









City of Tualatin

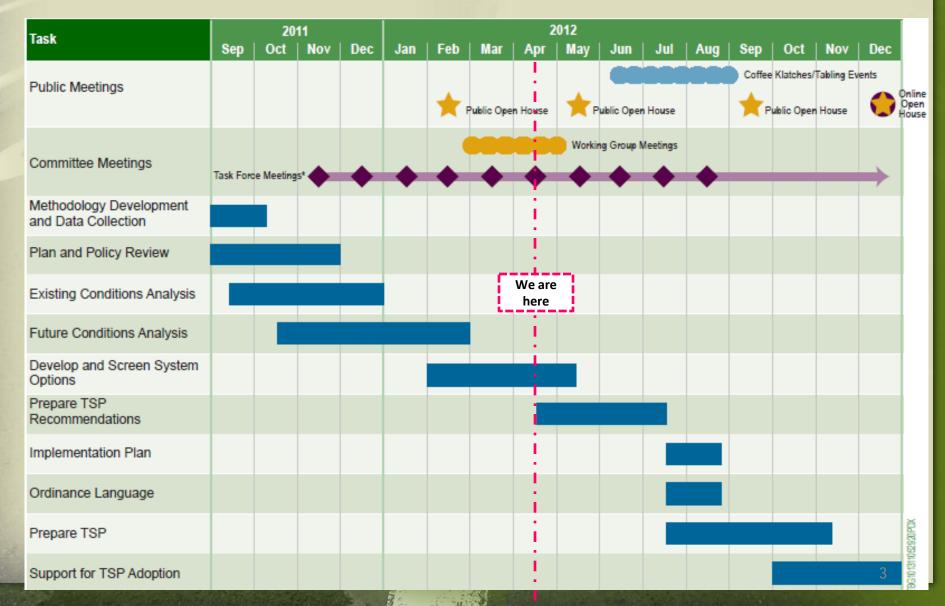
# Project Screening Results Tualatin TSP

Presentation to
Tualatin Transportation Task Force
April 19, 2012

### **Presentation Outline**

- What is the Screening Process?
- Screening Results
  - Bicycle and Pedestrian
  - Downtown
  - Neighborhood Livability
  - Major Corridors and Intersections
  - Transit
  - Industrial and Freight
- Next Steps

### Tualatin's TSP Timeline



## What Progress Have we Made?

- Remember March's theme?
  - "Generating a long list of potential project ideas"
- By April 1, the City collected a total of 248 preliminary project ideas from:
  - The first round of working groups (Feb/March)
  - The first TSP open house (Feb)
  - Online comment map and website
  - You! At March 15<sup>th</sup> Task Force Workshop
  - Ideas from various small group discussions (CIO meetings, Allied Waste, Chamber of Commerce gathering, city staff)

### From Long List, We Screen...

- Screening helps us:
  - 1. Form a feasible set of project ideas to move into evaluation
  - 2. Organize project ideas into different "bins"
    - Project ideas to be evaluated for the TSP
    - Project ideas to be forwarded to others:
      - Other agencies
      - Other departments within the City of Tualatin
    - Projects that do not address a need and/or are not feasible to construct

### Tualatin's TSP Process

#### STEP 1 STEP 2 STEP 3 STEP 4 Identify Needs and Develop and Create and Make Recommendations **Opportunities Evaluate Solutions** Adopt the Plan Develop Goals and Prepare Draft Project Create a Long List of Objectives Recommendations **Potential Solutions** Develop a **Survey Existing** Refine Project Draft TSP We are Screen/Evaluate Conditions Recommendations here How Ideas Help Adopt the Meet Goals and Forecast Future **Prioritize Project** Final TSP Objectives Conditions Recommendations \* Public Involvement \* Public Involvement Activities Included \* Public Involvement Activities Included \* Public Involvement Activities Included Activities Included

### What is a Feasible Idea?

- Our screening questions:
  - 1. Is the project transportation related, and does it address a known transportation deficiency or opportunity?
  - 2. Is it within the City? Is it within the city's control to implement?
  - 3. Is it technically feasible to build this project?\*
  - 4. Is the idea cost prohibitive? Are there more cost effective ways of addressing the same need?

<sup>\*</sup> We used basic engineering design requirements to assess technical feasibility. Projects were removed only if they were nowhere close to meeting design requirements or were thought to make the identified need *worse* than forecasted under the no build analysis.

