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Newberg TSP Update

Meeting Agenda

DATE: March 5, 2015
TIME: 5:30 p.m. to 7:30 p.m.
LOCATION: Public Safety Building
401 E Third St
Newberg, OR 97132

SUBJECT: Newberg Transportation System Plan Update
CAC Meeting #4: Alternatives Analysis Review

MEETING PURPOSE:
Review the alternatives evaluation and public feedback. Provide feedback and input that will help develop the draft TSP project list.

AGENDA:

1. Introduction — 5:30 p.m.

2. Presentation – Overview of Alternatives Evaluation — 5:35 p.m.
    a. Evaluation Process
    b. Project Alternatives
    c. Downtown Options & Council Feedback
    d. Open House / Public Feedback
    e. Next Steps for Plan Development

3. Discussion — 6:05 p.m.
    a. Individual Project Evaluation Questions/Concerns
    b. Missing Projects/Strategies
    c. Identify Preferred Projects

4. Next Steps — 7:20 p.m.
    a. Stakeholder Interviews & Summary
    b. Develop Project List

MEMORANDUM (DRAFT)

720 SW Washington St.
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DATE: February 26, 2015

TO: Newberg TSP Citizen Advisory Committee

FROM: Garth Appanaitis, DKS Associates

SUBJECT: Newberg Transportation System Plan Update
March 5 Meeting Overview

P# 11086-005

The purpose of the March 5 Citizen Advisory Committee (CAC) Meeting will be to review the transportation alternative evaluations and public feedback that we have received. The feedback provided during the meeting will be used to develop a draft project list for the TSP.

Our meeting will start with an overview presentation that includes: the evaluation process, public feedback we have received, and a review of the downtown circulation analysis and Council direction. We would like to use the remaining time to discuss the project evaluations and collect your ideas and feedback so that we can develop a draft project list for the TSP. We have attached material that we distributed at the Open House in December to advance this discussion:

- Draft Project List Handout – This handout includes an overview of the evaluation process and the preliminary evaluation score for each project. Our discussion will be focused on the contents of this list.
- Draft Project Maps – These maps show the locations of projects included in the evaluation list.
- Downtown Traffic Options Memo – This is a summary of traffic analysis that was conducted for the downtown area. This is not intended to be the focus of our discussion, but we will cover it during our presentation.

Based on the items above, key discussion items will include:

- Individual Project Evaluation Questions/Concerns – Are there individual projects that received higher/lower evaluation scores than you feel is appropriate? Are there specific projects that provide benefits or drawbacks that do not seem to be reflected in the scoring?
- Missing Projects/Strategies – Are there other projects or strategies that should be added to the list?
- Identify Preferred Projects – What are the preferred projects for each travel mode (pedestrian, bicycle, transit, and motor vehicle)? Are there specific projects that you feel are overall the most important when considering all types of a projects (filling a sidewalk gap, adding a bikelane, a new street extension, etc.)?

We look forward to our discussion next week.

Project Descriptions and Evaluation Summary

Newberg TSP Open House

December 10, 2014

The following pages include summaries of transportation improvement alternatives, grouped into several categories. Maps are provided around the room that show the project extents. The general categories include:

- Roadway Projects (Standards and Safety, Intersection Projects, Expansion Projects)
- Pedestrian Projects
- Bicycle Projects
- Transit Projects
- Bypass Projects

Each project was evaluated based on criteria (see below) that are developed from Newberg's transportation goals. This evaluation provides an initial prioritization for projects, but are looking for your input and thoughts about specific projects or other ideas.

Evaluation Criteria

Each project was evaluated on a score of -2 to +2 based on how well each of the following criteria was addressed. Higher scores are better, and a maximum score of 10 is possible.

- Economic Development
- Sustainability
- Health and Safety
- Equity
- Fiscal Responsibility

Feedback

You can provide feedback by:

- **Stickers** – Place stickers on the maps next to projects that you support
- **Comment Forms** – Comment forms are provided for you to leave more thorough feedback
- **Talk to Us** – We are available to answer your questions and hear your ideas.
- **Project Website** – If you think of something later that you didn't tell us tonight, you can leave feedback on the project website newbergtsp.org

Thanks for your attendance and feedback!

Roadway Projects – Standards and Safety

Project #	Project Name	Project Description	Source	Evaluation Score
S01	Dayton Ave Collector Improvement	Reconstruct Dayton Avenue to major collector street standards between 5th Street and Newberg city limits to include sidewalks and bicycle lanes on each side of Dayton Avenue	2005 TSP	4
S02	3rd St Collector Improvement	Reconstruct 3rd Street to minor collector street standards between OR 99W and Main Street to include sidewalks and on-street parking on each side of 3rd Street	2005 TSP	5
S03	OR 99W Arterial Improvement	Reconstruct OR 99W to major arterial street standards between Harrison Street and 3rd Street to include sidewalks and bicycle lanes on each side of OR 99W.	2005 TSP	3
S04	Downtown Street Redevelopment	Pedestrian enhancements such as improved crossings, wider sidewalks, and curb extensions should be considered on 1st St and Hancock St in the downtown	2005 TSP	5
S05	Remove RT Lane on Hancock	Remove right turn lane onto Main St, add back-in diagonal parking	Stakeholder Interviews	3
S06	Downtown Two-Way Converstion	Convert Hancock St and 1st St to two-way	Meetings	4
S07	Downtown Road Diet	Remove one lane each from Hancock St and 1st St	Meetings	5
S08	S Main St Collector Improvement	Reconstruct to major collector street standards between 1st St and 5th St to include sidewalks and bicycle lanes on each side.	2005 TSP	5
S09	2nd St Collector Improvement	Reconstruct 2nd St to major collector street standards between Main St and River St to include sidewalks, bicycle lanes, and on-street parking on each side of 2nd Street	2005 TSP	5
S10	Blaine St Collector Improvement	Reconstruct Blaine St to major collector street standards between Hancock St and 9th St to include sidewalks and bicycle lanes on each side of Blaine Street.	2005 TSP	4
S11	Chehalem Dr Collector Improvement	Reconstruct Chehalem Dr between OR240 and North Valley Rd to major collector street standards to include bicycle lanes and sidewalks on both sides of the street. Yamhill County and City of Newberg jurisdictions.	2005 TSP	5
S12	N Main St Collector Improvement	Reconstruct to full major collector street standards between Illinois St and Mountainview Dr to include sidewalks and bicycle lanes on each side of Main St.	2005 TSP	5
S13	Illinois St Collector Improvement	Reconstruct Illinois St between Main St and College St to major collector street standards to include on-street parking, bicycle lanes, and sidewalks on each side of the street.	2005 TSP	5
S14	Columbia Dr Collector Improvement	Reconstruct Columbia Dr between Chehalem Dr and College St to minor collector street standards to include a travel lane in each direction, and sidewalks and on-street parking on both sides of the street.	2005 TSP	6
S15	Ore 219 Rerouting	Rerouting of Ore 219 through Newberg.	2005 TSP	3
S16	North Valley Rd Collector Improvement	Reconstruct North Valley Rd to major collector street standards between College St and Chehalem Dr to include	2005 TSP	6

