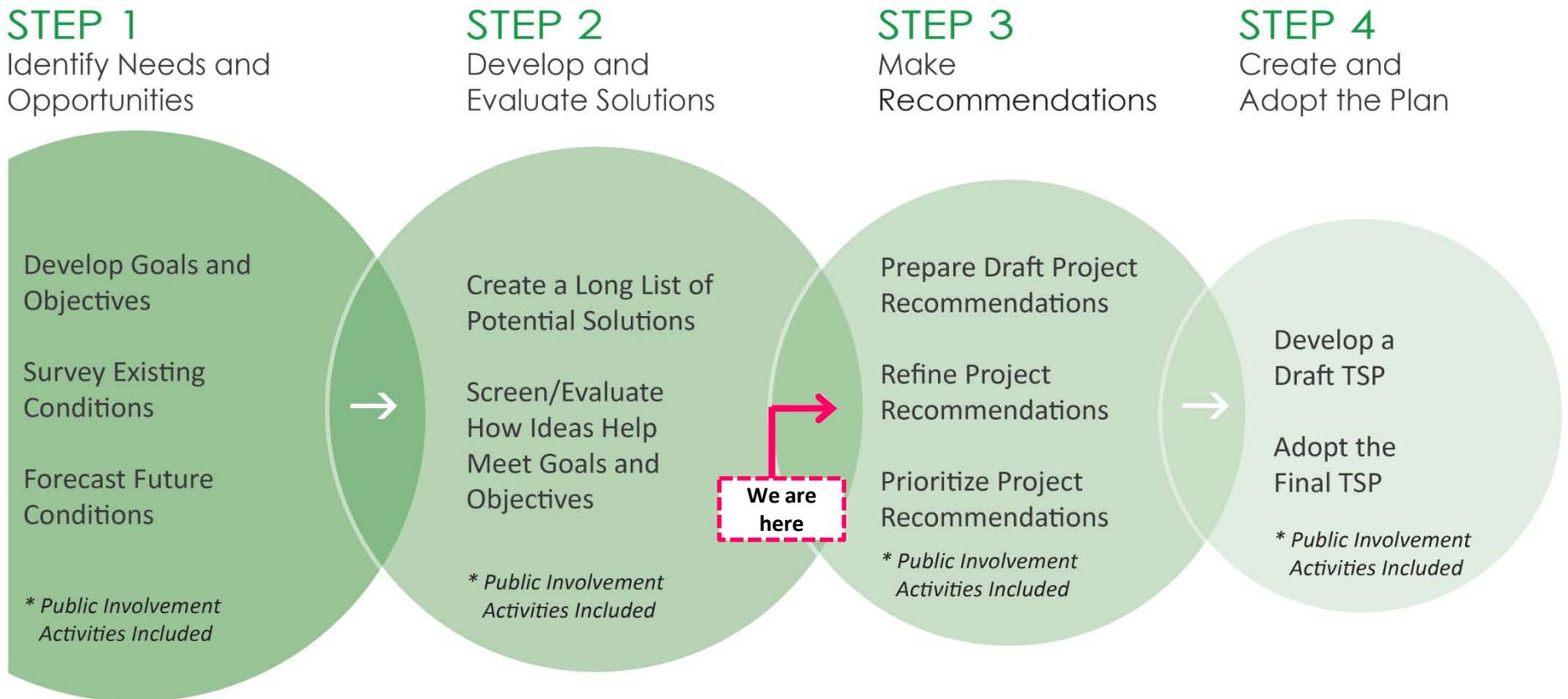
Tualatin TSP

Presentation to
Tualatin Transportation Task Force
July 19, 2012

Presentation Outline

- Focus of tonight's discussion
- Refinement area presentation and discussion
 - Nyberg interchange
 - 65th Avenue
 - North-south connectivity
 - Herman Road and Tualatin Road
- Next steps and preview of August meeting

Where We Are In the TSP Process



Progress Since our June 21st Meeting...