## The Screening Process

- Second round of working group meetings (March/April)
- Participants were asked to provide input on feasibility of project ideas
  - Red not feasible
  - Yellow not sure and/or have questions
  - Green feasible move forward into evaluation
- Comments recorded for all red cards
- Engineering team used working group notes to assess feasibility of project ideas



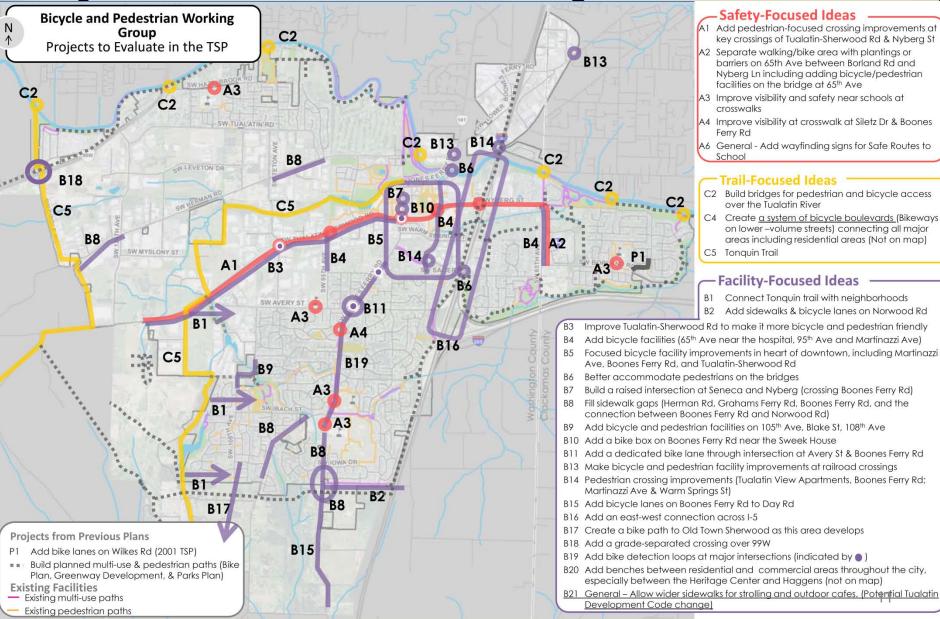
# **Screening Results**

By Working Group Topic Area



# Bicycle/Pedestrian

# Bicycle and Pedestrian - Projects to Evaluate



## Bicycle and Pedestrian - Ideas Screened Out

ID	Project	Based on what screening question?	Action to be taken
A5	Improve lighting at Jurgens Rd and Hazelbrook Rd	1 (transportation related, addressing an identified need)	Forward to engineering
B1	Add a pedestrian overcrossing between the Community park and Tualatin Commons	1 (transportation related), 4 (cost)	Consider upon future development
C3	Add a pedestrian shortcut between Hazelbrook Rd and 99W	1 (addressing an identified need)	Consider if a future development occurs at this location



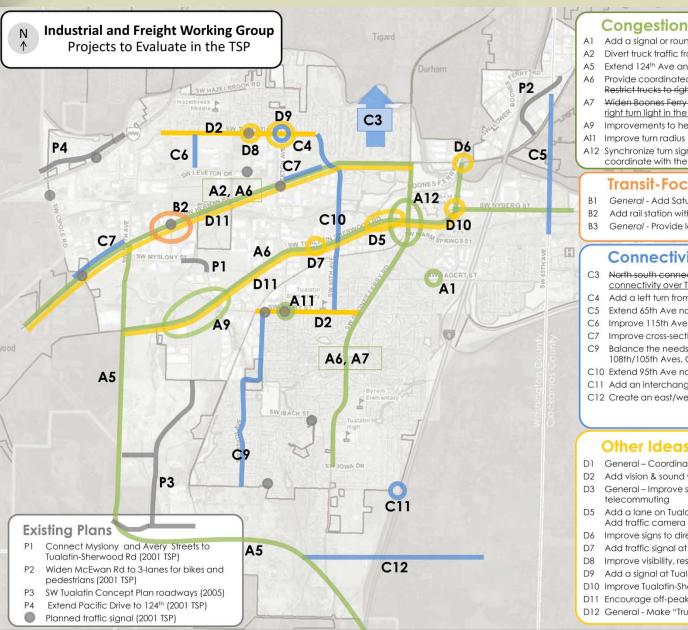
# Bicycle/Pedestrian

Discussion



# Industrial and Freight

# Industrial and Freight - Projects to Evaluate



#### Congestion-Focused Ideas

- A1 Add a signal or roundabout at Sagert St and Martinazzi Ave
- Divert truck traffic from Tualatin Rd to Herman Rd
- Extend 124th Ave and connect to 1-5 south of Tualatin
- Provide coordinated signal timing and access management along major arterials Restrict trucks to right lane. Widen travel lanes.
- Widen Boones Ferry Rd. Remove right turn light at Tualatin-Sherwood Rd. Remove right turn light in the northbound direction on Boones Ferry Rd.
- Improvements to help mobility of through-traffic (Tualatin-Sherwood Rd)
- Improve turn radius at Avery St and Teton Ave, look at congestion
- A12 Synchronize turn signals to/from Boones Ferry Rd to Tualatin-Sherwood Rd; coordinate with the train signal

