REQUEST FOR COUNCIL ACTION **DATE ACTION REQUESTED: November 16, 2020** Order **Ordinance** Resolution Motion **Information XX** No. No. No. Staff: Doug Rux, Director; Brett Musick, **SUBJECT: Work Session on Transportation Senior Engineer System Plan Technical Update to implement the Department: Community Development Riverfront Master Plan** Order on Agenda: Work Session X Business Session

RECOMMENDATION:

Information only.

EXECUTIVE SUMMARY:

The Newberg City Council accepted the Riverfront Master Plan after conducting a public hearing on September 16, 2019 by Resolution No. 2019-3596. On November 2, 2020 the City Council held a legislative public hearing on adopting Comprehensive Plan and Map, and Development Code and Zoning Map amendments to implement the Riverfront Master Plan. A final decision on the proposed ordinance will occur on November 16, 2020.

The next step in implementation is to amend the Transportation System Plan (TSP) that was adopted by Ordinance No. 2016-2810 on December 19, 2016. On July 6, 2020 City Council adopted Resolution No. 2020-3686 initiating an amendment to the Newberg Comprehensive Plan – Transportation System Plan. The City has engaged Kitteleson & Associates to conduct the analysis on amending the TSP. The evaluation is a technical amendment to address the Riverfront Master Plan and is not a full evaluation of the TSP.

The recommended changes to the TSP are those identified to serve the Riverfront Master Plan Area, which is generally bound by E Ninth Street to the north, S Wynooski Street to the east and the Willamette River to the south.

Table 1 summarizes the recommended changes to the "likely to be funded" list of projects in the adopted TSP to support the Riverfront Master Plan. For those projects that are identified as "aspirational" within the adopted TSP, the table identifies the TSP project number and indicates the recommended course of action as part of the TSP update.

Table 1. Recommended Riverfront Master Plan Transportation Projects for Inclusion into the TSP*

Description	TSP Project #	Recommended TSP Update Action	Estimated Project Cost**	
S Blaine St Extension (E Ninth St to S College St) – Major Collector	E04	Move from Aspirational List to Likely to be Funded List	\$1,800,000	
Rogers Landing Rd Extension (Willamette River to UGB) – Major Collector	E06	Move from Aspirational List to Likely to be Funded List	\$1,400,000	
S College St Improvements (E Ninth St to E Fourteenth St) – Minor Collector with parking both sides	S43	Add to Likely to be Funded List	\$2,925,000	
S River St Improvements (E First St to Bypass) – – to include sidewalks, buffered bike lanes and two 11' travel lanes	S22	Move from Aspirational List to Likely to be Funded List	\$3,200,000	
S River St Improvements (Bypass to Rogers Landing Rd) – to include sidewalks, on-street parking, buffered bike lanes and two 11' travel lanes	S44	Add to Likely to be Funded List	\$1,215,000	
Wynooski St Improvements (S River St to Bypass) – Major Collector	S37	Move from Aspirational List to Likely to be Funded List	\$4,400,000	
N Blaine/E Hancock Signal	I15	Add to Likely to be Funded List	\$900,000	
N Blaine/E First Signal	116	Add to Likely to be Funded List	\$900,000	
S College St Rail Crossing Improvements	117	Add to Likely to be Funded List	\$450,000	
S River St Rail Crossing Improvements	I18	Add to Likely to be Funded List	\$415,000	
Extension of Bypass Trail between S River Street and S College Street	Part of	Move overall Bypass and river trail system project from Aspirational List	\$97,000	
Rogers Landing Road Trail	CH07	to Likely to be funded list	\$117,000	
Construction of the Esplanade walking path	P49	Add to Likely to be Funded List	\$546,000	
Intersection Control Evaluation at E Fourteenth/Rogers Landing Road/Bluff Street	119	Add to TSP to occur when development occurs; cost of intersection study anticipated to be a joint effort between City and developer	\$40,000	
Trolley Feasibility Study		Add a feasibility study to TSP as a joint effort with the potential Urban Renewal District, the Historic Preservation Commission and a nonprofit organization interested in operating the trolley	\$90,000 for Feasibility Study	

^{*}Note: the street projects only reflect those along collector and arterial streets; like the adopted TSP and consistent with State Planning guidance, local streets are not included.

Inclusion of the recommended projects in the adopted TSP will result in approximately \$11 million of projects moved from the Aspiration list to the likely to be funded list and \$7.5 million of new projects added to the likely to be funded list. The adopted TSP identifies \$54.5 million in the likely to be funded list; adding the projects identified for implementation by the Riverfront Master Plan increases this list by \$18.5 million, which is an approximately 33 percent increase. Making a significant change to the reasonably likely to be funded list will require the City to continue to seek additional funding sources and partnership opportunities to implement transportation projects that support economic development during the next fifteen years.

The analysis includes the following topics:

^{**}Cost estimates will be updated following finalization of Project List in Table 1.

- Sidewalk Improvements
- Trail Improvements
- Bicycle Improvements
- Transit Service
- Freight Routes
- Streets & Intersections
- Trolley Project
- Downtown Road Diet

Additional details can be found in the memorandums included as Attachment 1.

The City is evaluating establishing an urban renewal district that includes the Riverfront Master Plan area as well as the Downtown Improvement Plan area. These two areas would be connected by S River Street and S Blaine Street. The urban renewal program could be a possible funding source, along with other funding sources, for the additional \$18.5 million in project costs. The City Council accepted the urban renewal feasibility study on July 20 by Resolution No. 2020-3685. The City Council also established an urban renewal agency on August 17, 2020 by Ordinance No. 2020-2865. The next step in the urban renewal process is to create an urban renewal plan and report which is in process and to determine what transportation projects might be funded in part or in whole using urban renewal funds.

One outstanding question to consider regarding transportation funding related to the Riverfront is "Should the Transportation SDC be adjusted or go without an update, knowing that the current SDC will not provide enough to fund the revised list of project?"

FISCAL IMPACT:

The adopted TSP identifies \$54.5 million in the likely to be funded list; adding the projects identified for implementation by the Riverfront Master Plan increases this list by \$18.5 million over the next 15 years. Urban renewal along with other funding sources will be evaluated to address the \$18.5 million in project costs.

STRATEGIC ASSESSMENT: (Relate to Council Goals if applicable)

2020 Council Goals:

- 2. Further develop an operational culture that adopts and cherishes Diversity, Equity, and Inclusion as core values.
- 3. Promote development of housing affordability such as houselessness, transitional housing, workforce housing.
- 4. Create and support an Urban Renewal Plan and Authority

Attachments: 1. Memorandums Transportation System Plan (TSP) Technical Update



MEMORANDUM

Date: August 18, 2020 Project #: 24611.001

To: Brett Musick, Doug Rux, Kaaren Hofmann, City of Newberg

From: Julia Kuhn and Matt Bell

Project: Transportation System Plan (TSP) Technical Update

Subject: Summary of the Existing Conditions Analyses – Revised per City Comments

This memorandum identifies key highlights of the existing needs analyses included in the adopted 2016 Newberg Transportation System Plan (TSP) and the 2019 Newberg Riverfront Master Plan. A review of key needs identified in each document will help guide the evaluation and prioritization of transportation projects for consideration as part of the TSP Technical Update (herein referred to as the "TSP Update").

BASIS OF NEEDS ANALYSIS

Per Oregon Administrative Rule (OAR) 660-012-0030 (Determination of Needs per the "Transportation Planning Rule"), the adopted TSP identifies needs and deficiencies under year 2015 and year 2035 conditions. The TSP is supported by a detailed assessment of key roadway features, traffic conditions, safety performance, bicycle and pedestrian facilities, and transit service that is provided in its Volume 2, Memorandum 4. Key findings from the previous assessment and its applicability to the TSP Update are outlined below.

An analysis of existing transportation conditions is also provided in Appendix B of the Riverfront Master Plan. In addition to the TSP identification of needs, the discussion provided below also highlights relevant findings from the existing needs assessment associated with the Riverfront Master Plan and notes any deficiencies not already addressed in the TSP. These additional needs should be considered during the TSP Update.

As part of assessing existing needs, the TSP and the Riverfront Master Plan compared the transportation facilities provided "today" to the City's goals and visions as well as to a variety of performance measures and multimodal objectives. The adopted TSP Goals are:

 Goal 1: Maintain or improve access to existing properties and employment areas; improve freight traffic and/or minimize downtown trips for through traffic; have minimal impact on adjacent properties.

- Goal 2: Emphasize visual and aesthetic qualities in their design; minimize any potential energy, social, environmental, and economic impacts; improve rail, water, and air transportation systems where possible.
- Goal 3: Enhance access for emergency response; include improvements meant to reduce crash frequency and severity and/or to enhance pedestrian/bicyclist safety.
- Goal 4: Include "complete street" principles with both vehicle and pedestrian/bicycle improvements; improve the connectivity of the street and/or sidewalk system; improve access to public transit.
- Goal 5: Provide the most cost effective improvement option and identify stable funding sources for improvements; repair, maintain, and/or improve existing facilities and protect needed right- of-way for future projects; or constructed as a mitigation requirement by private development.