Project #	Project Name	Project Description	Source	Evaluation Score
		sidewalks and bicycle lanes on each side of North Valley Rd.		
S17	Foothills Dr Collector Improvement	Reconstruct to major collector street standards between Main St and Aldersgate Dr to include sidewalks and bicycle lanes on each side.	2005 TSP	4
S18	Crestview Dr Collector Improvement	Reconstruct Crestview Dr to minor collector street standards between College St and Villa Rd to include sidewalks and on-street parking.	2005 TSP	4
S19	Meridian St Traffic Calming	Meridian St Traffic Calming	Stakeholder Interviews	2
S20	Vermillion St Collector Improvement	Reconstruct Vermillion St between Meridian St and College St to major collector standards to provide bicycle lanes and sidewalks on each side of the street.	2005 TSP	4
S21	Fulton St Collector Improvement	Reconstruct Fulton St between Meridian St and Villa Rd to major collector standards, providing bicycle lanes and sidewalks on each side of the street.	2005 TSP	4
S22	River St Collector Improvements	Reconstruct to major collector street standards between 1st St and Rogers Landing Rd to include sidewalks and bicycle lanes on each side of River St.	2005 TSP	3
S23	Rogers Landing Rd Collector Improvement	Reconstruct Rogers Landing Rd to major collector street standards between River St and the Willamette River to include sidewalks and bicycle lanes on each side of the street.	2005 TSP	4
S24	Villa Rd Wayfinding	Improve wayfinding on OR219 directing traffic bound for 99W onto Villa Rd	Stakeholder Interviews	2
S25	Villa Rd Collector Improvement	Reconstruct Villa Rd to major collector street standards between OR 99W and Fulton St to include sidewalks and bicycle lanes on each side of Villa Rd.	2005 TSP	4
S26	Villa Rd Collector Improvement	Reconstruct to major collector street standards between Fulton St and Crestview Dr to include sidewalks and bicycle lanes on each side of Villa Rd.	2005 TSP	6
S27	Haworth Ave Collector Improvement	Reconstruct Haworth Ave to major collector street standards between Villa Rd and Springbrook St to include sidewalks and bicycle lanes on each side of Haworth St.	2005 TSP	4
S28	Villa Rd Collector Improvement	Reconstruct Villa Rd to major collector street standards between Aspen Way and Bell Rd to include sidewalks and bicycle lanes on each side of Villa Rd.	2005 TSP	5
S29	Aspen Way Collector Improvement	Reconstruct Aspen Way to minor collector standards between Villa Rd and Mountainview Dr to include sidewalks and on-street parking on each side of Aspen Way	2005 TSP, Springbrook MP	4
S30	Bell Rd Collector Improvement	Reconstruct Bell Rd to major collector street standards between College St and Springbrook St to include sidewalks and bicycle lanes on each side of Bell Rd.	2005 TSP	6
S31	Springbrook St Collector Improvement	Reconstruct Springbrook to major collector standards between Mountainview and Bell Road,	2005 TSP, Springbrook MP	6

Project #	Project Name	Project Description	Source	Evaluation Score
S32	Elliott Rd Collector Improvement	Reconstruct to full, major collector street standards between OR 99W and Newberg High School to include sidewalks and bicycle lanes on each side of Elliot Rd.	2005 TSP	5
S33	Hayes St Collector Improvement	Reconstruct Hayes Street to minor collector street standards between Elliott Road and Deborah Street to include sidewalks and on-street parking on each side of Hayes Street	2005 TSP	3
S34	Hancock Street - Local Improvement	Reconstruct Hancock between Sitka and Elliot to include sidewalks and on-street parking on each side.	2005 TSP	4
S35	Fernwood Rd Collector Improvement	Reconstruct Fernwood Rd between Springbrook St and Creek to major collector standards to include bicycle lanes and sidewalks on each side of the street	2005 TSP	5
S36	OR 99W Arterial Improvement	Reconstruct OR 99W to major arterial street standards between Vittoria Way and Harmony Ln to include sidewalks and bicycle lanes on each side of OR 99W.	2005 TSP	4
S37	Wynooski St Collector Improvement	Reconstruct Wynooski Street to major collector street standards between River Street and Bypass to include sidewalks and bicycle lanes on each side of Wynooski Street	2005 TSP, Near-term Bypass	5

Roadway Projects - Expansion

Project #	Project Name	Project Description	Source	Evaluation Score
E01	OR 240 Minor Arterial Improvement	Reconstruct Ore 240 for approximately 0.36 miles between the west edge of the Urban Reserve Area and Main Street to full, 3-lane minor arterial street standards.	2005 TSP	4
E02	Hancock Street Arterial Improvement	Reconstruct Hancock Street to major arterial street standards between Harrison Street and Main Street to include sidewalks and bicycle lanes on each side of Hancock Street.	2005 TSP	4
E03	N Main Street (OR240) Arterial Improvement	Reconstruct to full minor arterial standards between Illinois and 1st to include three travel lanes, bike lanes, and sidewalks.	2005 TSP	5
E04	Blaine St Extension	Construct new street between 9th St and River St to major collector standards.	2005 TSP	4
E05	College St Arterial Improvement	Reconstruct to minor arterial street standards between 1st St and Bell Rd to include sidewalks and bicycle lanes on each side of College Street.	2005 TSP, Springbrook MP	4
E06	Rogers Landing Rd Extension	Construct Rogers Landing Rd from Willamette River to UGB to major collector standards.	2005 TSP	4
E07	Foothills Dr Extension	Construct Foothills Dr from Aldersgate to Villa Rd.	2005 TSP, Springbrook MP	5
E08	Villa Rd Extension	Construct Villa Rd from Mountainview Dr to Aspen Way and construct to major collector standards with sidewalks and bike lanes.	2005 TSP, Springbrook MP	6

E09	New Camelia Dr	Construct a new local street connection between Aspen Way and Zimri Dr, as development occurs.	2005 TSP	5
E10	New Kincaid Rd	Construct a new local street connection between Aspen Way and Springbrook Rd, as development occurs.	2005 TSP	5
E11	Mountainview Dr Arterial Improvement	Reconstuct Mountainview Dr between Villa Rd and Aspen Way to minor arterial standards. Include bike lanes and sidewalks on both sides.	2005 TSP, Springbrook MP	4
E12	New North-South Local St	Construct a new local street connection between Bell Rd and New Kincaid Rd extension (#6 above), as development occurs.	2005 TSP	5
E13	Putman Rd Extension	Construct approximately 0.42 miles of new Putman Rd between Springbrook St and Putman St to local street standards.	2005 TSP	3
E14	Crestview Dr Extension	Construct Crestview Dr from southern terminus to OR 99W. Construct to major collector standards	Meetings	6
E15	Hayes St Extension	Construct Hayes St from its eastern terminus at Deborah St to Springbrook St to minor collector street standards	2005 TSP	4
E16	Springbrook St Arterial Improvement	Reconstruct to minor arterial standards between OR 99W and 8th St. Include sidewalks and bike lanes.	2005 TSP	6
E17	Hancock St Extension	Construct Hancock St between Elliot Rd and Springbrook Rd to local street standards. Reconstruct eastern terminus of Hancock at Springbrook to local street standards.	2005 TSP	4
E18	OR219 Arterial Improvement	Reconstruct OR219 to arterial standards between 1st Street and the UGB to include sidewalks and bicycle lanes on each side of OR219.	2005 TSP	5
E19	New Greens Drive	Construct a new local street connection between Eagle Street and Corral Creek Rd, as development occurs.	2005 TSP	4