#### Transit-Focused Ideas

- General Add Saturday, Sunday, late evening transit shuttle
- Add rail station with easy offload and access for industry
- General Provide local loop bus

#### **Connectivity-Focused Ideas**

- C3 North-south connection to Hall Blvd Look for ways to provide north-south connectivity over Tualatin River for vehicles
- C4 Add a left turn from Teton Ave to Tualatin Rd
- C.5 Extend 65th Ave north
- Improve cross-section on Herman Rd
- Balance the needs of neighborhood with local truck movement along 108th/105th Aves. Consider removing trucks/adding truck info signs.
- C10 Extend 95th Ave north to Tualatin Rd
- C11 Add an interchange on I-5 at Norwood Rd
- C12 Create an east/west connection across I-5 (near Greenhill Rd)

#### Other Ideas

- D1 General Coordinate freight receiving/shipping times
- Add vision & sound walls; reduce cut-through traffic.
- General Improve safety and reduce congestion by education and incentivizing
- D5 Add a lane on Tualatin-Sherwood Rd to Fred Meyer, better lane signage for I-5. Add traffic camera for red light violations.
  - Improve signs to direct traffic to correct street
- Add traffic signal at 97th Ave and Tualatin-Sherwood Rd
- Improve visibility, restrict left turns from 108th Ave onto Tualatin Rd
- Add a signal at Tualatin Rd and Teton Ave/Jurgens Rd
- D10 Improve Tualatin-Sherwood Rd/Martinazzi Ave signal timing/add a red light camera
- D11 Encourage off-peak usage on Herman Rd and Tualatin-Sherwood Rd 5
- D12 General Make "Truck Route" signs larger

# Industrial and Freight - Ideas Screened Out

ID	Project Idea	Based on what screening question?	Action to be taken
А3	Provide an undercrossing for Nyberg through traffic under I-5 to avoid signal/conflicts. Create an urban interchange	2 (ability to implement), 4 (cost)	None
A4	Reconsider the connection between 99W and Tualatin-Sherwood Rd (note: in Sherwood)	2 (ability to implement)	Forward to City of Sherwood
A8	Close 90th Ave to 18-wheel trucks	1 (addressing a transportation problem)	Reassess during review of functional classification plan
A10	Create a loop road around central downtown, with a turn radius that works for trucks	1 (addressing a transportation problem), 4 (cost)	None
В3	General – Provide bus from Clackamas MAX stop to WES for employees	1 (addressing a transportation problem)	Forward to TriMet

# Industrial and Freight - Ideas Screened Out (cont'd)

ID	Project Idea	Based on what screening question?	Action to be taken
C1	Add connection and entry to I-205	3 (technical feasibility)	None
C2	Provide direct connection between Herman Rd & Boones Ferry Rd. Consider a tunnel	2 (ability to implement), 4 (cost)	None
C1	Add interchange at Norwood Road	3 (technical feasibility)	None
D4	Move industrial area to the SW area, change to multi-family residential, or buffer existing neighborhood better from industrial area	1 (transportation- related)	Forward to Planning



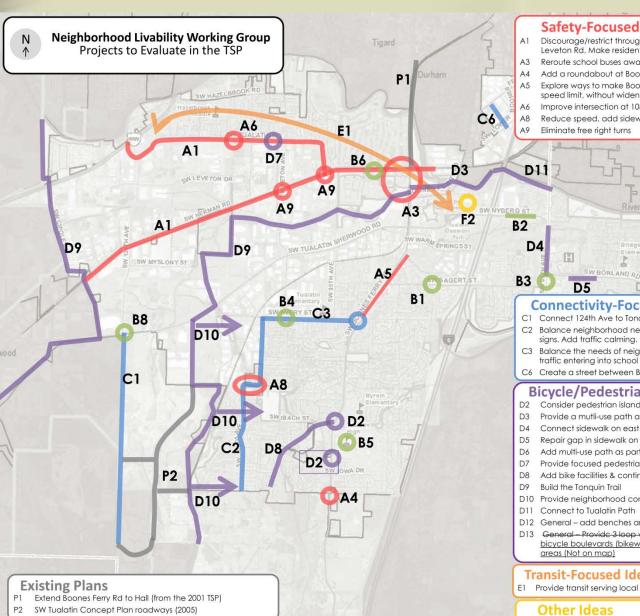
# Industrial and Freight

Discussion



# Neighborhood Livability

### Neighborhoods - Projects to Evaluate



#### Safety-Focused Ideas

- Discourage/restrict through & truck traffic along Tualatin Rd while encouraging a shift to Herman Rd & Leveton Rd. Make residential access along Tualatin Rd easier.
- Reroute school buses away from Tualatin Community Park and two railroad crossings
- Add a roundabout at Boones Ferry Rd & Norwood Rd
- Explore ways to make Boones Ferry Rd more pedestrian-friendly, including the creation of one consistent speed limit, without widening
- Improve intersection at 108th Ave and Tualatin Rd
- Reduce speed, add sidewalks and bike lanes on Blake St curves. Possibly add trail through wooded area.
- Eliminate free right turns