The Riverfront Master Plan includes seven goals, two of which are specifically relevant to transportation and are also in alignment with TSP Goals #1 and #4, in particular:

- Plan for a multimodal transportation network to provide access and connections to the rest of the city, especially downtown Newberg.
- Create a plan that works for community members of all ages, abilities and cultural backgrounds.
 - The performance measures and multimodal considerations used to identify existing deficiencies in both documents are highlighted below.
- Pedestrians the needs analysis is based on:
 - the identification of key gaps in the sidewalk and trail system that connect neighborhoods with key walking destinations in the City, such as schools, employment areas, the downtown, and recreational areas;
 - projects needed to comply with the City's ADA/Pedestrian/Bike Route Improvement Plan; and,
 - collector and arterial streets that are lacking sidewalks on one or both sides of the road.

Since adoption of the TSP, the Oregon Department of Transportation (ODOT) has developed a methodology for identifying "pedestrian level of service" (PLOS) along key walking corridors; PLOS considers factors such as sidewalk width, condition, width of a buffer/landscaping strip if provided, width of the adjacent bike lane if provided, number of vehicular travel lanes, posted speed, and the land use context. Although not specifically addressed within either document, the sidewalk and trail gaps analysis and fulfilling the ADA Plan projects are a good proxy for the PLOS measure.

- Bicyclists the needs analysis is based on:
 - the identification of key gaps in the system of bike lanes and "shared roadways" that connect neighborhoods with key cycling destinations in the city, such as schools, employment areas, the downtown, and recreational areas;

- projects needed to comply with the City's ADA/Pedestrian/Bike Route Improvement Plan; and,
- collector and arterial streets that are missing bike lanes and are higher in vehicular speed and volume than is desirable for a "shared roadway" configuration.

Since adoption of the TSP, ODOT has developed a methodology for identifying "bicycle level of service" (BLOS) along key bicycling corridors; BLOS considers factors such as number of through vehicular lanes per direction, the width of the bike lane and adjacent parking lanes, vehicular speed limit or prevailing speed, and any bike lane blockage (e.g., driveways, loading zones, stopped buses, or parking maneuvers). Although not specifically addressed within either document, the bike facility gaps analysis and fulfilling the ADA Plan projects are a good proxy for the BLOS measure.

- Transit the needs analysis is based on:
 - Considerations from the Yamhill County Transit Area planning efforts; and,
 - Analysis of pedestrian crossings and sidewalks that connect neighborhoods and employment areas with transit stop locations.
- Freight the needs analysis is based on:
 - Consistency with ODOT guidance on freight facility needs; and,
 - Analyses related to how intercity and intracity freight connections are made via the designated freight and truck routes.
- Streets and Intersection—the needs analysis is based on:
 - Street connectivity between key areas within the city;
 - Intersection level of service/mobility;
 - Intersection safety;
 - Achieving a network of "complete streets" overtime; and,
 - Existing commute patterns and residents' mode choices.

In addition, the TSP identifies key air, pipeline, rail and water services available in the City today.

SUMMARY OF EXISTING NEEDS RELEVANT TO THE TSP UPDATE

Sidewalks

Sidewalks along arterial and collector streets are generally provided within the downtown and newer commercial and residential areas but are frequently missing on one or both sides of the street in older neighborhoods. Further, although not specifically identified, there also appears to be a lack of consistent street lighting and there is often long walking distances between protected pedestrian crossings along arterial streets, in particular.

Areas noted to experience higher pedestrian volumes than other areas within the City include:

- Near the commercial areas adjacent to the Springbrook Road/Oregon 99W signalized intersection and the Springbrook Road/Haworth Avenue all-way stop-controlled intersection (e.g., near Fred Meyer, Safeway, etc.);
- Near the Everest Road/First Street intersection the west leg of this intersection has a marked crosswalk and flashing beacon to facilitate connections between the homes and multifamily residences to the south of First Street with the commercial areas and Post Office to the north;
- Near the Fulton Street/Villa Road intersection that connects the residential areas and Chehalem Aquatic and Fitness Center to the east with George Fox University and the Morse Athletic Facilities to the west;
- Along Hancock Street, First Street, Main Street and College Street in the downtown; and,
- Near the Illinois Street/Main Street intersection this connects residential and employment areas to the north into the downtown.

The TSP notes that walking within the City can generally be enhanced by filling key gaps in the sidewalk network, adding streetscape and landscaping to buffer walkers from traffic, addressing key ADA pedestrian needs, especially curb ramps at intersections, providing improved crossings and implementing other pedestrian-oriented safety measures. In addition, the TSP notes that although the downtown has a fairly complete network of sidewalks, curb ramps and pedestrian wayfinding signage, the number of vehicular travel lanes on the First Street/Hancock Street couplet (i.e. three lanes in each direction) serves as a barrier to providing comfortable walking and crossings of streets. This finding supports the city's desire to pursue a "Road Diet" along the couplet to reduce travel lanes and add bicycle and pedestrian facilities and other streetscaping improvements within the downtown (i.e., TSP Project S07). Based on our review, the key findings related to the TSP's existing deficiencies analysis are still relevant to shaping the existing determination of needs for the TSP Update.

In addition to the general pedestrian-related deficiencies presented in the TSP, the Riverfront Master Plan also highlights the need to connect Roger's Landing County Park, Leavitt Park, and Ewing Young Park to Edwards Elementary School, the downtown, and Renne Park. Further, the Riverfront Master Plan highlights the walking challenges associated with the discontinuous sidewalk on S College Street, the lack of any sidewalks on Fourteenth Street, the need for pedestrians to traverse steep stairs when walking

from downtown to the access the River, the walking barrier presented by the Newberg-Dundee Bypass, and the need for new curb ramps at many intersections that do not currently comply with ADA.

Based on our review, the specific sidewalk needs highlighted by the Riverfront Master Plan are consistent with the general needs identified in the TSP but add emphasis on connecting the parks and the River to the downtown and the residential areas and schools to the north of the Bypass. These connections should be highlighted in the TSP Update as well.

Shared Use Paths

Today, shared use paths and trails are fairly limited within the City. In the future, achieving the vision of the Chehalem Heritage Trail Plan, as developed by the Chehalem Parks and Recreation District (CPRD), are intended to provide a 70-mile trail system within and between Dundee and Newberg. According to CPRD's website¹, the trails open for use within the City are located near the Chehalem Glenn Golf Course, Schaad Park, Ewing Young Park, Bob and Crystal Rilee Park. CPRD's website also notes that the completion of the Heritage Trail System will likely take another 20 years to fully achieve.

In addition to the TSP and CPRD, the Riverfront Master Plan highlights the walking challenges associated with the gap in the trail constructed as part of the Bypass along E Fourteenth Street, the general lack of a continuous walking connection between the downtown and the River, and the need for pedestrians to traverse steep stairs when walking from downtown to the River access. The Riverfront Master Plan existing needs analysis also highlights the area where the Bypass is constructed above grade between College Street and River Street as a potential location for a future trail connection(s).

Based on our review, support of the continued implementation of the trail system is still relevant to shaping the existing needs for the TSP Update; specific emphasis of closing the gap in the trail along E Fourteenth Street and incorporating additional connections under the Bypass is also merited.

Bicycle Facilities

The TSP deficiencies analysis highlights that a limited number of arterial and collector streets within the City have continuous striped bike lanes today. With the exception of Oregon 99W, Oregon 219 to the south of downtown and the streets in the southeast part of the City, most of the striped bike lanes are only provided along individual street segments. The TSP also notes that cycling activity is relatively low and that no arterial/collector street intersection was noted to facilitate more than five cyclists over the course of a typical commute hour.

¹ https://www.cprdnewberg.org/general/page/chehalem-heritage-trails

The TSP also notes that the City has installed bike racks within the downtown to provide convenient parking for cyclists. The construction of these racks has been provided through funds raised as part of the downtown bike rack cost-share program.

The Riverfront Master Plan notes that there are no striped bike lanes within the area considered but that most streets near the Riverfront have low traffic volume and speeds that are suitable for cyclists to "share the road" with motorists. Some of these streets are marked with sharrows and wayfinding signs, but not all. The Riverfront Master Plan also notes that bike access to the Roger's Landing County Park is narrow, steep and windy, making it a challenge for comfortable cycling.

Based on our review, both plans highlight the need to establish a continuous network of convenient, comfortable and safe "low-stress" bicycle facilities along the street system, enhance available bicycle wayfinding to key destinations, and add bike parking facilities at key locations within the City. Each of these needs is also relevant to the TSP Update.

Transit Service

Yamhill County Transit Area (YCTA) provides fixed route and dial-a-ride service within the City. At the time the TSP was prepared, five fixed routes served the City of Newberg. With the COVID-19 pandemic, YCTA has discontinued² Routes 5 and 7 but maintained Routes 44, 45x, and 46. With this interruption in service, Newberg residents are still provided with connections to McMinnville and the Tigard Transit Center; however, transit connections within the City between George Fox University, the downtown and Newberg Providence Medical Center are not available.

No transit service is provided near the Riverfront Master Plan area today so the plan does not address transit deficiencies.

In general, the TSP identifies existing transit needs related to providing comfortable pedestrian crossings near stop locations, providing wayfinding to and shelters at stop locations, and expanding service within the City to newly developing areas beyond those served by Routes 5 and 7. Based on our review, these needs are also relevant to the TSP Update.

Freight

Statewide, regional and local truck freight traffic uses the city street system today. The Newberg-Dundee Bypass, Oregon 99W and Oregon 219 serve as the primary freight routes today and are all part of the state's freight system. Designated truck routes generally include Springbrook Road, Crestview Drive,

² http://ycbus.org/

Wynooski Street, Eleventh Street, Main Street, Second Street and Fourth Street in the downtown, and Illinois Street.