1. Mobilized the team to conduct additional analysis on refinement areas
 - ✓ Traffic and safety
 - ✓ Conceptual design
 - ✓ Environmental and policy
2. Team meetings to share information, package options
3. Discuss options with City, agencies

Our Seven Refinement Topic Areas

1. Nyberg interchange
2. 65th Avenue
3. North to south connectivity
4. Herman Road and Tualatin Road
5. Tualatin-Sherwood Road
6. Boones Ferry Road
7. Tualatin's Downtown Circulation

Tonight's Discussion Focuses on 1-4

1. Nyberg interchange
2. 65th Avenue
3. North to south connectivity
4. Herman Road and Tualatin Road
5. Tualatin-Sherwood Road
6. Boones Ferry Road
7. Tualatin's Downtown Circulation

Next Month's Discussion Focuses on 5-7

1. Nyberg interchange
2. 65th Avenue
3. North to south connectivity
4. Herman Road and Tualatin Road
5. Tualatin-Sherwood Road
6. Boones Ferry Road
7. Tualatin's Downtown Circulation

Plus we will answer questions and revisit anything as needed from tonight's meeting

Organization of Presentation

- Goal statement
- Description and sketch of possible solution
- Considerations
 - Local traffic, safety
 - City-wide traffic
 - Design considerations/constraints
 - Environmental/policy considerations

Your Role Tonight

1. Discuss as a task force the tradeoffs of various solutions
2. What are the benefits of doing something, vs. doing nothing?
3. What are the impacts?
4. Weigh in on forwarding options to the Summit

An Overall Context

- The TSP is in preliminary recommendations stage, through September
- We hope to reach resolution on *some* items tonight
- We don't expect to reach resolution on everything
- The conversation continues...
 - Online
 - August TTF meeting
 - September summit



Refinement Area Discussion

By Topic Area

Refinement Area #1: Nyberg Interchange





Goal Statement (#1 of 2)

Address safety at the Nyberg Interchange for all modes

Possible Solution



- A. Paint bike lanes
- B. Redesign bike lane at east end of interchange
- C. Skip striping on bike lane at west end of interchange
- D. Improve lane signage west of interchange
- E. Move guardrail on SB off ramp
- F. Disallow right turns on red from SB off ramp
- G. Redesign WB-NB movement to enhance safety
- H. Redesign NB off ramp to discourage traffic getting off and then right back onto I-5

Nyberg Interchange - Findings

Consideration Area	Comments	Score
Local traffic/safety	<ul style="list-style-type: none"> • Minor effects on motor vehicle traffic • Moderate safety benefits 	●
City-wide traffic	<ul style="list-style-type: none"> • Minimal effect on city-wide traffic 	◐
Design Constraints / Considerations	<ul style="list-style-type: none"> • Revisions can be incorporated with minor impacts • Provides better delineation for traffic and bicyclists • Redesigns the NB on ramp to allow double rights • Discourages the NB through traffic with minor impacts 	●
Environmental / Policy Considerations	<ul style="list-style-type: none"> • Painted pavement would require ODOT review/approval • Recent precedent for painted bike lanes on ODOT facility • Minor changes to the interchange configuration will not impact the wetlands preservation district 	◐



Discussion

Technical team
recommendation:

Yes, move this option forward
to the Summit

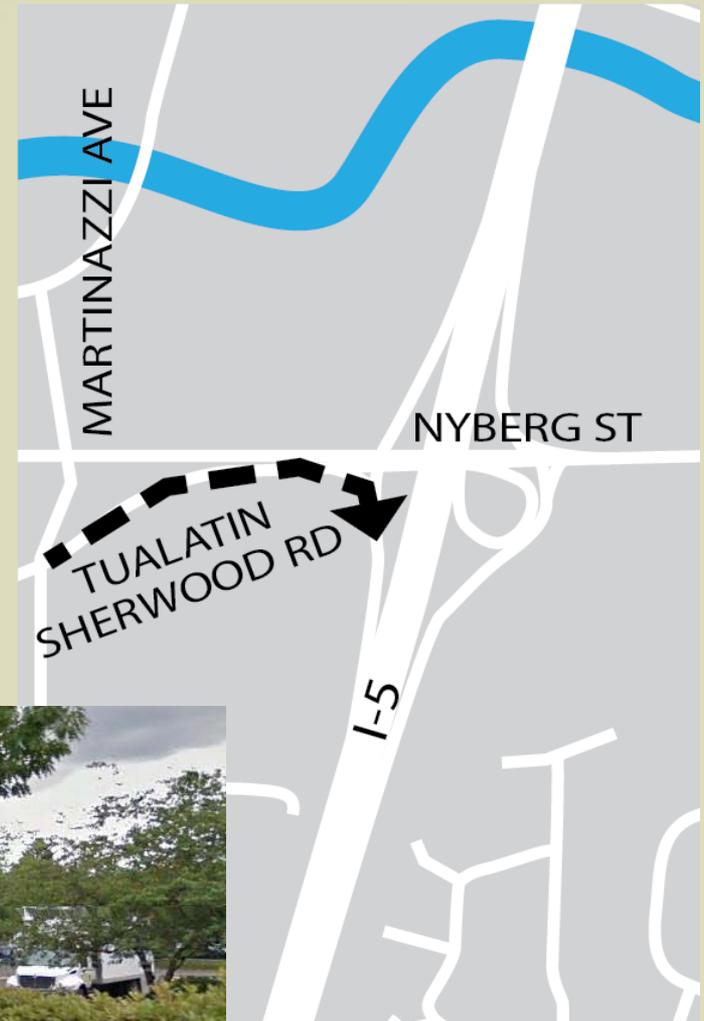


Goal Statement (#2 of 2)

Reduce congestion on Tualatin-Sherwood Road for eastbound drivers

Possible Solution

- Add a new lane on Tualatin-Sherwood Road in the eastbound direction from Martinazzi to I-5



Nyberg Interchange - Findings

Consideration Area	Comments	Score
Local traffic/safety	<ul style="list-style-type: none"> • Minor increase in EB traffic accessing freeway • Operations stay relatively consistent • Could detract from bicycle and pedestrian safety 	
City-wide traffic	<ul style="list-style-type: none"> • This potential solution has minimal effect on city-wide traffic 	
Design Constraints / Considerations	<ul style="list-style-type: none"> • Width of Tualatin-Sherwood Road/Nyberg Street from Martinazzi to the east is tight • No impacts forecasted to the Fred Meyer truck access road • Requires removal of mature street trees • Possible solution would be to shift lanes and widen to median • Past Fred Meyer intersection, widening would likely require walls, structure widening and impacts to sensitive areas 	
Environmental / Policy Considerations	<ul style="list-style-type: none"> • The area is already built • Only impacts are to the landscaping strip between the roadway and Fred Meyer 	



Discussion

Technical team recommendation:

Yes, forward on to summit as a long-term solution (10-20 year timeframe)