#### **Congestion-Focused Ideas**

- B1 Add a signal or roundabout at Sagert St and Martinazzi Ave
- Add a dedicated right turn lane into Nyberg Woods
- Realign Sagert St and Borland Rd intersection (roundabout or signal)
- Improve intersection at Avery St and Teton Ave
- Address congestion caused by high school
- Adjust signal timing to reflect traffic needs
- Add right turn lane from Tualatin-Sherwood Rd to northbound 124th Ave

#### **Connectivity-Focused Ideas**

- C1 Connect 124th Ave to Tonquin Rd
- C2 Balance neighborhood needs with trucks along 108th/105th Aves. Consider disallowing trucks/truck info signs. Add traffic calmina.
- C3 Balance the needs of neighborhood with local truck movement along Avery St; provide turn lane for traffic entering into school
- C6 Create a street between Boones Ferry Rd and Bridgeport Rd

#### Bicycle/Pedestrian-Focused Ideas

- D2 Consider pedestrian islands on Boones Ferry Rd, near Byrom Elementary and Tualatin High schools
- Provide a mutli-use path along the river
- Connect sidewalk on east side of 65th Ave
- Repair gap in sidewalk on the south side of Borland Rd
- Add multi-use path as part of Tualatin Trail
- Provide focused pedestrian crossing improvements (may need signal)
- Add bike facilities & continuous sidewalks; reduce speed limit
- Build the Tonquin Trail
- Provide neighborhood connections to Tonquin Trail
- Connect to Tualatin Path
  - General add benches around the city for pedestrians, especially between Heritage Center and Haggens
- General Provide 3 loop walking paths that connect all Tualatin Neighborhoods. Create a system of bicycle boulevards (bikeways on lower-volume streets) connecting all major areas including residential areas (Not on map)

#### Transit-Focused Ideas

Provide transit serving local resident needs in north Tualatin, between 99W and downtown Tualatin

#### Other Ideas

Consider changing "no right on red" sign Remove northbound right turn light in Boones Ferry Rd

# Neighborhood Livability - Ideas Screened Out

I	D	Project	Based on what screening question?	Action to be taken
A	2	Improve lighting on Hazelbrook Rd	1 (transportation-related)	Forward to Engineering
A	7	Improve sight distance and reduce speeds at Boones Ferry Rd and Arapaho Rd	1 (does not address a transportation problem)	Forward to Engineering
A	10	Require a stop before vehicles turn right onto Boones Ferry Rd between Mohawk St and Greenhill Lane	3 (technical feasibility)	None
B	7	Add two right turns onto I-5 northbound from Nyberg St	2 (ability to implement)	Forward to ODOT
C	4	Add I-5 Interchange with Norwood Rd	3 (technical feasibility)	None
C	5	Limit Siletz to exit only at Boones Ferry Rd and 105 <sup>th</sup> Ave to minimize cut-through traffic.	1 (not included in TSP analysis)	Revisit upon completion of Boones Ferry Road analysis and recommendations
D	1	Consider a pedestrian overcrossing on Boones Ferry Rd	4 (cost)	Assess more effective, lower cost solutions to pedestrian safety

# Neighborhood Livability - Ideas Screened Out (Cont.)

ID	Project	Based on what screening question?	Action to be taken
F1	Consider ways to lessen noise from 99W and I-5 on nearby residences	1 (transportation related)	Forward to Engineering
F3	Intersection of Ibach/Grahams Ferry is confusing; rename road or better signs; need better lighting	1 (transportation related, addressing a transportation problem)	Forward to Engineering
F4	General – Add gateway signs to announce CIOs	1 (transportation related)	Forward to CIOs
F5	Move industrial area to the SW area (no direct truck route), change to multifamily residential, or buffer existing neighborhood better from industrial area	1 (transportation related)	Forward to Planning
F6	Create small, neighborhood commercial for residents to walk to	1 (transportation related)	Forward to Planning