Based on our review and although not specifically identified in the TSP, in addition to serving "through" freight traffic, these designated routes provide key connections to employment, institutional, and commercial areas, such as:

- Newberg Providence Medical Center;
- The commercial areas near Oregon 99W/Springbrook, such as Fred Meyer and Safeway;
- Newberg High School and Mountainview Middle School;
- A-Dec;
- The Allison Inn and Spa;
- Downtown;
- The wineries surrounding the City;
- The industrial areas near Illinois Street and the Oregon 219/Springbrook Road intersection;
 and,
- The property formerly serving as the Paper Mill. This property is a key part of the Riverfront Master Plan area and is envisioned for redevelopment.

There are no east-west truck routes connecting to George Fox University; rather designated freight-related access is provided via Springbrook Road and College Street into the campus.

The TSP identifies the need to continue to monitor the effects of Bypass construction on downtown traffic levels, particularly related to regional and statewide truck activity, as well as to ensure that streets serving employment areas are designed to accommodate existing and future freight traffic. Traffic monitoring efforts collected by ODOT since its construction revealed that Phase 1 of the Bypass has had lower reductions in downtown truck-related traffic than originally anticipated. However, ODOT is currently designing Phase 2 to extend the Bypass from Oregon 219 to Rex Hill to the east on Oregon 99W. ODOT is also engaged in preliminary planning efforts on Phase 3 to extend the Bypass from Dundee to McDougall's corner (i.e., Oregon 99W/Oregon 18 in Dayton). With Phase 2 in-place, more convenient access to the Bypass for statewide and regional travel will be available (versus the more circuitous route provided via the Springbrook Road connection to the Bypass) and as such, further reductions in downtown traffic is anticipated.

Although not addressed within the Riverfront Master Plan existing conditions, Eleventh Street and River Street are designated truck routes today, providing access to the previous paper mill (the Bypass also has a statewide freight designation but is not at-grade in the Riverfront area).

Based on our review, the primary freight-oriented destinations within the City appear to be served by the designated freight and truck routes today and, as such, indicate support for continued Economic Development and growth within the City. In addition, the Bypass-related considerations and future street design needs are also relevant for inclusion into the TSP update.

Streets and Intersections

Existing and planned streets within the City are designated as:

- Major Arterials only Oregon 99W is classified as a major arterial;
- Minor Arterials this includes Oregon 219, Oregon 240, Mountainview Drive, Springbrook Road, and Wilsonville Road;
- Major and Minor Collector Streets this includes several streets within the City connecting residents to schools, parks, businesses, other neighborhoods, the downtown and employment areas; and,
- Local Streets these primarily serve residential areas.

The TSP also identifies desired cross-sections to provide for "complete streets" that accommodate the needs of all users along the arterial, collector and local street system. Achieving a network of complete streets over time is also important for the TSP update.

The Riverfront Master Plan notes that specific streetscape design details related to the future cross section of River Street and the provision of on-street bike facilities and/or the creation of bicycle boulevards along key streets will need further study as part of the TSP Update. We will want to further explore this issue as part of the Alternatives Analysis for the TSP Update.

A number of connectivity needs are included in the TSP to address vehicular as well as pedestrian and bicycle needs, such as:

- Extending Villa Road to the north and Foothills Drive to the east;
- Providing additional streets to connect the residential and employment areas east of Springbrook Road to Oregon 99W and Wilsonville Road;
- Providing additional east-west and north-south streets in the area north of Oregon 99W between Springbrook Road and Benjamin Road; subsequent to the TSP, the Crestview Drive extension north of Oregon 99W has been conditioned as part of a recently approved Planned Unit Development to help fulfill these needs; and,
- Providing additional options for accessing the neighborhoods south of Oregon 219 and west of Church Street; the potential for signalizing the First Street/Everest Road intersection is identified as a future consideration to provide access options.

These connectivity needs are important for consideration as part of the TSP update as well. Although the existing conditions deficiency for the Master Plan does not highlight any deficiencies, there are a number of future connectivity needs highlighted by the TSP within the Riverfront area. These key connectivity needs will be discussed in the Future Conditions Memo for the TSP Update.

The TSP includes an analysis of vehicular mobility at several arterial/collector throughout the City. Based on the analysis of level-of-service and volume-to-capacity, two intersections are identified as not meeting performance targets under "existing conditions", including Haworth Avenue/Springbrook Road and Oregon 219 (First Street)/Everest Road. Although not identified in the TSP Existing Conditions, we

understand that the City intends to signalize the Haworth Avenue/Springbrook Road intersection when warrants have been met.

Finally, the Riverfront Master Plan identifies E Ninth Street, S River Street and S Wynooski Street as the primary vehicular streets within the area. The plan also notes that many of the roadways allow for onstreet parking but yet many are poor pavement conditions, marked by cracking and potholes. This pavement condition also affects cyclists and walkers given the lack a continuous sidewalk system requires people to walk along the streets. No specific intersection or crash history deficiencies are noted within the existing needs associated with the Riverfront Master Plan but the future needs identifies the potential signalization of Blaine/First Street and Blaine/Hancock Street in the downtown.

Based on our review, both plans highlight existing deficiencies related to providing street connectivity and ensuring that the collector and arterial street system includes facilities and treatments that serve all users of the transportation system in the future. These needs are also relevant to the TSP Update.

Safety

The TSP identifies four intersections along Oregon 99W and two along Oregon 219 that ranked in the Top 10 percent of crash locations within the state in 2011. Further, two intersections are noted for future consideration related to safety improvements, including Oregon 99W/Springbrook Road and Haworth/Springbrook Road.

Since adoption of the TSP, the Oregon 99W/Springbrook Road intersection has been reconstructed to facilitate access to the Bypass/Oregon 219 intersection and opening in 2018. Accordingly, the City and ODOT should continue to monitor crash patterns at this location. ODOT has only published crash data for year 2018, not 2019, so a comprehensive analysis of crash rates at this intersection is not yet reflective of the new configuration.

As noted above, the City intends to signalize the Haworth Avenue/Springbrook Road intersection when warrants have been met. This appears to also be a priority for the TSP Update. No other crash-related needs are identified in the Existing Conditions Analyses for the TSP.

The Riverfront Master Plan does not include an analysis of existing crash records but instead notes that "safe and direct connections for walkers, bikers, and drivers will draw people to the riverfront from downtown and other areas of the city." The provision of multimodal facilities that provide these connections to the riverfront should be a focus of the TSP Update.

Based on our review, both plans highlight the need for safe, comfortable, and convenient travel by walkers, cyclists and motorists in the City; this finding is also relevant to the TSP Update.

Commute Patterns

As noted in the TSP, a significant portion of the City's residents commute to Portland. This contributes to higher than average commute times and higher percentages of single occupancy vehicles commuting than experienced in other communities. Only one percent of residents identified transit as their primary commute mode and less than eight percent identified walking or cycling.

Based on our research of 2019 US Census data published since the adoption of the TSP, the average travel time to work for 2014 – 2018 was estimated at 26 minutes for Newberg residents³; this indicates that the patterns identified are still relevant for consideration in the TSP Update. Further, per information provided⁴ in the "On the Map" website maintained by the US Census, the number of Newberg residents residing and working in the City has decreased since the publication of the TSP. Of the 8,555 jobs in Newberg, only 23 percent are Newberg residents whereas the remainder come from a variety of places with no one city or area representing more than 7 percent. Further, 8,221 residents commute out of Newberg for their jobs; this represents a significant increase in commuting out of the city from when the TSP was published.

Given the existing reliance on single occupancy vehicle commuting and the continued increase in residents commuting out of Newberg for their jobs, measures to encourage reduced reliance on automobile travel (per OAR 660-012-0045) should be included in the TSP Update.

No specific mode-split analyses are discussed in the existing needs analysis of the Riverfront Master Plan. As highlighted previously both plans identify the importance of providing comfortable, convenient and safe facilities for all users of the transportation system in the future. Providing these facilities can provide alternative options to the automobile for travel by area residents, employees and visitors, thereby helping the City comply with OAR 660-012-0045. These considerations are important for the TSP Update as well.

Rail Service

Willamette & Pacific Railroad operates the line that runs parallel to Oregon 99W in the City. The TSP notes the potential for passenger freight service in the future but does not identify this as a deficiency. The Riverfront Master Plan identifies the need to study the feasibility of operating a trolley service to connect into downtown along the existing rail tracks. This consideration will be further explored as part of the future conditions analyses for the TSP Update.

³ https://www.census.gov/quickfacts/fact/table/newbergcityoregon/LFE305218

⁴ https://onthemap.ces.census.gov/

Air Service

As noted in the TSP, the privately-owned Sportsman Airpark provides access to the public for small aircraft, aircraft rentals (including planes, helicopters and hot-air ballooning) and flight instruction. A larger general aviation airport is located in Hillsboro and passenger service is provided via the Portland International Airport. Neither the TSP nor the Riverfront Master Plan identify any air-related deficiencies. No air-specific activities are anticipated as part of the TSP Update.

Water Service

As noted in the TSP, recreational boating and water activities are provided via the Willamette River on the southside of the City. Key access to the river is provided via Rogers Landing County Park, which is located south of the Newberg Paper Mill property. Primary access to the Park is provided via College Street and River Street. No water-related deficiencies are identified in the TSP.

As noted in several sections above, the Riverfront Master Plan highlights the need for improving existing multimodal connections to the River as well as for providing additional connections that can provide comfortable, convenient and safe walking, cycling and driving within and to/from the Riverfront. Based on our review, this should be a key focus of the TSP Update as well. In addition, the vision for the Riverfront Master Plan identifies the potential for "water trails" for recreational use along the Willamette River. Based on our review, improving multimodal connectivity to the parks along the river as well as the "water trails" should be a key focus of the TSP Update as well.