Refinement Area #2: 65th Avenue



Goal Statements

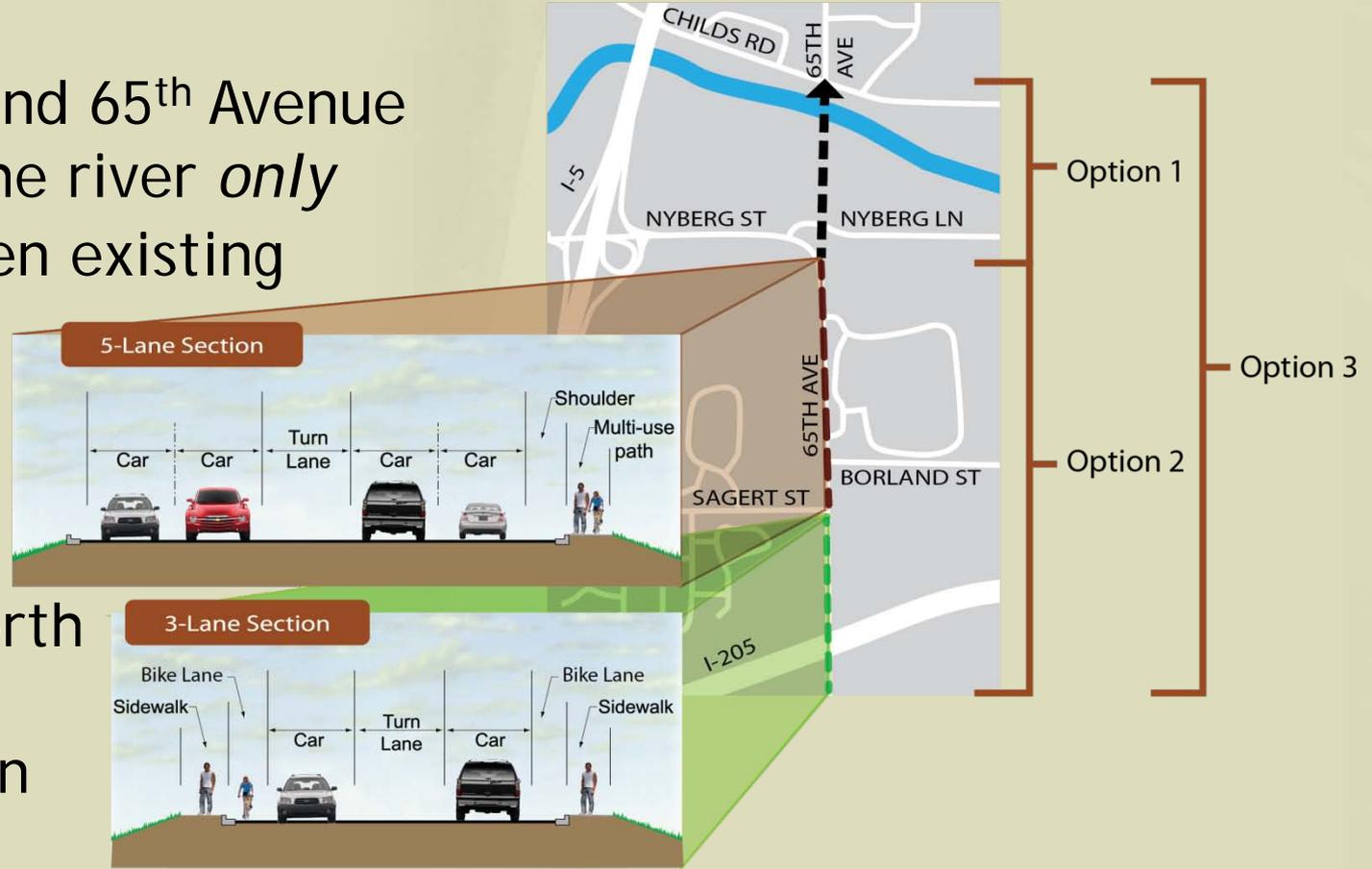
1. Provide north-south connectivity east of I-5
2. Address forecasted future congestion along 65th Avenue