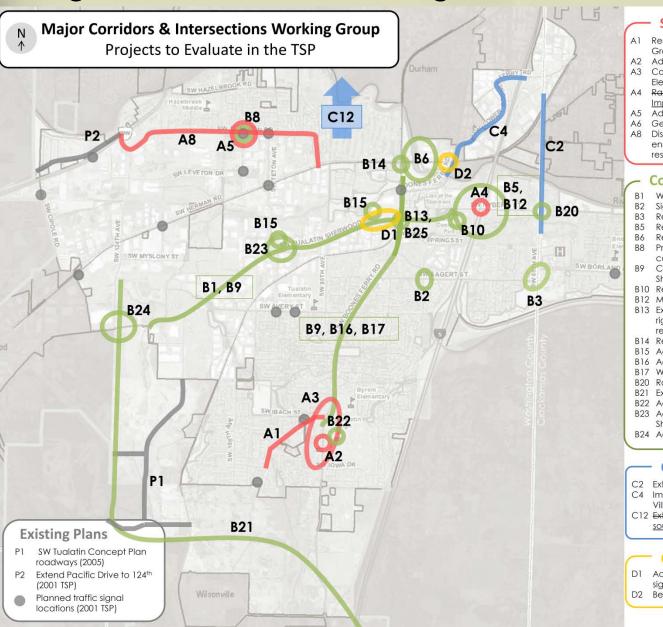
# Neighborhood Livability

Discussion



# Major Corridors and Intersections

# Major Corridors - Projects to Evaluate



#### Safety-Focused Ideas

- A1 Reduce speeds, add guardrail and shoulders to this section of Grahams Ferry Rd
- A2 Add traffic signal at Tualatin High School
- A3 Consistent speed zones for both Tualatin High School & Byrom Elementary School
- A4 Raise the southbound off-ramp to allow a better view of traffic on Improve the sight distance at the I-5-Nyberg Rd interchange
- A5 Add traffic signal on Tualatin Rd at 108th Ave or on Teton Ave
- A6 General consistent use of yellow turn signals on all traffic signals
- A8 Discourage through and truck traffic along Tualatin Rd while encouraging through and truck traffic along Herman Rd. Make residential access easier.

#### Congestion-Focused Ideas

- 31 Widen Tualatin-Sherwood Rd
- S2 Signal or roundabout at Sagert St and Martinazzi Ave
- B3 Realign Sagert St/Borland Rd intersection
- B5 Restrict right turn on red at Nyberg Interchange
- B6 Rethink access in vicinity of Tualatin Community Park
- B8 Prohibit left turns out of 108th Ave <u>or</u> remove trees in the southwest corner
- B9 Coordinate signal timing on Boones Ferry Rd and Tualatin-Sherwood Rd; widen Boones Ferry Rd
- B10 Redesign the intersection at the Fred Meyer (from Nyberg Rd)
- B12 Make two right turn lanes from I-5 north onto Nyberg Rd
- B13 Extend the northbound left turn lane and create a southbound right turn lane on Boones Ferry Rd at Tualatin-Sherwood Rd to reduce backup from WES train; add red light cameras
- B14 Reconfigure Boones Ferry Rd at Tualatin Rd
- B15 Add a 4-way stop by 90th Ave at Kaiser
- B16 Add bus pullouts on Boones Ferry Rd
- B17 Widen Boones Ferry Rd
- B20 Roundabout at Nybera Rd/65th Ave; keep Nybera Rd 2 lanes
- B21 Extend 124th Ave and connect to I-5 and Tonquin Rd
- B22 Address congestion caused by high school
- B23 Add a dedicated right turn lane on Teton Ave at Tualatin-Sherwood Rd
- B24 Add right turn lane on Tualatin-Sherwood Rd at 124th Ave

#### **Connectivity-Focused Ideas**

- C2 Extend 65th Ave north
- C4 Improve traffic flow on Lower Boones Ferry Rd near Bridgeport Village into downtown Tualatin
- C12 Extend Boones Ferry Rd to Hall Blvd-Look for ways to provide northsouth connectivity over Tualatin River for vehicles

#### Other Ideas

- D1 Add Iane on Tualatin-Sherwood Rd to Fred Meyer, better Iane signage for I-5. Install traffic camera for signal violations.
- D2 Better signs needed to direct traffic to correct street

# Major Corridors - Ideas Screened Out

-	Ducinat	Deced on what	A stien to be taken
ID	Project	Based on what screening question?	Action to be taken
A7	Improve sight distance and reduce speeds at Boones Ferry Rd and Arapaho Rd	1 (does not address a transportation problem)	Forward to Engineering
B4	Consider a traffic loop in downtown (one way, right turn only)	1 (addressing a transportation problem), 4 (cost)	Look at other options to address downtown circulation
В7	Consider removing ramp signals at Nyberg interchange	1 (does not address a transportation problem), 2 (Ability to Implement)	Look at other options to address congestion at Nyberg interchange
B1	Consider redesigning the Nyberg interchange into a full cloverleaf	2 (ability to implement), 4 (cost)	Look at other options to address congestion at Nyberg interchange
B1	Add a southbound left turn and right turn lane to Nyberg interchange	1 (does not address a transportation problem), 4 (cost)	Look at other options to address congestion at Nyberg interchange
B1	Restrict trucks to right lane, widen travel lanes	2 (ability to implement)	None