Pipeline Service

High-pressure natural gas transmission lines in the City are operated by Northwest Natural. No pipelinerelated deficiencies are identified in the TSP. No changes to the pipeline section are anticipated as part of the TSP Update.

Conclusions

Based on our review of the existing deficiencies analyses presented in the adopted TSP and the Riverfront Master Plan, both documents provide consistent themes that will shape the deficiencies analyses for the TSP Update as well as the analyses of future alternatives and TSP project prioritization. Both plans stress the need for comfortable, convenient and safe multimodal facilities that help area residents, employees and visitors walk, cycle and drive within and to/from the City and the Riverfront area. Further, the provision of these facilities can help the City achieve statewide Transportation and Economic Development planning goals, amongst others.

A couple of specific areas highlighted in the Riverfront Master Plan are not as clearly articulated in the TSP and merit further discussions as part of the TSP Update process, such as:

- Prioritizing key walking and cycling connections to the Riverfront area as well as improving access to the river and the parks;
- Addressing gaps along S College Street and Fourteenth Street sidewalks as well as providing alternatives to the steep stairway connection to the river;
- Addressing the narrow, steep bicycle connection to Roger's Landing County Park;
- Prioritizing ADA curb ramps and pavement improvements within the Riverfront area;
- Identifying the potential for future transit connections to the Riverfront area;
- Re-assessing the freight and truck needs associated with the Riverfront area, given the closure of the paper mill;
- Future signalization of the Blaine/First Street and Blaine/Hancock Street intersections; and,
- Further review of specific streetscape design details related to the future cross section of River Street and the provision of on-street bike facilities and/or the creation of bicycle boulevards along key streets within the Riverfront area.

These topics as well as the future deficiencies analyses presented in the adopted TSP and the Riverfront Master Plan will be discussed as part of our next memo.



MEMORANDUM

Date: September 1, 2020 Project #: 24611.001

To: Brett Musick, Doug Rux, Kaaren Hofmann, City of Newberg

From: Julia Kuhn and Matt Bell

Project: Transportation System Plan (TSP) Technical Update

Subject: Summary of the Future Conditions Analyses

This memorandum identifies key highlights of the future needs analyses included in the adopted 2016 Newberg Transportation System Plan (TSP) and the 2019 Newberg Riverfront Master Plan. This review focuses on the commonalities and differences between the year 2035 transportation needs identified in the two documents specific to the Riverfront area only. No anticipated changes to other areas of the City are included in the TSP Update. The needs analysis also builds upon information presented in the Existing Conditions Memo prepared for the TSP Technical Update (herein referred to as the "TSP Update").

BASIS OF FUTURE NEEDS ANALYSIS

The future transportation needs are based on the anticipated growth in households and jobs within the Newberg Urban Growth Boundary (UGB) through the year 2035. Consistent with the adopted Comprehensive Plan designations, the TSP future needs analysis is based on a total of 864 homes and 534 jobs located within the Riverfront area. Conversely, the Riverfront Master Plan reflects a mixed-use rezoning scenario that would increase the number of anticipated homes in the area to 1,050 and the jobs to 758 by the year 2035. As part of the rezoning, a mixed-use node is envisioned for the area to the northwest of the S River Street/E Fourteenth Street intersection; key to this nodal development is the provision of "safe, comfortable, and convenient travel throughout the area and into Downtown."

As part of the Riverfront Master Plan, the consistency of the rezone with the requirements of Oregon Administrative Rule (OAR) 660-012-0060 (*Plan and Land Use Regulation Amendments* per the "Transportation Planning Rule") was assessed based on the ability of four nearby intersections to accommodate the potential changes in traffic associated with the new land designations. Per the Riverfront Master Plan, only the S Blaine Street/First Street and S Blaine Street/E Hancock Street intersections were identified as being significantly affected (as defined by the TPR). To address the TPR impacts, the Riverfront Master Plan recommends future signalization of both intersections. The S River Street/S First Street intersection was forecast to operate at capacity under either scenario so no significant impacts were identified as a result of the change in zoning. No other streets or intersections were identified to be affected by the recommended rezoning within the Riverfront Master Plan.

Accordingly, the remainder of this memorandum identifies the multimodal needs and recommended alternatives within both documents to address the year 2035 conditions within and near the Riverfront area.

SUMMARY OF FUTURE NEEDS

The future needs analysis summarized herein focuses on the planned transportation system within the Riverfront Master Plan Area, which is generally bound by E Ninth Street to the north, Wynooski Street to the east and the Willamette River to the south. The future transportation system needed within and to/from this area is reflective of the proposed rezoning to integrate and transition the use of the lands south of the Newberg Dundee Bypass from industrial to an overall vibrant, mixed use neighborhood.

The Riverfront Master Plan and the City's adopted TSP identify transportation needs and future projects within this area; some of the future projects are included in both plans whereas others are in one plan but not the other. The objective of the technical update to the TSP is to provide a common framework of needs within the City's TSP reflective of the future Riverfront Master Plan vision for adoption by the City.

Table 1 summarizes the consistency of the recommended Riverfront Master Plan transportation projects with those in the adopted TSP. For those projects that are included in both documents, the table identifies the TSP project number and indicates whether the TSP considers them "likely to be funded" by the year 2035 or as "aspirational." The aspirational projects are not anticipated for funding by the year 2035 but are identified as important to consider if additional funding becomes available.

As shown in Table 1, only the sidewalk and bicycle improvements recommended in the Riverfront Master Plan are shown as "likely to be funded" in the adopted TSP. The TSP update will need to include moving several of the Riverfront projects from the "aspirational list" to the "likely to be funded" list to ensure implementation within the next twenty years as well as adding the projects that were not included in the TSP as part of the update.

Table 1. Recommended Riverfront Master Plan Transportation Projects for Inclusion into the TSP

Description	TSP Project #	TSP Funding Status	Estimated Project Cost
S Blaine St Extension (E Ninth St to S College St) – Major Collector	E04	Aspirational; would need to be moved to Likely to be funded	\$1,800,000
Rogers Landing Rd Extension (Willamette River to UGB) – Major Collector	E06	Aspirational; would need to be moved to Likely to be funded	\$1,400,000
S College St Improvements (E Ninth St to E Fourteenth St) – Minor Collector with parking both sides	-	Would Need to be Added to TSP	\$2,925,000
S River St Improvements (E First St to Bypass) Major Collector	S22	Aspirational; would need to be moved to Likely to be funded	\$3,200,000
S River St Improvements (Bypass to Rogers Landing Rd) – Major Collector with parking both sides	-	Would Need to be Added to TSP	\$1,215,000
Wynooski St Improvements (S River St to Bypass) – Major Collector	S37	Aspirational; would need to be moved to Likely to be funded	\$4,400,000
E Ninth St Sidewalks (S Blaine St to S River St)	P08	Identified as Funded; no change needed	\$86,000
E Fourteenth St Sidewalks (S College St to S River St)	P09	Identified as Funded; no change needed	\$83,000
E Eleventh St Sidewalks (S River St to Wynooski St)	P12	Identified as Funded; no change needed	\$78,000
E Ninth St Bike Boulevard (S Blaine St to S River St)	B05	Identified as Funded; no change needed	\$118,000
E Eleventh St Bike Boulevard (E of S River St)	B19	Identified as Funded; no change needed	\$120,000
N Blaine/E Hancock Signal	-	Would Need to be Added to TSP	\$900,000
N Blaine/E First Signal	-	Would Need to be Added to TSP	\$900,000
S College St Rail Crossing Improvements	-	Would Need to be Added to TSP	\$450,000
S River St Rail Crossing Improvements	-	Would Need to be Added to TSP	\$415,000
Provision of a Trolley		Would Need to be Added to TSP	Recommended for Feasibility Study

Further, the adopted TSP does not identify local street connections (which is appropriate per the TPR requirements), while the Riverfront Master Plan identifies six local streets needed for implementation of the overall vision. For reference purposes the following local streets are identified in the Master Plan:

- Local Residential
 - E Ninth Street from S Pacific Street to Wynooski Street
 - Mill Place Extension south from E Ninth Street
 - E Fourteenth from S College to S River Street
- Local Commercial/Industrial
 - E Fourteenth Street from S River Street to NE Dog Ridge Road
 - Waterfront Street from S College Street to the UGB
 - S Industrial Street
 - E Industrial Street

As part of the Update, the City may choose to add the streets identified above as local commercial/industrial street designations to the Functional Classification Map (shown in Figure 14 of the Adopted TSP) to highlight the importance of these streets in the implementation strategy.

The following sections highlight further considerations as part of the TSP Update.

Funding Implications

Adding the new projects and moving projects from the aspirational list to the likely to be funded list will have financial implications on the TSP adoption. As summarized in Table 1, the cumulative impact of the projects to be addressed by the TSP Update include:

- Moving projects from the Aspirational List to the Likely to be Funded List = \$10.8 million
- Adding new projects to the TSP = \$6.81 million

The adopted TSP identifies \$54.5 million in the likely to be funded list; adding the projects identified for implementation by the Riverfront Master Plan increases this list by \$17.6 million, which is an approximately 33 percent increase. Making a significant change to the reasonably likely to be funded list will require additional funding sources to be identified and/or will require the City to move some of the lower priority TSP projects to the aspirational list.