Possible Solution

Option 1: Extend 65th Avenue north across the river *only*

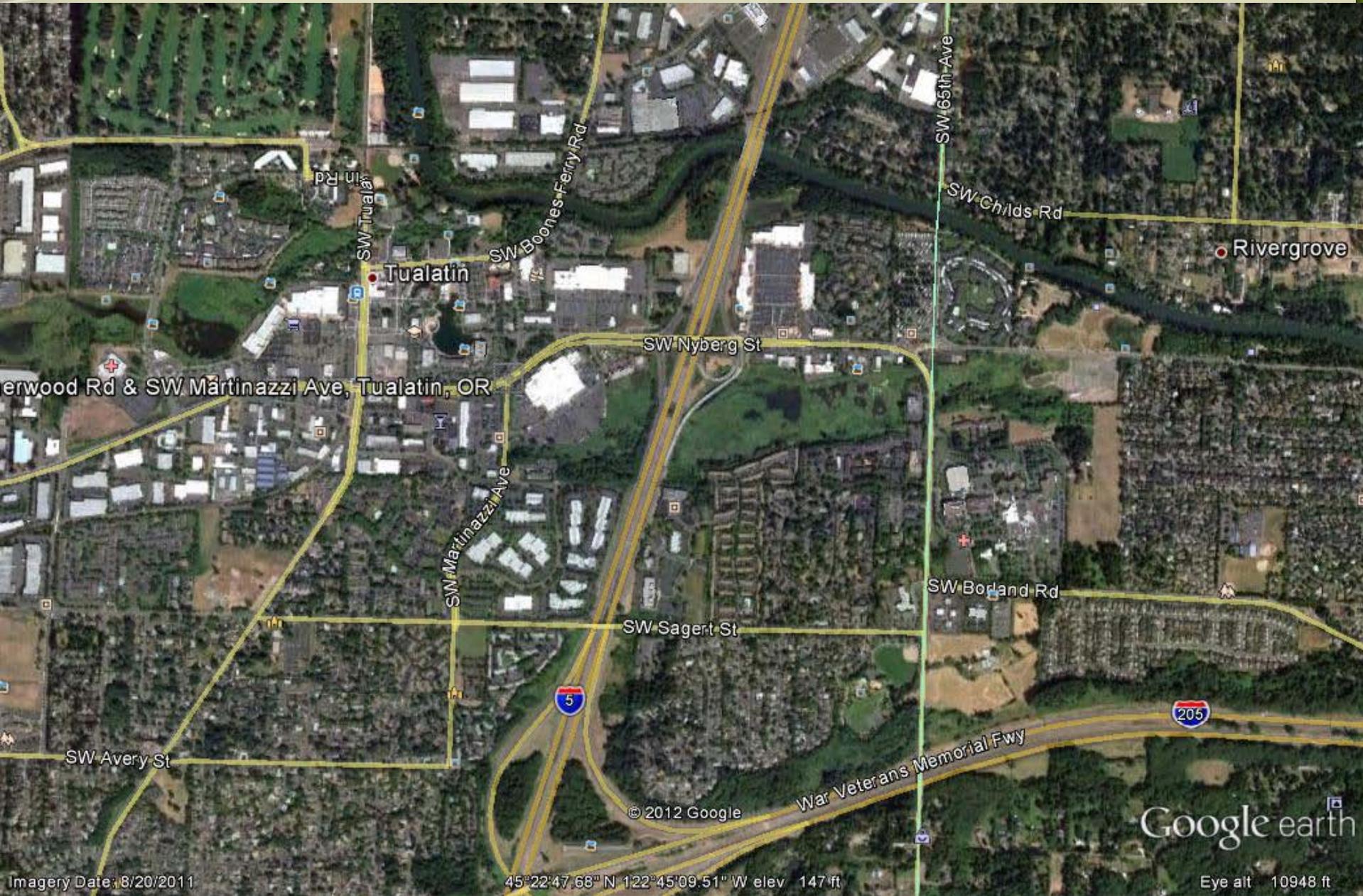
Option 2: Widen existing section of 65th Avenue *only*

Option 3: Extend 65th Avenue north and widen existing section



65th Avenue - Findings

Consideration Area	Comments	Score
Local traffic/safety	<ul style="list-style-type: none">● Extension allows for<ul style="list-style-type: none">➤ Connectivity to north➤ Potential for 1,000-1,200 vehicles during PM peak hour● Widening allows<ul style="list-style-type: none">➤ Capacity to service the future demand on the roadway and at intersections	
City-wide traffic	<ul style="list-style-type: none">● Extension would<ul style="list-style-type: none">➤ Reduce traffic on I-5 and Boones Ferry Road➤ Create slight increase in traffic on Tualatin Sherwood Road eastbound over the Nyberg interchange	



erwood Rd & SW Martinazzi Ave, Tualatin, OR

SW Tualatin
In Rd

Tualatin

SW Boones Ferry Rd

SW Nyberg St

SW 65th Ave

SW Childs Rd

Rivergrove

SW Martinazzi Ave

SW Sagert St

SW Borland Rd

SW Avery St

War Veterans Memorial Fwy

© 2012 Google

Google earth

Imagery Date: 8/20/2011

45°22'47.68" N 122°45'09.51" W elev 147 ft

Eye alt 10948 ft

65th Avenue - Findings

Consideration Area	Comments	Score
Design Constraints / Considerations	<ul style="list-style-type: none"> • <u>Extension</u> considerations: <ul style="list-style-type: none"> ➤ 40' ± right of way available from river to Childs ➤ Alignment could be designed to avoid lift station east/south of Nyberg Lane • <u>Widening</u> considerations: <ul style="list-style-type: none"> ➤ Widening Borland to Nyberg possible for bikes and peds with minor impacts until structure crossing Nyberg Creek and wetlands area ➤ Widening for lane/capacity involves more significant right of way and utility impacts ➤ Signal at Sagert less impactful than combining Sagert and Borland into one intersection 	
Environmental / Policy Considerations	<ul style="list-style-type: none"> • Multi-jurisdictional coordination needed • Impacts to Metro riparian class I-III habitat • Easements or right of way required to extend and/or widen 65th Avenue 	