# Major Corridors - Ideas Screened Out (cont'd)

ID	Project	Based on what screening question?	Action to be taken
B25	Limit access and grade separate the intersection of Tualatin-Sherwood Rd and Boones Ferry Rd	1 (addressing a transportation problem), 4 (cost)	None
C3	Construct a new road between Tualatin High School and Byrom Elementary School	1 (does not address a transportation problem)	Look at other options to address school congestion
C5	Improve intersection at 99W and Tualatin Rd	1 (does not address a transportation problem)	None
C6	Extend Tualatin Rd to Lower Boones Ferry Rd	3 (technical feasibility)	None
C8	Add on/off ramps from I-5 to Norwood Rd	3 (technical feasibility)	None
<b>C</b> 9	Widen Sagert St to 2 lanes each way with pedestrian median	1 (does not address a transportation problem)	None 27

# Major Corridors - Ideas Screened Out (cont'd)

ID	Project	Based on what screening question?	Action to be taken
C10	Extend Helenius Road (Grahams Ferry Rd to Norwood Rd)	3 (technical feasibility)	None
C11	Create street grid in Bridgeport	1 (does not address a transportation problem), 2 (ability to implement)	None
D3	Tualatin-Sherwood Rd/Martinazzi Ave – Adjust signal timing, add a red light camera	2 (ability to implement)	Forward to Washington County – potential project already underway
D4	Adjust signal Timing	2 (ability to implement)	Forward to Washington County – potential project already underway

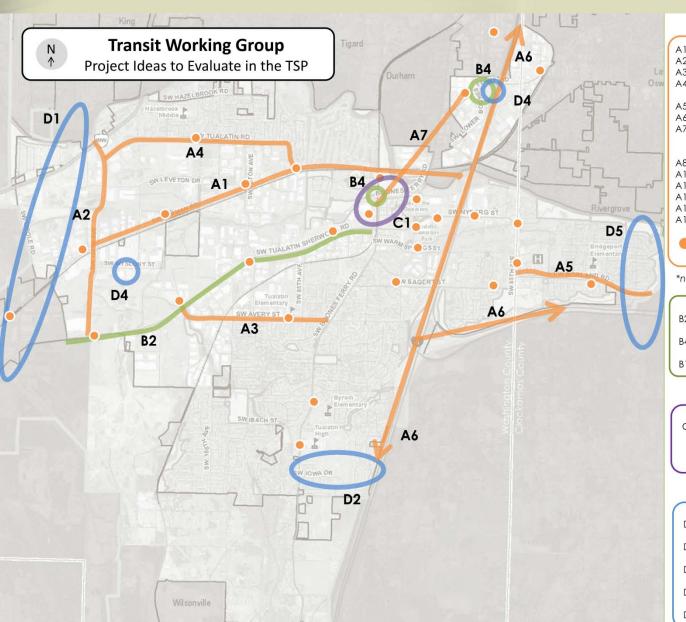


# Major Corridors and Intersections

Discussion

# **Transit**

### Transit - Projects to Evaluate



#### **Bus Service-Focused Ideas**

- Provide bus transit service on Herman Road
- A2 Provide bus transit service on 124th Street
- A3 Provide bus transit service on Avery Street
- A4 Provide bus transit service on Tualatin Road between downtown and 99W
- A5 Extend bus service to east Tualatin
- A6 Improve bus service between Tualatin and Salem
- A7 Provide a shuttle or trolley service between Bridgeport Village and Commons area, especially for weekend service
- A8 Provide a loop bus route around the city\*
- A10 Expand existing on-call shuttle and charge fares\*
- A12 General need extended service hours for all transit\*
- A13 General use more energy efficient buses\*
- A14 Coordinate bus schedules with WES schedule\*
- A16 Add stops on higher-volume routes\*
- Potential bus stop locations connecting major employers and activity centers

\*not shown on map

#### Rail Service-Focused Ideas

- B2 Provide rail or high capacity bus transit service on Tualatin-Sherwood Road (towards Sherwood)
- B4 Build elevated pedestrian bridge to connect park-andride with shopping at Bridgeport Village
- B10 General Add more spaces for bicycles on WES trains\*