Recommended River Street Cross-Section & Bike Treatments

Under the adopted TSP, River Street is identified as a major collector, which includes the following typical elements on both sides of the street:

- Five foot sidewalks
- Five and a half feet landscaping strips
- Six feet bike lanes
- Twelve feet vehicular lanes

This results in a total right-of-way (ROW) of 57 feet, with up to 80 feet ROW, depending on the context.

To achieve the vision of the Riverfront Master Plan and in recognition of existing ROW constraints, there are four alternative cross-sections identified for River Street. A comparison of these cross-sections to the TSP major collector cross-section is presented in Table 2.

Table 2. River Street Cross-Section Comparison

Description	Sidewalks	Landscaping	Bike Treatment	Parking	Vehicular Travel Lanes (One in each direction)	Other	
	Existing TSP						
Major Collector	5′	5.5′	6' bike lane	No	12'	N/A	
	Riverfront Master Plan						
North of the Bypass	5′	6′	6' bike lane plus 1' buffer	No	11'	1' easement behind sidewalk	
South of the Bypass – 72 feet ROW with Bike Lanes	12' on one side; 6' with landscaping strip on other side	6' one side only	5' bike lane with 1' buffer	7' parking lane	11'	N/A	
South of the Bypass – 72 feet ROW with Cycle Track	12' on one side; 6' with landscaping strip on other side	6' one side only	5'protected bike lane with 1' buffer	7' parking lane between bike lane and vehicular travel lane	11'	N/A	
South of the Bypass – with 60 – 66 feet ROW	12 – 15′	None	Shared lane with vehicles	7' parking lane	11'	N/A	

The adopted TSP does not include a cross-section with cycle tracks on any of the standards and there are no streets identified with four different permutations for implementation as is reflected in Table 2 above.

As part of the adoption of the TSP update, the City will also want to explore:

- Whether other street classifications could benefit from the implementation of a cycle track in lieu of bike lanes;
- Continued use of sharrows and/or shared lanes on collectors and local streets, especially when right-of-way is constrained; the need for sharrows on other streets within the Riverfront area is part of overall plan implementation and we understand that this issue also applies to other constrained streets in existing neighborhoods throughout the city; and,
- Adding a special category of cross-section options for River Street reflective of the various needs identified above. This is atypical of a TSP but may be needed in this context.

Oregon 219/Wynooski Street Intersection

Neither the TSP nor the Riverfront Master Plan identify a specific project to increase vehicular capacity at the Oregon 219/Wynooski Street intersection. However, the Riverfront Master Plan notes that this intersection serves as a key gateway for providing access into the Riverfront area. As part of the TSP Update, the City may want to include funding for an intersection control evaluation study and/or design and construction funding at this location to achieve the desired vision of the Riverfront Master Plan. No costs for an intersection study and/or construction were evident within the Riverfront Master Plan so a cost estimate may need to be developed as part of the final list of recommended projects for the TSP Update.

Trolley Project

The *Downtown Improvement Plan* for Newberg and the Riverfront Master Plan both identify a vision for a future trolley using the existing rail tracks within Blaine Street to connect downtown with the Riverfront as well as to the Allison Inn to the northeast. Within the Riverfront Master Plan, the need to study the feasibility of providing a trolley is identified. Examples of considerations for the trolley feasibility study to address include:

- The recommended alignment and probable stop locations from the downtown to the Willamette River, especially in light of supporting the identified mixed-use nodes within the Riverfront Master Plan;
- The type and scale of rail crossing treatments needed at the street and trail crossings; these treatments will need to consider current rail safety guidance such as, but not limited to, crossing geometry, illumination, safety barriers, signage and pavement markings, detection and warning devices, the type of gates needed, coordination with school bus stop needs, and, the type of crosswalk and pedestrian gates needed;
- The role of ODOT Rail in planning, constructing and operating the trolley;
- Likely funding sources for construction, maintenance and operations.

To achieve this Riverfront vision, the TSP Update will need to add funding for the Trolley feasibility study into the likely to be funded list. No costs for the feasibility study were evident within the Riverfront Master Plan so a cost estimate may need to be developed as part of the final list of recommended projects for the TSP Update.

Trail Improvements

The Riverfront Master Plan identifies the need for a number of pathways and the importance of achieving the vision of the Chehalem Heritage Trail Plan, as developed by the Chehalem Parks and Recreation District (CPRD).

A number of trail projects are identified that provide localized access within and directly to the parks in the area. However, some of the trails serve broader needs and therefore require coordination with the TSP Update and will rely on a mix of funding from the City, CPRD, property development and other potential sources. In particular, the Riverfront Master Plan identifies the following trail projects that have more regional applicability that should be considered as part of the TSP Update:

- Extension of the Bypass Trail between S River Street and S College Street (estimated for a total cost of \$97,000);
- Construction of the Esplanade walking path west of S River Street and south of the existing mill site (estimated for a total cost of \$546,000); and,
- Rogers Landing Road trail (estimated for a total cost of \$117,000).

In total, these projects would add approximately \$760,000 to the reasonably likely to be funded list within the TSP.

The Riverfront Master Plan also identifies the provision of a new "Waterline Bridge" over the Willamette River, which would be a potential new pedestrian and bicycle bridge to connect Newberg with other areas in the county. This is identified as a longer-term need (beyond 30 years) and could be considered for addition to the aspirational list in the TSP Update. No costs for the new bridge were evident within the Riverfront Master Plan so a cost estimate may need to be developed as part of the final list of recommended projects for the TSP Update.

Downtown Road Diet

The City's desire to pursue a "Road Diet" along the First Street/Hancock Street couplet in downtown is currently included in the "likely to be funded list" in the TSP. This project requires ODOT coordination and would reduce the number of vehicular travel lanes and add bicycle and pedestrian facilities and other streetscape improvements within the downtown. These changes to the downtown will also help to achieve the Riverfront Master Plan's vision of providing a more safe, convenient and comfortable environment for people walking, bicycling, taking transit or the trolley and driving. Continued prioritization of the Downtown Road Diet project should be an integral part of the TSP Update to help achieve the vision of the Riverfront Master Plan.

Truck Routes

Although not addressed within the Riverfront Master Plan, Eleventh Street and River Street are designated truck routes today, providing access to the previous paper mill (the Bypass also has a statewide freight designation but is not at-grade in the Riverfront area). As part of the TSP update, this designation may need to be removed to reflect the vision for the vibrant mixed-use environment.

Further and as noted above, the City may consider adding the local commercial/industrial streets identified in the Riverfront Master Plan to the functional classification map to indicate the priorities for local truck routing/access rather than continuing to prioritize a designated truck route with the transition of the area into a vibrant, mixed-use environment.

Conclusions

Based on our review of the future needs presented in the adopted TSP and the Riverfront Master Plan, the TSP Update should consider the following:

- Re-evaluating the projects identified on "likely to be funded list" to include projects within the Riverfront Master Plan area; adding the projects identified for key Riverfront implementation activities would increase the overall needed funding by the City for transportation projects by more than 33 percent over the next twenty years;
- Whether the local commercial/industrial streets in the Riverfront Master Plan should be added to the Functional Classification Map shown in Figure 14 of the TSP as part of supporting the transition of the lands south of the Bypass into a vibrant mixed use environment;
- Whether the collector and arterial classifications could benefit from the implementation of a cycle track as an alternative to bike lanes on both River Street as well as along other streets within the City;
- Continued use of sharrows on collectors and local streets, especially in right-of-way constrained environments;
- Adding a special category of cross-section options for River Street reflective of the needs of the Riverfront Master Plan; this is atypical of a TSP but may be needed to achieve the overall vision;
- Re-assessing the truck route designations on Eleventh Street and River Street given the closure of the paper mill and vision of the Riverfront Master Plan;
- Adding funding for an intersection control evaluation study and/or the design and construction of changes to the Oregon 219/Wynooski Street intersection to achieve the desired vision of the Riverfront Master Plan;
- Adding a trolley feasibility study to the likely to be funded list;
- Prioritizing completion of the Heritage Trail as well as trail projects that support the needs
 of walkers and cyclists, particularly extension of the Bypass Trail and construction of the
 Esplanade walking path and the Rogers Landing Road trail;
- Adding a feasibility study for a potential Waterline Bridge across the Willamette River;
- Continuing to prioritize the implementation of the Downtown Road Diet project to support the provision of safe, comfortable and convenient travel for people walking, cycling, taking transit and driving.

We look forward to discussing these topics with you at our upcoming meetings.



MEMORANDUM

Date: November 2, 2020 Project #: 24611.001

To: Brett Musick, Doug Rux, Kaaren Hofmann, City of Newberg

From: Julia Kuhn and Matt Bell

Project: Transportation System Plan (TSP) Technical Update

Subject: Recommended list of Projects for the TSP Technical Update

This memorandum identifies the recommended changes to the adopted 2016 Newberg Transportation System Plan (TSP) to reflect the transportation needs identified in the 2019 Newberg Riverfront Master Plan. The changes discussed herein are specific to the Riverfront area only. No recommended changes to other areas of the City are recommended for inclusion in the TSP Update.

BASIS OF NEEDS ANALYSIS

In accordance with Oregon Administrative Rule (OAR) 660-012-0030 (Determination of Needs per the "Transportation Planning Rule"), the adopted TSP identifies needs and deficiencies under year 2015 and year 2035 conditions. The TSP is supported by a detailed assessment of key roadway features, traffic conditions, safety performance, bicycle and pedestrian facilities, and transit service that is provided in its Volume 2, Memorandum 4. The future transportation needs in the TSP are based on the anticipated growth in households and jobs within the Newberg Urban Growth Boundary (UGB) through the year 2035.