Pedestrian Projects

Project #	Additional Project #	Project Name	Project Description	Source	Evaluation Score
P01	S01	Dayton Ave Sidewalks	From 5th St to UGB	New	3
P02	N/A	OR 99W Sidewalks	From UGB to 3rd Street	2005 TSP	6
P03	N/A	1st St Sidewalks	From UGB to Ore 99W	2005 TSP	4
P04	E02, S06, S07	Hancock St/1st St Sidewalks	From 3rd to River Street	New	3
P05	S02	3rd St Sidewalk Infill	From OR 99W to Main Infill	2005 TSP	3
P06	S08	S Main St Sidewalk Infill	From 5th St to Hancock Infill	2005 TSP	3
P07	S10	Blaine St Sidewalk Infill	From River St to Hancock St Infill	New	3
P08	N/A	9th St Sidewalks	From Blaine St to River St	2005 TSP	3
P09	N/A	14th St Sidewalks - Partially with BY	From College St to River St	2005 TSP	4
P10	S22	River St Sidewalks	From Sheridan St to 14th St	New	3
P11	S37	Wynooski St Sidewalks	From 4th St to 11th St	New	3
P12	N/A	11th St Sidewalks	From River St to Wynooski St	2005 TSP	3
P13	N/A	College St Sidewalks	From 9th St to 14th St	2005 TSP	3
P14	E05	College St Sidewalks	From Ella Ct to Foothills Drive	Stakeholder	3

P15	N/A	Meridian St Sidewalks	From Hancock Street to 2nd Street	2005 TSP	3
P16	E03	N Main St/OR240 Sidewalk Infill	From Hancock St to Illinois St Infill	New	3
P17	E01	OR240 Sidewalk Infill	From Main to UGB Infill	2005 TSP	3
P18	S11	Chehalem Dr Sidewalk Infill	From OR240 to North Valley Rd Infill	2005 TSP	3
P19	S13	Illinois St Sidewalks	From Main St to College St	New	3
P20	S20	Vermillion St Sidewalk Infill	From College St to Meridian St Infill	2005 TSP	3
P21	S21	Fulton St Sidewalk Infill	From Meridian St to Cherry St Infill	2005 TSP	3
P22	S14	Columbia Dr Sidewalk Infill	From Chehalem Dr to College St Infill	2005 TSP	3
P23	N/A	Meridian St Sidewalks	From Crestview Dr to Fulton St	2005 TSP	3
P24	S18	Crestview Dr Sidewalk Infill	From College to Villa Rd Infill	2005 TSP	3
P25	S12	N Main St Sidewalk Infill	From Illinois St to Mountainview Dr	2005 TSP	3
P27	S16	North Valley Rd Sidewalks	From Chehalem Dr to College St	2005 TSP	5
P28	S30	Bell Rd Sidewalks	From College St to Springbrook Rd	2005 TSP	5
P29	S29	Aspen Way Sidewalks	From Bell Rd to Crestview Dr	New	5
P30	E11	Mountainview Dr Sidewalks	From Villa Rd to Aspen Way	New	5
P31	N/A	Zimri Dr Sidewalks	From Mountainview Dr to Bell Rd	New	5
P32	N/A	N Springbrook Rd Sidewalks	From S of Benjamin Rd to UGB	New	5
P33	N/A	Crestview Dr Sidewalks	From Emery St to Springbrook St	2005 TSP	5
P34	N/A	Emery St Sidewalks	From Crestview Drive to Douglas Ave	2005 TSP	3
P35	N/A	Douglas Ave Sidewalks	From Emery St to Springbrook Way	2005 TSP	3
P36	N/A	Springbrook Way Sidewalks	From Douglas Ave to 100 ft S of Douglas	2005 TSP	3
P37	N/A	Deborah St Sidewalks	From Douglas Ave to Haworth Ave	2005 TSP	3
P38	N/A	Springbrook Rd Sidewalks	From Crestview Drive to Ore 99W	2005 TSP	3
P39	S27	Haworth Ave Sidewalks	From Villa Rd to Springbrook Rd	New	3
P40	S32	N Elliott Rd Sidewalk Infill	From Ore 99W to Newberg HS	2005 TSP	3
P41	S25, S26	Villa Road Sidewalks	From OR 99W to Mountainview Dr	2005 TSP	5
P42	N/A	Hayes St Sidewalks	From Springbrook St to Burl St	2005 TSP	5
P43	S34	Hancock St Sidewalk Infill	From Sitka to end	2005 TSP	5
P44	N/A	S Elliott Rd Sidewalk Infill	From OR 99W to 2nd St	0	5
P45	E16	S Springbrook Rd Sidewalks	From OR 99W to 8th St	0	5
P46	S35	Fernwood Rd Sidewalks	From Springbrook St to Brutscher St	2005 TSP	5
P47	E18	OR219 Sidewalk Infill	From 1st St to UGB	0	5
P48	N/A	OR 99W Sidewalk Infill	From Brustcher Street to Vittoria Way	2005 TSP	6
P49	S36	OR 99W Sidewalk Infill	From Vittoria Way to East of UGB	2005 TSP	6

Bicycle Projects

Project #	Additional Project #	Project Name	Project Description	Source	Evaluation Score
B01	S01	Dayton Ave Bike Lanes	From OR 99W to UGB	2005 TSP	4
B02	S12, E03, S08	Main St Bike Lanes	From 5th St to Mountainview Dr.	2005 TSP	4
B03	E02, S06, S07	Hancock/1st Bike Lanes	From 3rd St to River St	Stakeholder	5
B04	S10	Blain St Bike Lanes	From 1st St to 9th St	2005 TSP	4
B05	N/A	9th St Bike Lanes	From Blaine St to River St	2005 TSP	4
B06	S22	River St Bike Lanes	From OR 99W to Rogers Landing Rd	2005 TSP	4
B07	E05	College St Bike Lanes	From 1st to UGB	2005 TSP	5
B08	N/A	Meridian St Bike Lanes	From Crestview Dr to 1st St	2005 TSP	4
B09	E01	OR240 Bike Lanes	From Main to UGB	2005 TSP	5
B10	S11	Chehalem Dr Bike Lanes	From OR240 to North Valley Rd	2005 TSP	4
B11	S13, S20	Illinois Street Bike Lanes	From College St to Main St	2005 TSP	4
B12	N/A	Jaquith Park Path	New pedestrian/bicycle pathway adjacent to Jaquith Park between Main St and College St	2005 TSP	3
B13	S17	Foothills Drive Bike Lanes	From Main St to Villa St	2005 TSP	4
B14	S16, S30	North Valley Road /Bell Road Bike Lanes	From Chehalem Dr to Springbrook Rd	2005 TSP	4
B15	S25, S26, S28	Villa Rd Bike Lanes	From OR 99W to Mountainview Dr	2005 TSP	4
B16	E11	Mountainview Dr Bike Lanes	From Villa Rd to Aspen Way	2005 TSP	4
B17	S27	Haworth Ave Bike Lanes	From College St to Springbrook Rd	2005 TSP	4
B18	S21	Fulton St Bike Lanes	From College St to Springbrook Rd	2005 TSP	4
B19	N/A	11th St Bike Lanes	East of River St	2005 TSP	4
B20	N/A	Hess Creek Path	New pedestrian/bicycle pathway along Hess Creek can serve recreational and school bicyclists and pedestrians.	2005 TSP	3
B21	S23	Rogers Landing Rd Bike Lanes	From 1st to Rogers Landing	2005 TSP	4
B22	N/A	New Willamette River Pedestrian-Bicycle Bridge	Extended from Rogers Landing Drive across to Champoeg Park. This new connection would link the Newberg bicycle-pedestrian system with that of Champoeg Park and Marion County	2005 TSP	3
B23	N/A	Wilsonville Rd Bike Lanes	East of Daybread Drive	2005 TSP	4
B24	E18	OR219 Bike Lanes	From Wynooski St to 1st St	2005 TSP	4
B25	E16	Springbrook Road Bike Lanes	South of OR 99W on west side and north of OR 99W between Haworth and Middlebrook	New	4