#### Land Use-Focused Ideas

C1 Make the WES station a central focus of downtown and the main transit center. Improve pedestrian connectivity, transit-oriented development opportunities, and local transit connections

#### Park-and-Ride-Focused Ideas

- D1 Look for potential park-and-ride locations in west Tualatin
- D2 Look for potential park-and-ride locations in south
- Add parking capacity at Tualatin Park-and-Ride (near Bridgeport Village)
- D4 Look for opportunities to reduce size of or relinquish underutilized park-and-ride lots 31
- D5 Add a park-and-ride location in east Tualatin

### Transit - Ideas Screened Out

ID	Project	Screening Question	Moving forward into evaluation?
A9	Add bus line from Yamhill Transit District to WES	2 (Ability to Implement)	Forward to Yamhill Transit District and TriMet
A11	General –leave TriMet service area	3 (Technical Feasibility)	Assess ability to improve transit service in Tualatin first, and then reconsider the need for this idea
A15	Provide transit service to Lake Oswego	1 (Addressing a need)	None
B1	Eliminate freight rail trips during rush hours, to avoid interrupting bus and WES service	2 (Ability to implement)	Participate in future regional discussions around increasing WES frequency (B3)
B3	Increase WES frequency	2 (Ability to implement)	Participate in future regional discussions around increasing WES frequency
B5	Extend WES to Salem	2 (Ability to implement)	Participate in future regional discussions on this topic

# Transit - Ideas Screened Out (Cont.)

ID	Project	Screening Question	Moving forward into evaluation?
B6	Oregon Passenger Rail between Portland and Eugene	2 (Ability to implement)	Participate in future regional discussions on this topic
B7	SW corridor High Capacity Transit	2 (Ability to implement)	Participate in ongoing regional discussions on this topic
B8	Add a WES Station in south Tualatin	1 (Addressing a need)	Reconsider upon future buildout of Basalt Creek area
B9	General – Add more spaces for bicycles on WES trains	2 (Ability to implement)	Forward to TriMet
B11	Follow the existing rail line with High Capacity Transit	2 (Ability to implement)	Forward to Metro for ongoing SW Corridor and other regional transit discussions











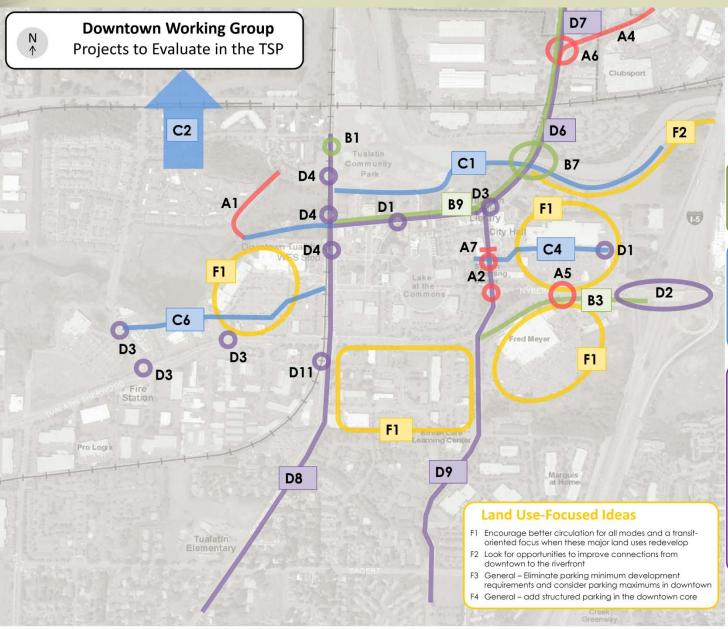
# **Transit**

Discussion



# Downtown

### Downtown - Projects to Evaluate



#### Safety-Focused Ideas

- A1 Upgrade bridge surface and improve illumination along path near Hedges Creek
- A2 Consider raised intersections for pedestrians at Seneca St and Nyberg St
- A4 Reduce speeds near Bridgeport Village
- A5 Redesign Fred Meyer & Kmart intersection upgrade the pedestrian connection
- A6 Add a roundabout at Lower Boones Ferry Rd and Boones Ferry Rd
- A7 Add a pedestrian island on Martinazzi Ave north of Seneca St

#### Congestion-Focused Ideas

- B1 Improve circulation into and out of the park
- B3 Add an eastbound lane on Tualatin-Sherwood Rd from Martinazzi Ave to I-5
- B7 Replace/widen bridge on Boones Ferry Rd
- B9 Widen Boones Ferry Rd to 5 lanes

#### Connectivity-Focused Ideas

- C1 Build a trail from Boones Ferry Rd to the downtown core along the river to the Tualatin River Greenway
- C2 Look for ways to provide north-south connectivity over Tualatin River for vehicles
- C4 Create a grid system near the Kmart, connect to Seneca St
- C5 General-improve street connectivity in downtown
- C6 Create a public road between Boones Ferry Rd and