Discussion

Technical team recommendation:
Forward Option 3 (Extend 65th
Avenue to north, widen
existing section) on to summit



Refinement Area #3: North to South Connectivity



Goal Statement

Improve north-south connectivity west of I-5

Possible Solution

Note: All options below extend north across the Tualatin River, west of I-5

- *Option 1:* Extend west of railroad tracks, east of country club
- *Option 2:* Widen Boones Ferry Road
- *Option 3:* Extend 90th to north (not shown)
- *Option 4:* Extend west of country club (not shown)

North-South Connectivity - Findings

Consideration Area	Comments	Score
Local traffic/safety	<ul style="list-style-type: none">▪ Allows for better north-south connectivity▪ New roadway potential to carry up to 1,000-1,500 vehicles in each direction during PM peak hour	◐
City-wide traffic	<ul style="list-style-type: none">▪ Potential draw from Hwy 99W, Boones Ferry Road, and Interstate 5▪ Potential to affect Downtown roadways, potentially difficult tie-ins with existing street network, impact varies depending on alignment	◐

North-South Connectivity - Findings

Consideration Area	Comments	Score
Design Constraints / Considerations	<ul style="list-style-type: none"> • All options require significant right of way • All options require coordination with Oregon Department of Transportation Rail Division regarding rail crossings • Option to widen Boones Ferry Road has most impacts to existing buildings, followed by extension of 90th and extension west of country club 	
Environmental / Policy Considerations	<ul style="list-style-type: none"> • Multi-jurisdictional coordination needed • Impacts to historic structures • Extension is included in Tigard TSP and Washington County TSP 	



Discussion

Technical Team Recommendation:
None at this time. Obtain input from TTF, come back to August TTF to discuss what (if any) option is forwarded to summit



Refinement Area #4: Herman Road and Tualatin Road



Goal Statement

Encourage through traffic to
move onto Herman Road and off
of Tualatin Road

Possible Solution



- A. Reclassify Herman
- B. Upgrade the remaining section of Herman
- C. Lower speeds on Tualatin
- D. Eliminate free right turn at Tualatin/Herman intersection, consider roundabout
- E. Add signals at the east and west ends of Tualatin
- F. Remove trees at Tualatin and 108th
- G. Modify channelization of 124th and Tualatin, consider roundabout
- H. Signage to indicate that Tualatin is for local traffic

Herman Road and Tualatin Road - Findings

Consideration Area	Comments	Score
Local traffic/safety	<ul style="list-style-type: none">• Major effect is shifting of traffic from Tualatin Road to Herman Road• On the west end traffic is diverted to 124th• On the east end traffic is diverted to Herman• Small amount of traffic shifted to Tualatin-Sherwood Road• Some traffic diverted along Hwy 99W up to Durham Road	
City-wide traffic	<ul style="list-style-type: none">• Minimal effects to city-wide traffic• Majority of effects are local	

Tualatin Road and Herman Road - Findings

Consideration Area	Comments	Score
Design Constraints / Considerations	<ul style="list-style-type: none"> • Traffic calming can be installed with minor impacts • Projects could be chicane type improvements (lane weave) or speed tables • Coordination with Tualatin Valley Fire and Rescue and Tualatin Police likely needed • Improvements to Herman and the intersection of Tualatin/ Herman require right of way • New locations for signals recommended at Jurgens and 115th have not been analyzed for warrants • Removal of tree(s) at Teton, at the SW quadrant improve sight distance but have impacts to natural resources 	
Environmental / Policy Considerations	<ul style="list-style-type: none"> • Some adjacent land would be required north of Herman to widen to three lanes • Potential impact some landscaping and parking • Planter circles and speed table design standards would need to be added to the City's code 	



Discussion

Technical team recommendation:
Yes, move this option forward
to Summit

What Happens Next?

- July - continue analysis and respond to TTF questions
- August 23 meeting - review/discuss findings for remaining refinement areas
 - What are the benefits?
 - What are the impacts?
 - What are we willing to accept?
- Transportation Community Summit in September (September 20th)

Transportation System Plan Timeline