B26	S35	Fernwood Dr Bike Lanes	From Springbrook to Brutcher St	2005 TSP	4
B27	N/A	Hancock St Bike Lanes	West of Springbrook	2005 TSP	4
B28	S32	Elliot Road Bike Lanes	From OR 99W to Newberg HS	2005 TSP	4
B29	N/A	Vittoria Way Bike Lanes	From Springbrook to OR 99W	2005 TSP	4
B30	N/A	Aspen Way Bike Lanes	From Mountainview Dr to Springbrook	2005 TSP	4
B31	N/A	Benjamin Rd Bike Lanes	From the railroad to UGB	2005 TSP	4
B32	S31	Springbrook Rd Bike Lanes	From UGB to Bell Road	2005 TSP	5
B33	N/A	Wynooski St Bike Lanes	From Willamette St to OR219	Bypass EIS, 2005 TSP	4

Transit Projects

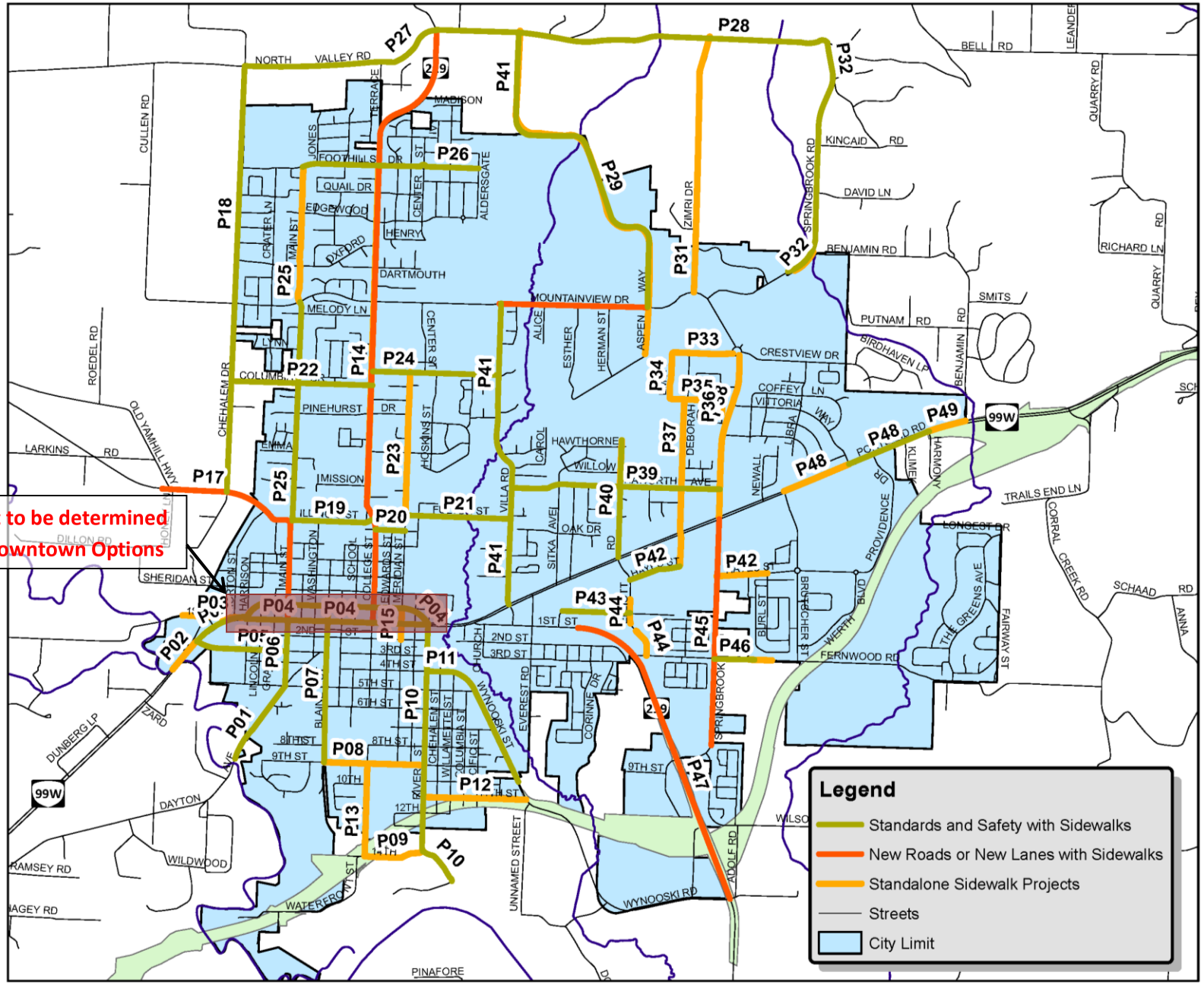
Project #	Project Name	Project Description	Source	Evaluation Score
T01	Bus Stop Improvements	Amenities and improved pedestrian crossings at bus stops along 99W	New	3
T02	Route 5 and 7 Expansion	Expand routes 5 and 7 to new urban growth areas	New	3