The TSP Update reflects a mixed-use rezoning scenario for the Riverfront Master Plan area that would increase the number of anticipated homes and jobs beyond that considered in the adopted TSP. Key to creating a vibrant mixed-use neighborhood is the provision of "safe, comfortable, and convenient travel throughout the area and into Downtown."

SUMMARY OF RECOMMENDED CHANGES

The recommended changes to the TSP are those identified to serve the Riverfront Master Plan Area, which is generally bound by E Ninth Street to the north, Wynooski Street to the east and the Willamette River to the south.

Table 1 summarizes the recommended changes to the "likely to be funded" list of projects in the adopted TSP to support the Riverfront Master Plan. For those projects that are identified as "aspirational" within

the adopted TSP, the table identifies the TSP project number and indicates the recommended course of action as part of the TSP update. Further detail on the recommended projects to serve people walking, cycling, driving and taking transit associated with the Riverfront Master Plan area are discussed below. Figures 24 - 28 of the adopted TSP have been updated to reflect the projects shown in Table 1; these figures are included as an attachment to this memo.

Table 1. Recommended Riverfront Master Plan Transportation Projects for Inclusion into the TSP*

Description	TSP Project #	Recommended TSP Update Action	Estimated Project Cost**
S Blaine St Extension (E Ninth St to S College St) – Major Collector	E04	Move from Aspirational List to Likely to be Funded List	\$1,800,000
Rogers Landing Rd Extension (Willamette River to UGB) – Major Collector	E06	Move from Aspirational List to Likely to be Funded List	\$1,400,000
S College St Improvements (E Ninth St to E Fourteenth St) – Minor Collector with parking both sides	S43	Add to Likely to be Funded List	\$2,925,000
S River St Improvements (E First St to Bypass) to include sidewalks, buffered bike lanes and two 11' travel lanes	S22	Move from Aspirational List to Likely to be Funded List	\$3,200,000
S River St Improvements (Bypass to Rogers Landing Rd) – to include sidewalks, on-street parking, buffered bike lanes and two 11' travel lanes	S44	Add to Likely to be Funded List	\$1,215,000
Wynooski St Improvements (S River St to Bypass) – Major Collector	S37	Move from Aspirational List to Likely to be Funded List	\$4,400,000
N Blaine/E Hancock Signal	I15	Add to Likely to be Funded List	\$900,000
N Blaine/E First Signal	I16	Add to Likely to be Funded List	\$900,000
S College St Rail Crossing Improvements	117	Add to Likely to be Funded List	\$450,000
S River St Rail Crossing Improvements	118	Add to Likely to be Funded List	\$415,000
Extension of Bypass Trail between S River Street and S College Street	Part of	Move overall Bypass and river trail system project from Aspirational List	\$97,000
Rogers Landing Road Trail	CH07	to Likely to be funded list	\$117,000
Construction of the Esplanade walking path	P49	Add to Likely to be Funded List	\$546,000
Intersection Control Evaluation at E Fourteenth/Rogers Landing Road/Bluff Street	119	Add to TSP to occur when development occurs; cost of intersection study anticipated to be a joint effort between City and developer	\$40,000
Trolley Feasibility Study		Add a feasibility study to TSP as a joint effort with the potential Urban Renewal District, the Historic Preservation Commission and a nonprofit organization interested in operating the trolley	\$90,000 for Feasibility Study

^{*}Note: the street projects only reflect those along collector and arterial streets; like the adopted TSP and consistent with State Planning guidance, local streets are not included.

Inclusion of the recommended projects in the adopted TSP will result in approximately \$11 million of projects moved from the Aspiration list to the likely to be funded list and \$7.5 million of new projects added to the likely to be funded list. The adopted TSP identifies \$54.5 million in the likely to be funded list; adding the projects identified for implementation by the Riverfront Master Plan increases this list by

 $[\]hbox{*}\hbox{Cost estimates will be updated following finalization of Project List in Table 1.}\\$

\$18.5 million, which is an approximately 33 percent increase. Making a significant change to the reasonably likely to be funded list will require the City to continue to seek additional funding sources and partnership opportunities to implement transportation projects that support economic development during the next fifteen years.

Sidewalk Improvements

The need for new sidewalks to serve people walking within and to/from the Riverfront Master Plan area was identified through an evaluation of:

- gaps in the sidewalk and trail system that connect neighborhoods with key walking destinations in the City, such as schools, employment areas, the downtown, and recreational areas;
- projects needed to comply with the City's ADA/Pedestrian/Bike Route Improvement Plan;
 and,
- collector and arterial streets that are lacking sidewalks on one or both sides of the road.

The sidewalks recommended in the Riverfront Master Plan are those that help to connect Roger's Landing County Park, Leavitt Park, and Ewing Young Park to Edwards Elementary School, the downtown, and Renne Park as well as those needed to address the discontinuous sidewalk on S College Street, the lack of any sidewalks on Fourteenth Street, the need for pedestrians to traverse steep stairs when walking from downtown to the access the River, and the walking barrier presented by the Newberg-Dundee Bypass.

The key sidewalk needs associated with the Riverfront Master Plan area are already included in the reasonably likely to be funded list in the adopted TSP and therefore no action is needed as part of the TSP Update.

Trail Improvements

The Riverfront Master Plan identifies a number of new pathways for construction and the importance of achieving the vision of the Chehalem Heritage Trail Plan, as developed by the Chehalem Parks and Recreation District (CPRD). A number of these trail projects provide localized access within and directly to the parks in the area whereas others serve broader needs and will rely on a mix of funding from the City, CPRD, property development and other potential sources.

The following trail projects are recommended for inclusion as part of the TSP Update:

- Extension of the Bypass Trail between S River Street and S College Street (estimated for a total cost of \$97,000);
- Construction of the Esplanade walking path west of S River Street and south of the existing mill site (estimated for a total cost of \$546,000); and,
- Construction of the Rogers Landing Road trail (estimated for a total cost of \$117,000).

The Bypass trail extension and Rogers Landing Road trail appear to be part of the CH07 Aspirational project included in the adopted TSP whereas the Esplanade walking path would be a new project for inclusion into the TSP. All three projects are recommended for inclusion on the likely to be funded list.

Although the Riverfront Master Plan identifies the upgrading of the existing "Waterline Bridge" to serve people walking and riding bicycles in the future; the costs associated with the needed seismic upgrades of the bridge are beyond the financial resources of the City at this time. Accordingly, this project is not recommended as part of the TSP update.

Bicycle Improvements

The need for additional projects to serve people riding bikes within and to/from the Riverfront Master Plan area was identified through an evaluation of:

- the identification of gaps in the system of bike lanes and "shared roadways" that connect neighborhoods with key cycling destinations in the city, such as schools, employment areas, the downtown, and recreational areas;
- projects needed to comply with the City's ADA/Pedestrian/Bike Route Improvement Plan;
 and,
- collector and arterial streets that are missing bike lanes and are higher in vehicular speed and volume than is desirable for a "shared roadway" configuration.

Most of the streets within the Riverfront Master Plan area are anticipated to have traffic volumes and travel speeds that are suitable for cyclists to "share the road" with motorists in the future. The notable exceptions to this are E Eleventh Street and S River Street. The E Eleventh Street project is already included in the reasonably likely to be funded list in the adopted TSP and therefore no action is needed as part of the TSP Update.

The provision of a buffered bike lane on each side of S River Street from E 1^{st} Street to Rogers Landing Road is recommended for inclusion in the TSP Update. The costs associated with the bike lanes are included in the two S River Street "complete street projects" shown in Table 1 above. Exhibits 1-3 illustrate the recommended cross-section along S River Street; these exhibits are provided as an attachment to this memo.

Transit Service

The transit projects identified in the adopted TSP are those that support "comfortable" street crossings for people and walking near transit stop locations, providing wayfinding to and shelters at stop locations, and expanding service within the City to newly developing areas beyond those served by Routes 5 and 7. The City will continue to coordinate with Yamhill County Transit Area (YCTA) to identify any additional transit service changes. No specific changes to the transit service to support the Riverfront Master Plan are identified for adoption as part of the TSP update.

Freight Routes

The need for changes to the identified freight routes in the adopted TSP is based on an evaluation of:

- Consistency with ODOT guidance on freight facility needs; and,
- Analyses related to how intercity and intracity freight connections are made via the designated freight and truck routes.

The adopted TSP identifies S Eleventh Street and S River Street as designated truck routes to provide access to the previous paper mill. As part of the TSP update, these designations are recommended to be removed to reflect the vision for the vibrant mixed-use environment. Instead, the implementation of the local commercial/industrial streets identified in the Riverfront Master Plan can help indicate priorities for local truck routing/access. Consistent with the adopted TSP and Oregon TSP guidance, local streets are not explicitly mapped to enable future flexibility as part of site development and market conditions.

Streets & Intersections

The need for changes to the planned street network within and adjacent to the Riverfront Master Plan area is based on:

- Streets needed to connect people driving to areas within and to/from the area;
- Intersection level of service and mobility; and,
- Achieving a network of "complete streets" overtime that serve the needs of people driving, walking, taking transit, and riding bicycles.