#### Bicycle/Pedestrian-Focused Ideas

- D1 Redesign pedestrian crossing, consider flashing lights
- D2 Upgrade Nyberg interchange to improve the crossing experience for bicyclists
- D3 Optimize intersections to reduce conflicts between cars and pedestrians (Tualatin-Sherwood Rd & Martinazzi Ave and Boones Ferry Rd)
- D4 Add pedestrian crossings along Boones Ferry Rd
- D6 Improve sidewalks and bicycle lanes Boones Ferry Rd
- D7 Improve bicycle and pedestrian facilities near Bridgeport Village
- D8 Provide "Share the Road" signage and/or other visual cues to motorists to accommodate bicycles on Boones Ferry Rd
- D9 Add bicycle lane or "Share the Road" signs on Martinazzi Ave
- D10 General coordinate traffic signal timing to accommodate pedestrians in downtown
- D11 Focused pedestrian crossings

### Downtown - Ideas Screened Out

ID	Project	Based on what screening question?	Action to be taken
A3	Add a grade separated railroad crossing on Tualatin-Sherwood Rd	1 (addressing a transportation problem), 4 (cost)	None
B2	Provide secondary exit from park, and provide additional parking	3 (technical feasibility)	Look at other options to improve circulation at park
B4	Add a travel lane on I-5 northbound (between Tualatin and OR 217)	2 (ability to implement)	Forward to ODOT
B5	Create a one-way circulator loop roadway around downtown	1 (addressing a transportation problem), 4 (cost)	Look at other options to address downtown circulation
В6	Reduce ambient noise along Boones Ferry Rd in downtown	1 (transportation-related)	None

# Downtown - Projects to Screen (Cont.)

ID	Project	Based on what screening question?	Action to be taken
B8	Add HOV lanes on Tualatin-Sherwood Rd	2 (ability to implement), 3 (technical feasibility)	None
C3	Connect Nyberg Rd through the Commons	1 (addressing a transportation need)	Look at other options to address downtown circulation
<b>C7</b>	Extend Lower Boones Ferry Rd across Tualatin River	3 (technical feasibility)	None
D5	Create a pedestrian skybridge that connects downtown retail businesses and the park	1 (transportation-related), 4 (cost)	Consider upon future development



# Downtown

**Discussion** 

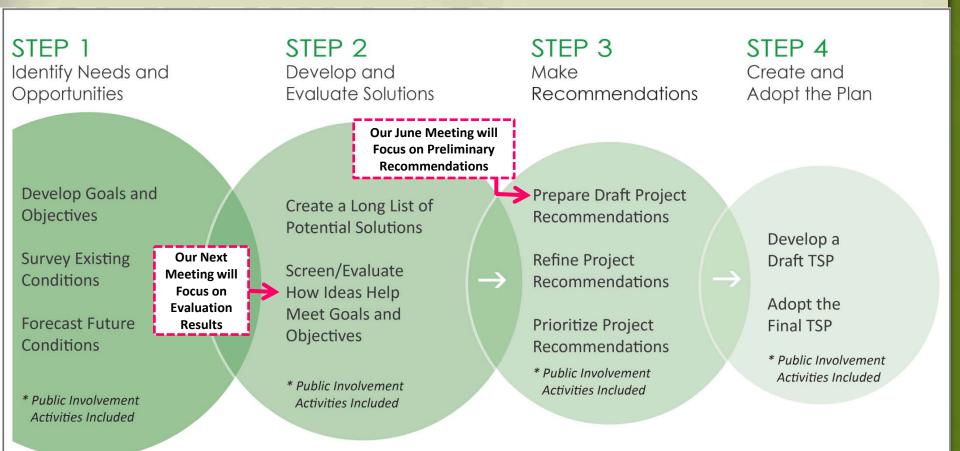
## In Summary

- We started with 248 project ideas
- Of the 60 ideas proposed to be screened out...
  - 19 to be forwarded to other agencies or City departments
  - 6 to be reconsidered again in the future
  - 6 will be considered as part of regional conversations
  - 4 will be woven into other project ideas being evaluated

# **Next Steps**

No.	Action	Timing
1.	Discuss results of TTF screening process with City Council	April 23
2.	Evaluate feasible project ideas	Late April through mid May
3.	Discuss evaluation results with Task Force	May 24
4.	Hold 3 <sup>rd</sup> round of working groups to develop preliminary recommendations	June 4 – June 14
5.	Discuss preliminary recommendations with Task Force	June 21
6.	Public outreach on preliminary recommendations	Late June through August

## **Next Steps**





# Thank You