Bypass Projects

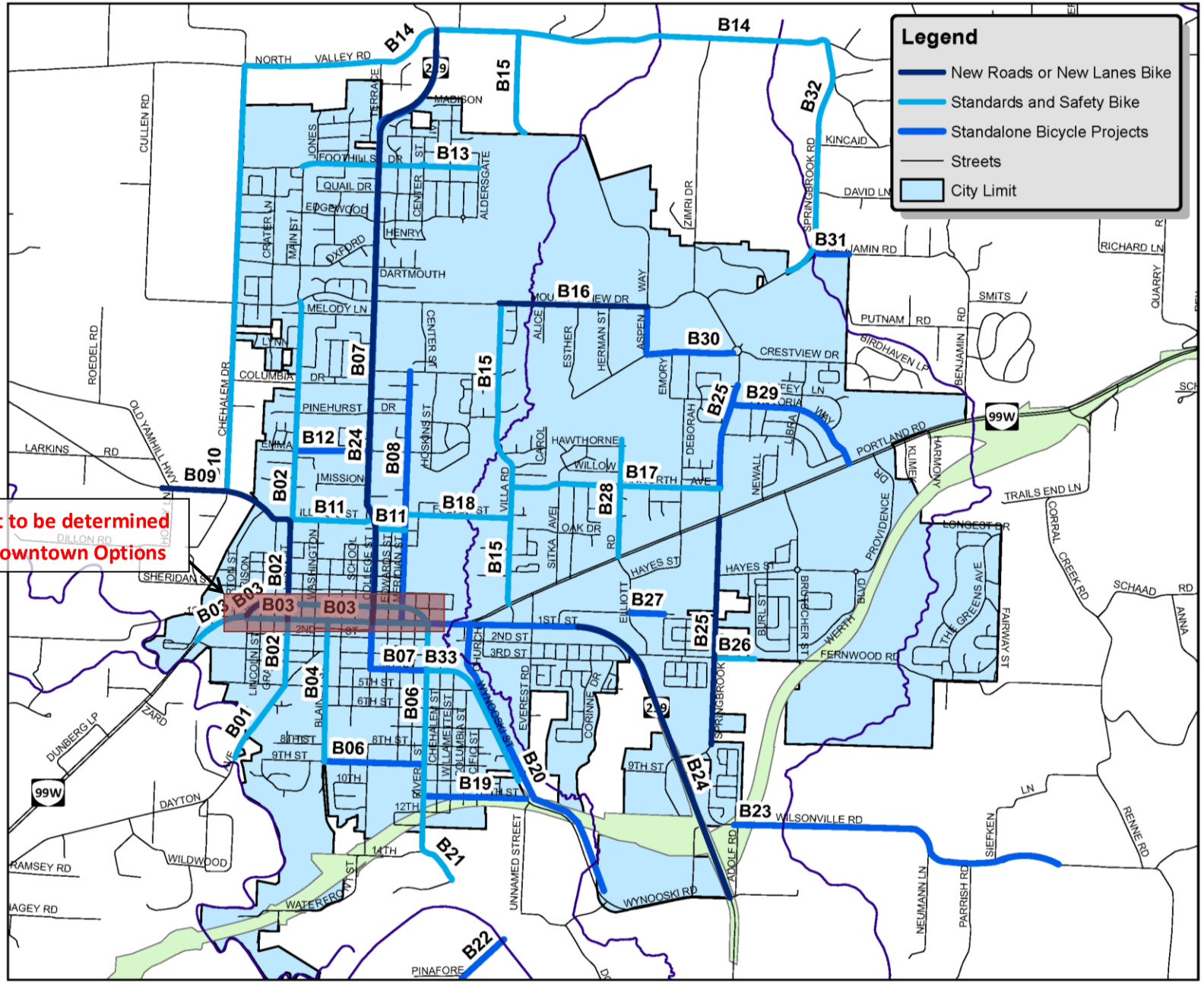
Project #	Project Name	Project Description
BY1	Wilsonville Rd Reroute	Wilsonville Road is to be rerouted to the north to cross the Bypass (without an interchange) and to intersect with Springbrook Street.
BY2	Springbrook/Fernwood Traffic Signal	New traffic signal at Springbrook Rd and Fernwood Rd
BY3	Benjamin Loop	Concurrent with the construction of the new Ore 99W interchange with the NDTIP Bypass, Benjamin Road to be closed at Ore 99W
BY4	New East-West Bypass Connection	Construct new east-west connection from the eastern terminus of Hayes Street, northeasterly and across the NDTIP Bypass to Corral Creek Road
BY5	Ore 219 Street Closures	The existing street connections of Wilsonville Road, Wynooski and Springbrook Street to Ore 219 are to be eliminated
BY6	NDTIP Bypass Roadway Crossings	to have eight grade separated crossings of the new NDTIP Bypass: Blaine Street, College Street, River Street, Wynooski Street, Ore 219 (grade-separated interchange), Wilsonville Road, Fernwood Street, Proposed East-West Street
BY7	RIRO at OR219/2nd	RIRO at OR 219/2nd to limit through traffic, improve intersection safety
BY8	Newberg-Dundee Bypass Bike Path	New bicycle facility to be developed in conjunction with the Newberg Dundee Bypass

BY9	OR99W/Springbrook Rd	Construct second westbount left turn lane and second southbound receiving lane on Springbrook Road extending 300 feet from Oregon 99W
BY10	Springbrook Rd/OR219	Construct second westbound left turn lane, second southbound through lane, and second northbound through lane.
BY11	Oregon 219/Wynooski Rd	Construct eastbound right turn lane
BY12	Oregon 219/Wilsionville Rd Phase 1 intersection	Construct westbound left, through, and right turn lanes. Construct dual southbound right turn lanes to access Phase 1 and dual westbound left turn lanes to exit Phase 1 onto Oregon 219
BY13	Wilsonville Rd	Extend Wilsonville Road west to connect to Oregon 219/Bypass intersection. Create cul-de-sac section of Wilsonville Road between new extension and Springbrook Road
BY14	14th St Realignment	Preserve access to properties on 14th Street when bypass is built
BY15	Wynooski St Realignment	Realignment due to bypass