To support the Riverfront Master Plan, the following street projects are needed:

- Extension of S Blaine Street this street extension from E Ninth Street to S College Street would provide additional north-south connectivity from the Riverfront Master Plan area into the downtown; as part of the TSP update, this project is recommended to be moved from the aspirational list to the likely to be funded list.
- Extension of Rogers Landing Road this street extension from the Willamette River to the UGB to provide additional connectivity to the parks; this project is recommended to be moved from the aspirational list to the likely to be funded list.

- S College Street¹ this street is noted as an important gateway into the Riverfront Master Plan area and in need of changes to accommodate people walking and bicycling as well as on-street parking to support the planned mixed use neighborhood; the creation of a "complete street" on this section between E Ninth and E Fourteenth would represent a new project for inclusion into the TSP.
- S River Street this street is also noted to be an important north-south gateway into the area that is also in need of changes to accommodate people walking and cycling; As part of the TSP update, two separate cross-section configurations to achieve these goals are recommended for adoption:
 - Between E First Street and the Bypass, S River Street is recommended to include 2-11 feet travel lanes, a 6 foot bike lane and 1 foot buffer, a 6 foot landscaping strip, a 5 foot sidewalk, and a 1 foot strip behind the sidewalk. This project is currently identified on the aspirational list in the TSP; as part of the update, this project is recommended for inclusion on the likely to be funded list.
 - Between the Bypass and Rogers Landing Road, S River Street² is recommended to include 2-11 feet travel lanes, 2-7 feet on-street parking lanes, a 5 foot bike lane and 1 foot buffer, a 6 foot landscaping strip, and a 6 foot sidewalk. This is recommended as a new project to be added to the likely to be funded list with the TSP Update.
- Wynooski Street this street is noted as an important gateway into the Riverfront Master Plan area and in need of changes to accommodate people walking and bicycling to support the planned mixed use neighborhood; the creation of a "complete street" between E Fourth Street and the Bypass is currently an aspirational project in the adopted TSP. As part of the update, these changes are recommended for inclusion on the likely to be funded list.
- Rail Crossing improvements at S College Street and S River Street today these at-grade crossings are narrow and controlled by signage and stop signs. As part of recommended "complete street" upgrades to both streets, rail crossing equipment and roadway changes will be needed to address current rail safety guidance. These rail improvements are recommended as new projects to be added to the likely to be funded list as part of the TSP Update.

In addition, the following intersection changes are recommended for adoption with the TSP Update:

Signalization of the N Blaine/E First Street and N Blaine/E Hancock Street intersection in the downtown are needed to accommodate the long-term capacity needs associated with the additional jobs and housing anticipated in the Riverfront Master Plan area. These signals are recommended as new projects to be added to the likely to be funded list as part of the TSP

¹Approval of the South College Commons subdivision at 1100 S College included a reduced street cross section of 24-feet curb to curb in the area of the stream corridor.

²Approval of the Riverlands Planned Unit Development at 1303 NE River Street included a typical major collector street cross section of 60-feet of ROW with 36-feet curb to curb of pavement, which is a narrower right-of-way than recommended as part of the TSP Update.

Update. Signalization of both intersections will require approval by the State Traffic Engineer at ODOT prior to installation. In addition, coordination will also be required with the private railroad spur owner and ODOT Rail.

- The Riverfront Master Plan notes that the Oregon 219/Wynooski Street intersection serves as a key gateway for providing access into the mixed-use neighborhood and recommends further evaluation of the potential geometric and traffic control needs at this location. As noted in the adopted TSP project BY5, the realignment of the Oregon 219/Wynooski Street project was contemplated as an aspirational project that would be included as part of the Phase 2 construction of the Bypass. Since adoption of the TSP, ODOT has begun designing Phase 2 of the Bypass, including recommended changes to this intersection. As such, no changes are recommended as part of the TSP Update as this project will be funded and constructed as part of ODOT's efforts.
- An "Intersection Control Evaluation" is recommended at the E Fourteenth Street/Rogers Landing Road/Bluff Street location as part of redevelopment of the mill property. This study is recommended for inclusion on the likely to be funded list as part of the TSP update; the funding for the study is anticipated as a joint effort between the City and the future developer of the property.

Trolley Project

The *Downtown Improvement Plan* for Newberg and the Riverfront Master Plan both identify a vision for a future trolley using the existing rail tracks within Blaine Street to connect downtown with the Riverfront as well as to the Allison Inn to the northeast. Within the Riverfront Master Plan, the need to study the feasibility of providing a trolley is identified. Examples of considerations for the trolley feasibility study to address include:

- The recommended alignment and probable stop locations from the downtown to the Willamette River, especially in light of supporting the identified mixed-use nodes within the Riverfront Master Plan;
- The type and scale of rail crossing treatments needed at the street and trail crossings; these treatments will need to consider current rail safety guidance such as, but not limited to, crossing geometry, illumination, safety barriers, signage and pavement markings, detection and warning devices, the type of gates needed, coordination with school bus stop needs, and, the type of crosswalk and pedestrian gates needed;
- The role of ODOT Rail in planning, constructing and operating the trolley;
- Likely funding sources for construction, maintenance and operations.

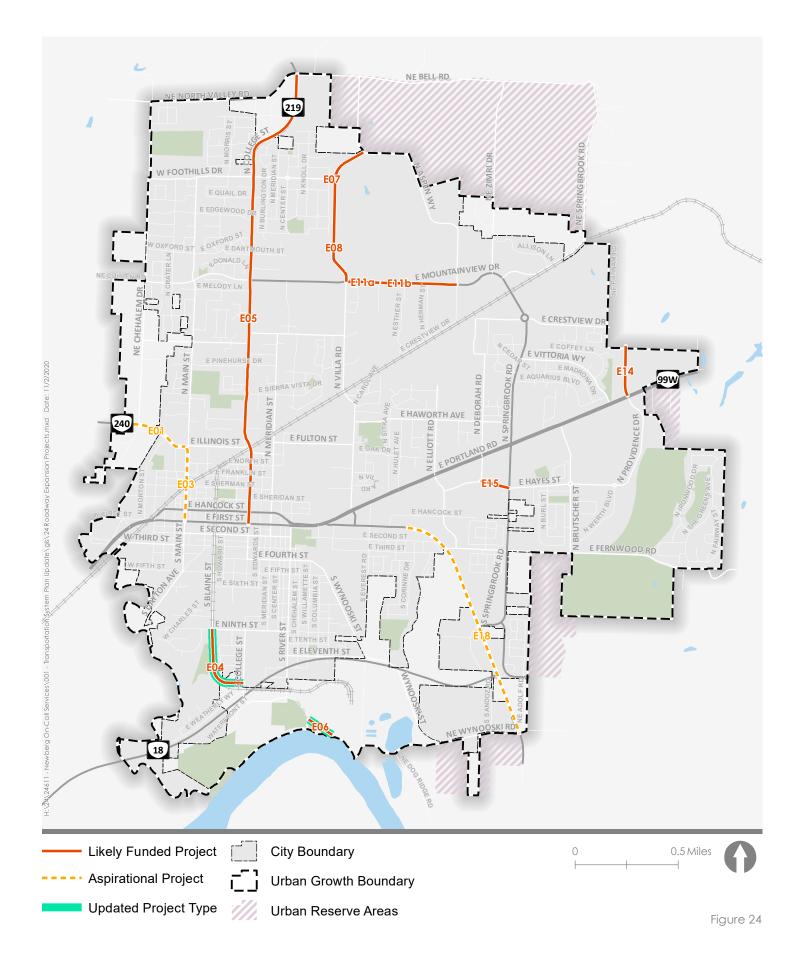
To achieve this Riverfront vision, funding for a Trolley feasibility study is recommended for inclusion on the likely to be funded list. This study is estimated to cost \$90,000 and is envisioned to be a joint effort with the potential Urban Renewal District, the Historic Preservation Commission and a non-profit organization interested in operating the trolley.