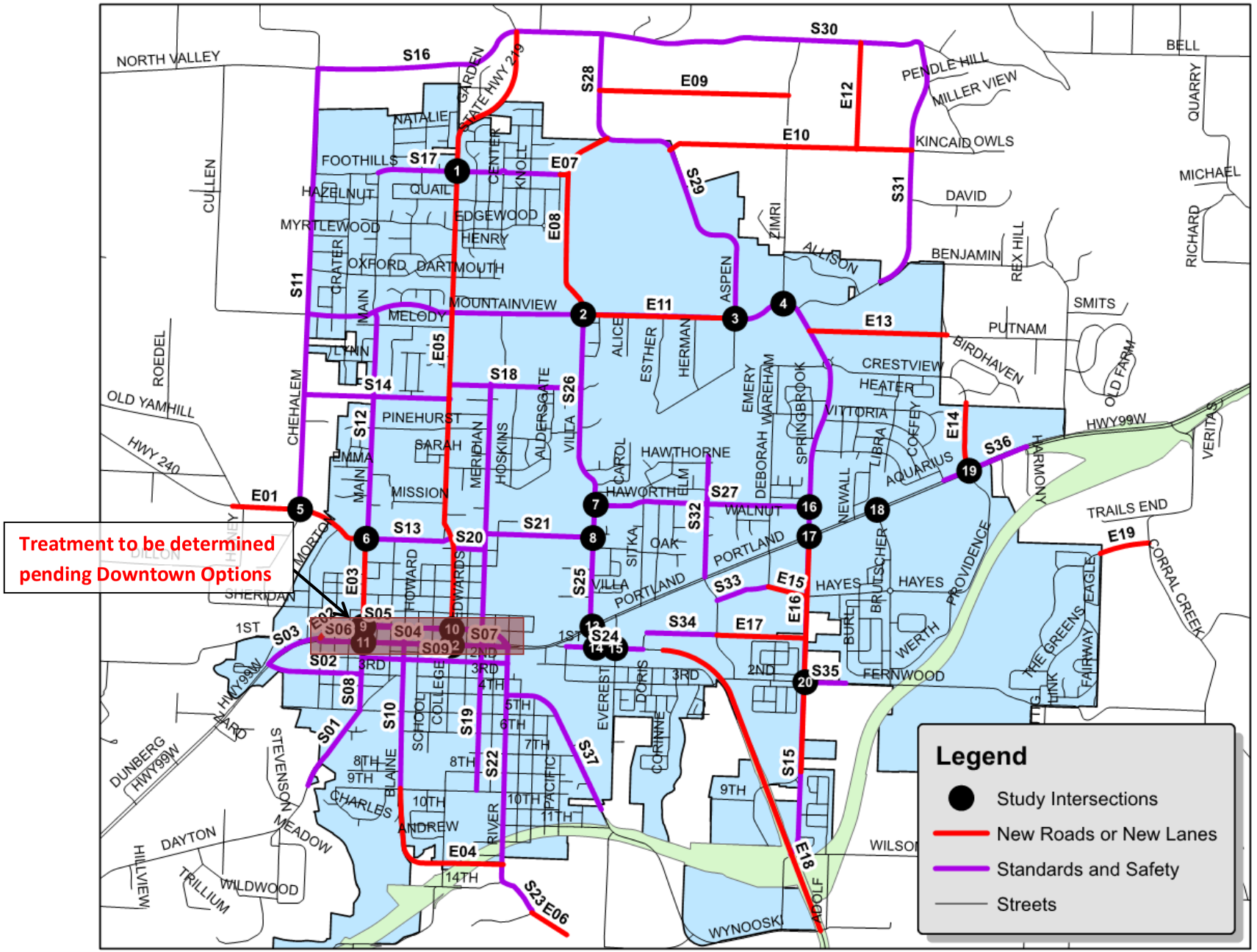
Pedestrian Project Alternatives



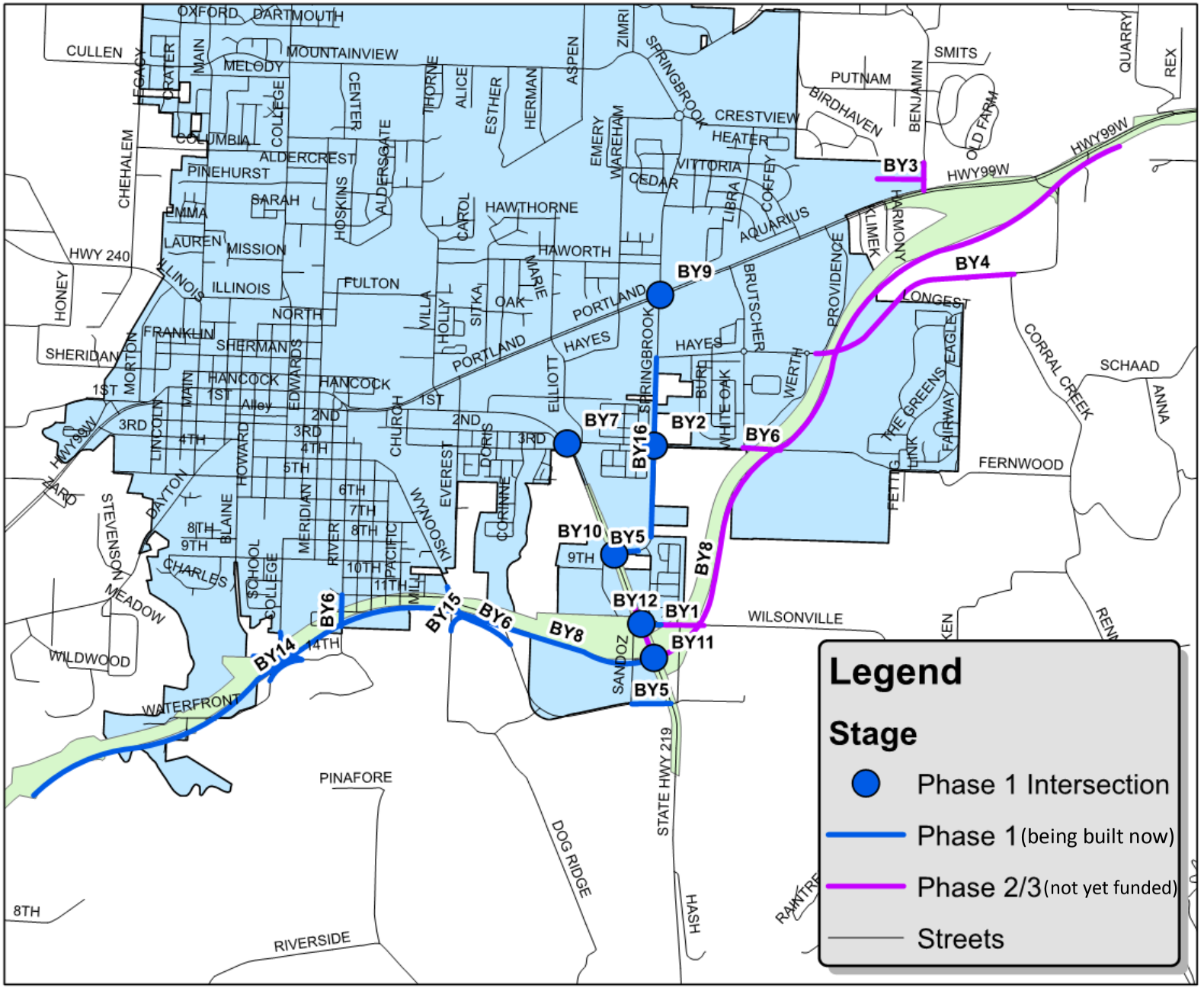
Bicycle Project Alternatives



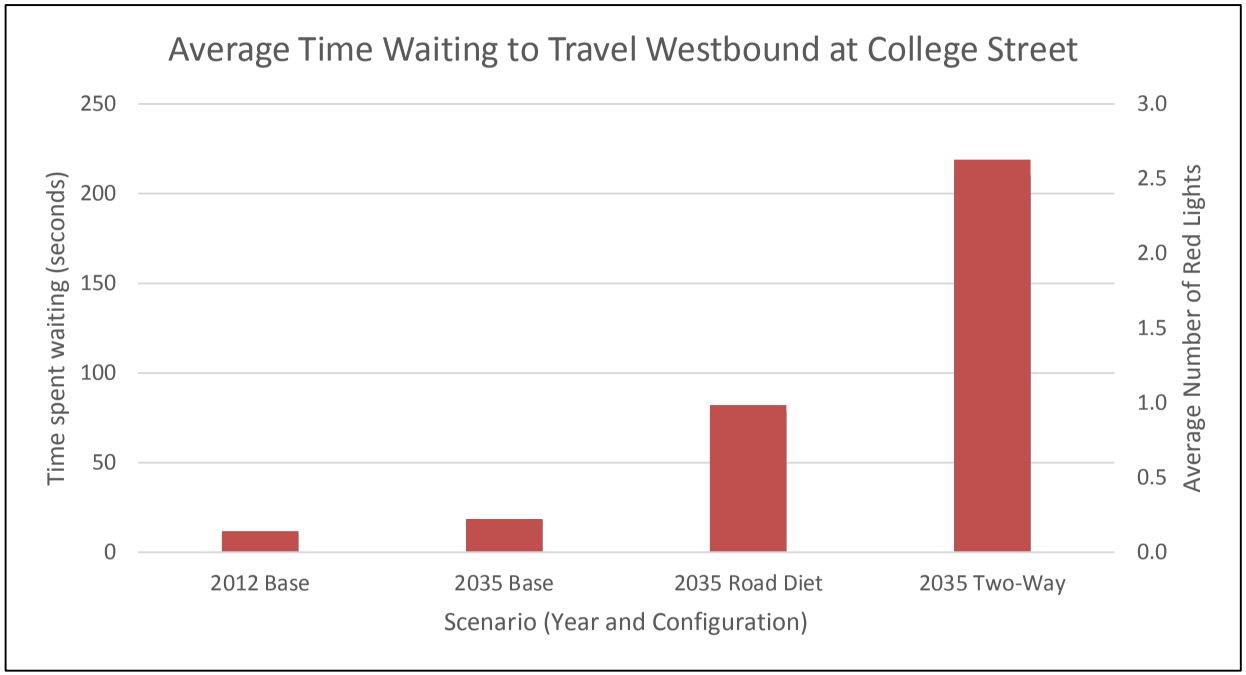
Street Project Alternatives



Bypass Projects



Summary of Downtown Circulation Options



Key Points:

- Without changes to downtown roads, 2035 would feel similar to today
- Only 1st Phase of Bypass (Dundee to Springbrook) is currently funded
- Some traffic would shift from downtown to bypass, but there is also additional growth
- Both concepts would remove lanes, and make downtown more congested, but provide more space for other uses
- Traffic may shift to adjacent streets

OPTION	DESCRIPTION	PRELIMINARY COST ESTIMATE (Installation, Installation + Removal)	WHEN DOES IT FEEL LIKE 2035
Base (Do Nothing)	Retain 3 lanes in each direction	$0, $0 (Retain existing configuration)	2035
Concept A: 2-way Conversion	Convert Hancock and 1st to have one lane in each direction	$8.5 Million, $10.5 Million (striping, curb extensions, planters/barriers, signal modifications, new signal poles, right of way, etc.)	When Open
Concept B: Road Diet	Remove one lane each on Hancock & 1st	$3.5 Million, $4.5 Million (striping, curb extensions, planters/barriers, signal modifications, etc.)	2018

DRAFT MEMORANDUM

DATE: November 7, 2014

TO: Newberg TSP Project Management Team

FROM: Garth Appanaitis, DKS Associates

SUBJECT: **Newberg Transportation System Plan Update**
Downtown Traffic Concepts – Operations Summary

This memorandum summarizes the traffic impacts of two circulation concepts that have been identified to transform Downtown Newberg following the opening of Phase 1 of the Newberg Dundee bypass. One concept was advanced by the Downtown Committee and one was suggested by City staff. Both concepts would include removing existing vehicle travel lanes to convert the space for other potential uses (bikes, pedestrians, seating, etc.).

Summary

The information and analysis presented in the following sections addresses:

- **Future Context** - For the horizon year of 2035, only the initial "Phase 1" portion of the Bypass is currently funded (one lane each direction from Dundee to Oregon 219 and Springbrook Rd.)
- **Future Conditions** – While initially improved after opening, by 2035 with the existing couplet configuration and just Phase 1 of the Bypass, traffic flow through downtown will be slightly worse than it is today due to future growth in Newberg and increased activity in downtown for non-Newberg traffic.
- **Concept Capacity Reduction** - Both downtown concepts include removing a lane of traffic on both Hancock and 1st to include a total of two travel lanes in each direction (total of both streets) compared to the existing 3-lanes in each direction.
- **Concept Performance** - Either downtown concept will make traffic conditions through downtown significantly worse than the conditions that are expected with the existing configuration. The projected 2035 level of traffic congestion based on the existing configuration would be reached or exceeded much sooner with either of the alternative concepts (immediately exceeded with the Downtown Committee's two-way concept and reached by 2018 with the City staff's reduced couplet).

- **Limited Function & Life** – Due to degraded traffic conditions, both concepts would have short usable life. Removing a lane in each direction would cause traffic congestion to reach 2035 levels by approximately 2018. Converting the existing 3-lane couplet to two-lane, two-way traffic flow would result in levels of congestion that would immediately exceed 2035 congestion levels by a significant margin.
- **High Concept Cost** – While both concepts could make use of some existing infrastructure, there would still be significant costs associated with signal modifications, crossing treatments, drainage, and other factors that go beyond painting and striping the pavement. Preliminary project costs are estimated to be $5 to $10 million for each concept.

General Assumptions

Two primary concepts for downtown Newberg circulation, post-bypass opening day, in addition to the "no change" option, have been suggested for Council consideration – one by the Downtown Committee (Concept A) and one by City staff (Concept (B).

- Concept A: 2-Way Conversion
  - Convert Hancock and 1st to two-way travel
  - Both streets would have one travel lane in each direction with left turn lanes at intersections
  - 1st would "T" into Hancock at either end and Hancock would be through route
  - This concept would introduce additional challenges (related to design treatment, traffic mobility, and project cost) at either end of the couplet to convert the existing one-way flow to a two-way configuration
- Concept B: Road Diet
  - Remove one travel lane in each direction along Hancock and 1st, while retaining the one-way couplet flow

The following items reflect analysis for both options:

- Some traffic will likely divert to adjacent routes due to reduced capacity and increased travel time through downtown. If so, impacts would spread beyond the downtown area. Traffic diversion was estimated with the travel demand model.
- Traffic operations were analyzed both with and without shifted traffic .
- Traffic operations were analyzed for the seasonal peak hour at four intersections (Hancock/College, Hancock/Main, 1st/College 1st/Main).
- Traffic growth and circulation is based on only Phase 1 of the Newberg Dundee bypass being constructed by 2035 (Dundee to Springbrook Road as a single lane each direction).
  - Phase 1 is the extent of the overall bypass project that is currently funded and is reasonably likely to be funded by 2035, which is the planning horizon for the TSP. If additional unanticipated funding does become available prior to 2035, future phases of the bypass would be considered for construction. While a decision has not been made about the next phase of the Bypass construction, it could include additional improvements to the south end before making additional improvements and extension to the north.