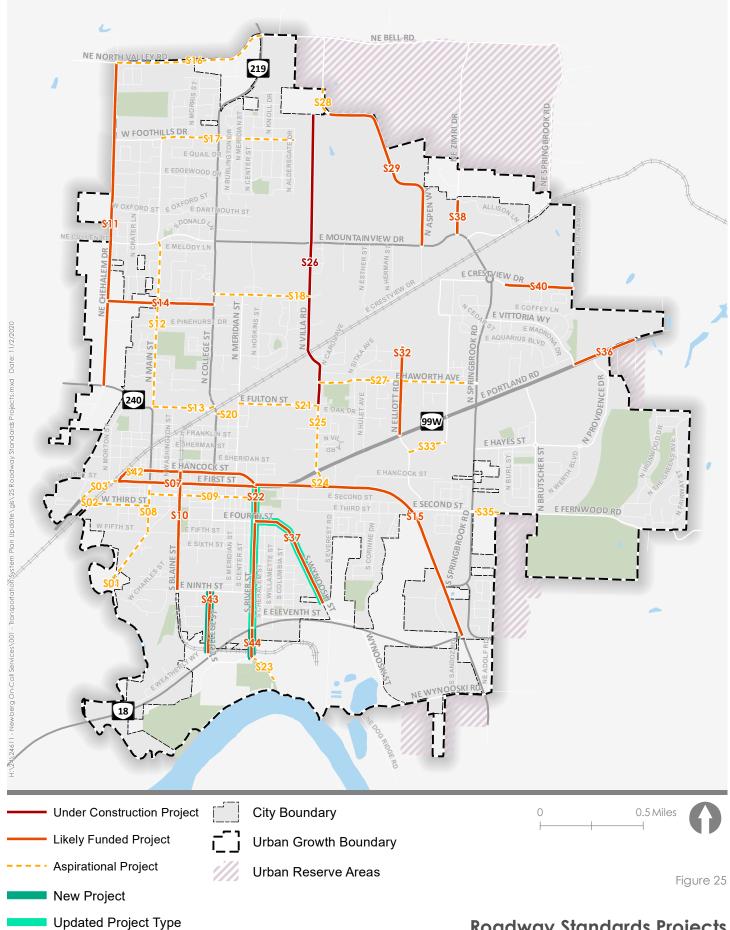
Downtown Road Diet

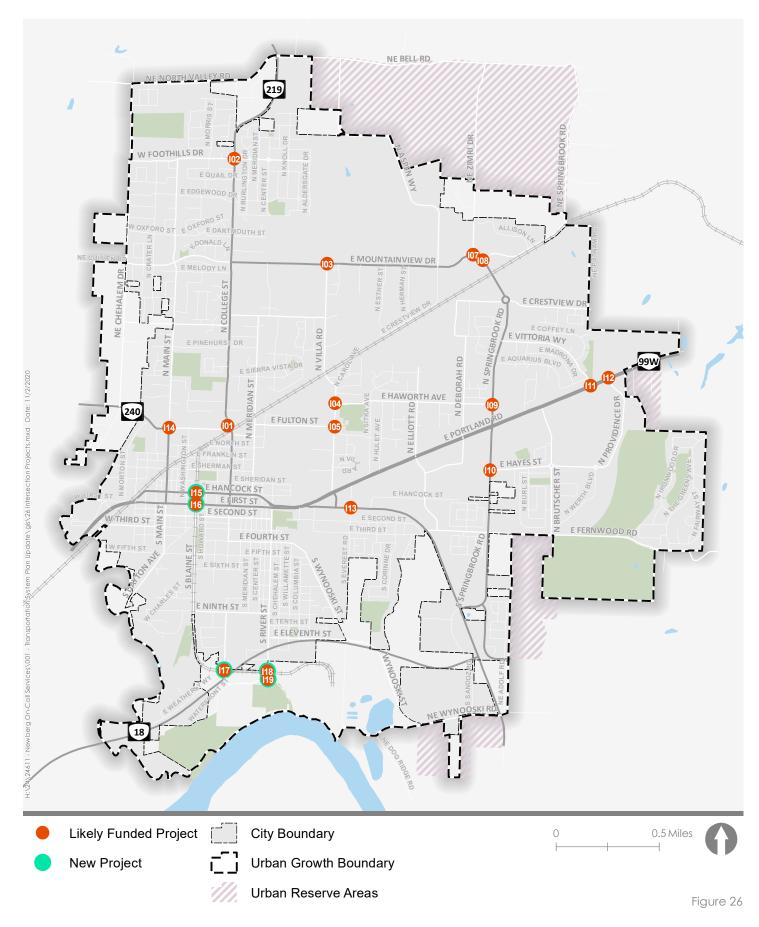
The City's desire to pursue a "Road Diet" along the First Street/Hancock Street couplet in downtown is currently included in the "likely to be funded list" in the TSP. This project requires ODOT coordination and would reduce the number of vehicular travel lanes and add bicycle and pedestrian facilities and other streetscape improvements within the downtown. These changes to the downtown will also help to achieve the Riverfront Master Plan's vision of providing a more safe, convenient and comfortable environment for people walking, bicycling, taking transit or the trolley and driving. Continued prioritization of the Downtown Road Diet project will help achieve the vision of the Riverfront Master Plan. No changes are recommended as part of the TSP Update.

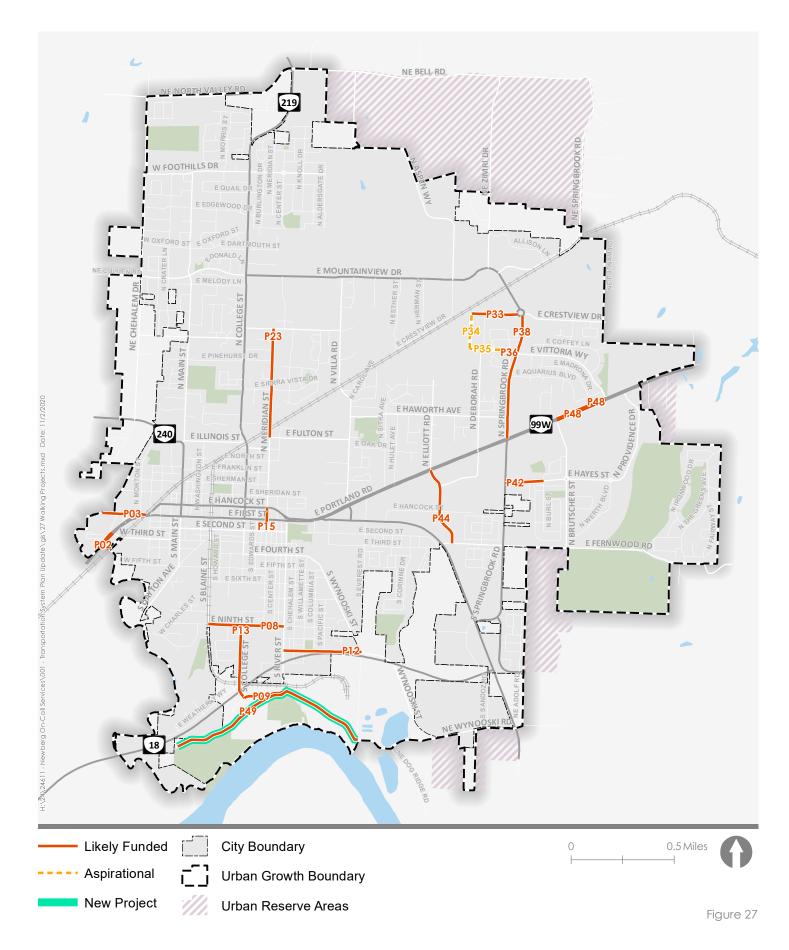
Next Steps

We look forward to discussing the recommended changes for consideration for the TSP Update at the Joint Planning Commission/City Council work session in November. Following this meeting, we will update the cost estimates for the projects identified to be added to the likely to be funded list as part of the TSP Update.









Transportation System Plan Update

November 16, 2020

Kittelson & Associates, Inc.

Agenda for Discussion

- What is a TSP?
- Why is it being updated?
- Key Recommendations for Consideration
- Next Steps
- Questions



Why do we have a TSP?

- Outlines future projects, programs and policies to support people walking, cycling, driving and taking transit both within and to the City
- Supports the City's anticipated growth in jobs and housing over the next 15 years
- Helps the City with decisions related to land use actions and transportation funding priorities
- Helps City work with other agency partners to seek funding for changes to transportation system



Why are we updating the TSP?

- Support change in land uses anticipated in Riverfront Master Plan
- Add sidewalk, trail, bike lane, and street projects identified to support Riverfront area
- Identify needed funding for adding Riverfront Projects



What area is included in the TSP Update?



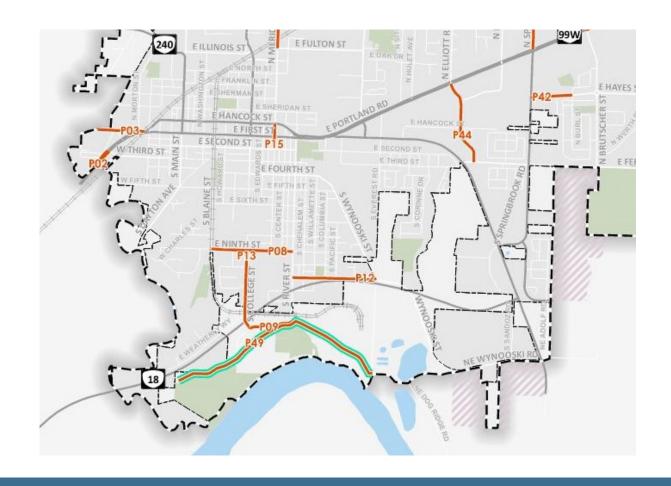


What are the Recommended Projects to Support Walking?

- New paths and sidewalks to connect people between and within Riverfront Area to jobs, schools, parks and houses
- Key Projects:
 - Esplanade Walking Path
 - Bypass Trail extension from S River Street to S College street
 - Rogers Landing Road trail
- Future Feasibility Study of Trolley to/from Downtown



New Projects for People Walking





What are the Recommended Projects to Support People Riding Bikes?

- Changing street to include facilities for walking and cycling "Street Standards"
- Key Projects:
 - S River Street north of Bypass
 - S River Street south of Bypass
 - S Wynooski Street
 - S College Street



New Projects for People Riding Bikes





What New Streets and Intersection Changes are Recommended?

- Changes to provide additional connections into and within Riverfront Area as well as to support rail crossing safety
- Key Projects:
 - Extension of Blaine Street
 - Extension of Rogers Landing Road
 - Rail crossing equipment on S College Street and S River Street
 - Adding signals at Blaine/Hancock and Blaine/First Street in downtown
 - "Study" project to identify future needs of E Fourteenth/Rogers Landing Road/Bluff Street in collaboration with developer



New Street and Intersection Projects







What are the Next Steps?

- Confirm list of recommended Projects
- Update Cost Estimates to Construct
 - Preliminary costs indicate that adding projects increases the "likely to be funded list" from \$54.5 million to \$73 million over next 15 years
- Consider implications of additional costs on Transportation SDCs the City collects as part of development
- Next meeting with Planning Commission in January