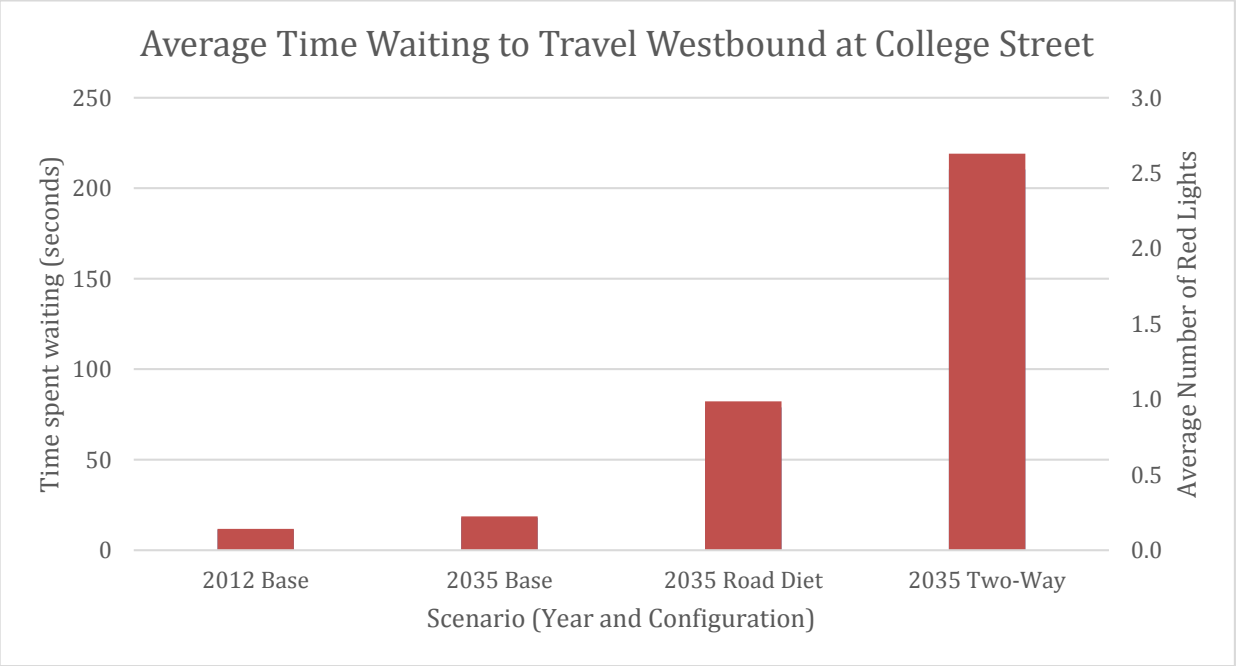
Year 2035 Operational Summary

- With the existing roadway (couplet with 3-lanes on both Hancock and 1st), the two Hancock intersections (at College Street and at Main Street) would not meet ODOT mobility targets for operational performance (0.85 volume/capacity ratio[1]), but would operate at less than full roadway capacity in 2035. Both 1st Street intersections (at College Street and Main Street) would meet mobility targets and would also operate under capacity.

[1] A decimal representation (1.0 represents saturated conditions) of how "full" the road network or intersection is.

- With either concept, traffic is expected to divert to adjacent east-west corridors for alternative routes in response to increased congestion levels.
    - Approximately 700 to 1,000 vehicles during the seasonal (summer) peak hour (occurring between 4-6 p.m.) would divert with each concept depending on intersection design and actual traffic volume on any given day.
- In 2035, both proposed circulation options would significantly increase traffic congestion through the downtown corridor and congestion would be worse than is experienced today, even with the expectation that a certain amount of traffic will divert to adjacent routes.
    - Potential impacts to parallel routes such as Sheridan Street and 2nd Street with the additional traffic diversion were not estimated.
- Concept B (road diet option) would perform better than Concept A (two-way option) for all four intersections.
- As shown in Figure 1, during the PM peak hours, it would take significantly longer to travel westbound on Hancock through the College Street light with either of the concepts relative to existing or 2035 (with bypass) conditions.
    - With 2035 traffic volumes, the road diet option would increase the average delay (the additional time it takes to travel through the corridor if no slowing or stopping was needed) to approximately 80 seconds (compared to 20 seconds with the existing 3-lane couplet configuration in place), while the two-way option would further increase the average delay to over 200 seconds.
    - In 2035, most westbound traffic would get through the downtown corridor without stopping at the light at College St with the current 3-lane configuration. Most vehicles would stop for at least one red light with Concept B, and most vehicles would stop and wait for at least 2-3 red lights with Concept A (at College St).

Figure 1: Summary of Westbound Traffic Conditions on Hancock at College



Potential for Temporary Implementation

In general, neither Concept A nor Concept B would perform well with 2035 traffic levels. However, either concept could be implemented on a temporary basis, with capacity added back (project removed and reverted to existing configuration) when needed in the future. The two concepts were analyzed for temporary implementation, which could be considered for policy recommendation, but would need to be further vetted by freight community.

- Temporary implementation of Concept A (two-way option) would immediately result in traffic congestion within the downtown core that would be significantly worse than the existing conditions and the conditions expected in 2035 with Phase One of the bypass with the existing roadway configuration remaining unchanged. In addition, this option would not be a simple, low-cost endeavor, and the necessary infrastructure investments would be lost by converting back to the existing configuration.
    - Specific design elements and cost would depend on the actual configuration. However, elements and cost considerations would likely require items beyond paint striping, including: curb extensions, planters or other barriers to separate motor vehicle travel from the existing travel lane that would be removed, signal modifications for current locations (adjusting signal head locations and/or pole locations), new signal pole/arms for two way travel, and potentially right of way at either end of the couplet for two-way conversion.
- Temporary implementation of Concept B (road diet option) would result in the level of congestion expected with the current lane configuration in 2035 occurring by 2018. Full roadway capacity would be reached by approximately 2026.
    - While modifications and costs to implement Concept B would less than Concept A, significant investment would still be required for the short-term project. Fewer new signal poles (to account for two-way traffic flow) would be needed than in Concept A construction, however minor signal modifications, pedestrian crossing treatments, and planters or other physical separators would still contribute to project cost.
- Approximate planning level cost estimates[2], including eventual project removal:
    - Concept A (2-way Conversion): $8.5 Million installation ($10.5 Million with removal)
    - Concept B (Road Diet): $3.5 Million installation ($4.5 Million with removal)

[2] Planning level cost estimates are based on typical concept planning assumptions and may not capture unique design needs or issues that may be identified through subsequent project design and engineering phases.

Appendix A – Technical Operation Summary

Table 1 provides a technical summary of the intersection mobility for several scenarios using Highway Capacity Manual (HCM) measures including level of service (LOS) and volume to capacity (V/C) ratio, which are two methods to gauge intersection operations.

Volume-to-capacity (V/C) ratio: A decimal representation (with 1.00 representing saturated condition) of the proportion of capacity that is being used at a turn movement, approach leg, or intersection. It is determined by dividing the peak hour traffic volume by the hourly capacity of a given intersection or movement. A lower ratio indicates smooth operations and minimal delays. As the ratio approaches 1.00, congestion increases and performance is reduced. If the ratio is greater than 1.00, the turn movement, approach leg, or intersection is oversaturated and usually results in excessive queues and long delays beyond a single peak hour. ODOT mobility targets for intersections along OR 99W are based on v/c ratios. The current ODOT Mobility Target for OR 99W in downtown Newberg is a V/C ratio of 0.85.

Level of service (LOS): A "report card" rating (A through F) based on the average delay experienced by vehicles at the intersection. LOS A, B, and C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. LOS D and E are progressively worse operating conditions. LOS F represents conditions where average vehicle delay has become excessive and traffic is highly congested. LOS is used to designate minimum performance standards for intersections under City of Newberg and Yamhill County jurisdictions.

Table 1: Peak Seasonal (30HV) Traffic Operations - Level of Service and Volume/Capacity V/C)

Intersection	Existing 2014 (No Bypass)	2035 Baseline (Phase 1 Bypass)*	2035 Concept B (Road Diet)		2035 Concept A (2-way Conversion)	
			No Additional Shift*	Shifted (Reduced Traffic)	No Additional Shift*	Shifted (Reduced Traffic)
Hancock/Main	0.70 B	0.88 C	1.06 E	0.93 C	1.87 F	1.86 F
Hancock/College	0.76 B	0.91 C	1.15 F	1.06 E	1.39 F	1.30 F
1st/Main	0.57 B	0.68 B	0.82 B	0.63 B	0.99 C	0.88 C
1st/College	0.58 B	0.63 B	0.77 B	0.62 B	0.86 B	0.80 B

Note: * 2035 Baseline traffic conditions and "no additional shift" scenarios assume that some through traffic has shifted to the bypass. V/C ratios and LOS reflect PM Peak Hour Conditions.