



ENHANCE 150% LIST

SUPPLEMENTARY PROJECT BENEFIT INFORMATION

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(E1) CRESCENT CONNECTION: CEDAR HILLS BLVD – DENNEY ROAD

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

“RRFB may not meet signal warrants”

- Per the MUTCD, RRFBs do not need to meet signal warrants for installation. RRFBs are installed where the location does not meet warrants for a full pedestrian signal.

“Selected alignment to be determined during PE/ROW phase. Depending on the selected alignment, ROW issues may surface in PE phase that could affect scope and delivery”

- One of the primary factors in selecting the preferred alignment will be the ease or difficulty in acquiring ROW. Regardless of the selected alignment, the acquisition of ROW from up to 8 properties will be necessary. The ROW agent is Right of Way Associates, a firm that is located in Beaverton and very familiar with acquiring ROW for the City. There is sufficient time in the project schedule to acquire ROW so as to be under construction in Federal FY2016.

“A Joint Permit Application and a 401 Certification may be required if project impacts wetlands”

- There is the possible impact to one wetland area along 100-150 feet of the proposed alignment. This impact will be minimized by crossing the wetland with a boardwalk. There is sufficient time in the project schedule to acquire a JPA and/or 401 Certification, if necessary, so as to be under construction in Federal FY2016.

“A 4(f) de minimis letter may be required if the project impacts wetlands”

- There is the possible impact to one wetland area along 100-150 feet of the proposed alignment. This impact will be minimized by crossing the wetland with a boardwalk. There is sufficient time in the project schedule to acquire a 4(f) de minimis letter, if necessary, so as to be under construction in Federal FY2016.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

All existing system users within cycling and walking distance of the Fanno Creek Greenway Trail and the Crescent Connection/Beaverton Creek Trail, the Westside Trail, and the transit stops accessing them and trails connecting to them will benefit from completion of this project. Just these three trails alone provide access from the Tualatin River to the Willamette River in Portland to the east, and Beaverton, Washington County, and Hillsboro to the west. Transit in the corridor will more easily be accessed due to project construction as Beaverton Transit Center/bike station/MAX/WES/bus transfer station and many transit stops are located along the route. Thus, including transit access along the way and surrounding lands, jobs, residential populations, and services, thousands are currently being served with many more thousands projected to be served when the Crescent Connection gap is filled. This project constructs and closes the final gap in the trail system under Beaverton's jurisdiction. Within the construction project corridor alone over 23,000 people, including a significant number of environmental justice and disadvantaged populations, will be better served through healthier means to access jobs, housing, services, and industrial, commercial and civic areas. So, not only do users in Beaverton, Tigard, Tualatin, and Wilsonville to the south, Portland to the east, and Washington County and Hillsboro to the west benefit from a completed system, but the entire Metro region and state benefits since cyclists and pedestrians can use miles and miles of bike, pedestrian, and transit connections to access the region and beyond. Moreover, with more complete, direct, safe routes, more users can choose to not drive, which frees up capacity for cars and freight.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The Crescent Connection will be a shared-use path along Denney Road from the Fanno Creek Greenway Trailhead at Denney Road to King Blvd. On King Blvd north to the Beaverton Transit Center (BTC), the route is a bike boulevard that is located on the lower volume slower speed streets. In the center of Beaverton's Regional Center downtown, bike lanes are already striped along the route to the BTC where it will once again become a shared-use path west to Cedar Hills Blvd. PE and ROW phases, which are already funded, will determine the final alignment along the creek in this section. Safe crossings of the streets are already signalized and a RRFB is part of the project at mid-block locations not yet signalized. The width of the path is sufficient to allow bikes and pedestrians to share the travelway safely. Wayfinding signage will be provided through a separate Beaverton project due to be completed in downtown by November 2013.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

This project fills a gap in the transportation system that will result in more people being able to effectively use transit, bicycles, and walking for their commutes and trips to destinations instead of driving their single occupant vehicles. Therefore, more vehicle capacity will be freed up and made available for freight. Specifically, freight accessing Beaverton's industrial lands at OR 217 between Allen Blvd and Denney Road, and freight using OR 217, OR 8, and OR 10 in the Beaverton Regional Center will be able to flow more efficiently. In addition, Fanno Creek Trail and Crescent Connection users will be separated from freight vehicles making their trips safer. Moreover, cyclists and pedestrians are diverted to non-freight accessible city streets and are specifically kept off of OR 217, OR 8, and OR 10 in Beaverton's busy Regional Center downtown area, which significantly reduces potential for conflict.

(E6) S. IVY PEDESTRIAN & INTERSECTION IMPROVEMENTS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

Existing off set right of way.

- The roadway survey shows all proposed improvements can be completed in the existing public rights of way. The roadway width may deviate from the typical cross section to reincorporate sections of existing curbs and sidewalks.

Right of way assumed based on tax lots:

- No right of way has been located from tax lots lines. All right of way lines are based on locating existing monuments along the roadway and independent of assessors maps tax lot lines.

Possible utility relocations requiring additional utility easements:

- ADA accessible routes will always be available regardless if some utility poles may require relocation. Design tools to incorporate ADA routes include meandering the sidewalk behind the poles, installing curb bump outs at the intersections as a last resort or secure a sidewalk easement. There are existing easements in place on many of the existing lots.

Pervious pavement for storm water management:

- The City of Canby and Clackamas County have successfully used pervious pavement in parking areas to manage storm water. Pervious sidewalk treatments are acceptable and we could, if necessary, incorporate pervious sidewalk materials. Canby has numerous rule authorized dry wells for storm water management. The City has recently completed a storm water master plan for the entire city and the project area is a good candidate for dry wells. They would of course be rule authorized by DEQ.

There are some properties located on the northern end of project area that may be eligible for listing on the National Register of Historic Places.

- There are no properties currently listed on the National Register of Historic Places, nor are there any listed on the State Register within the project boundary. No properties in the project area are designated Canby historic landmarks, and the project boundaries are not within any Canby designated Historic District. The project is a sidewalk in fill project and no adjoining structures should be impacted.
- We can verify what properties have historical significance, however, none of the proposed street improvements will directly or negatively impact any structures or any adjoining properties.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Several community amenities about this portion of S Ivy. Interviews with key personnel from each facility and with our Canby Area Transit mangers generated the following estimates:

Canby Swim Center: 75,000 swimmers and 25,000 spectators annually

Canby Adult Center: 39,000 visits annually

Lee Elementary: 400 students

Canby Area Transit: 5000 riders now, expected to serve 10,000 in the future

S. Ivy is the major arterial for residents to walk to our commercial district. There are an estimated 1,030 residents living within 2 blocks of the S Ivy project area, many of whom walk to our downtown, but many more who would walk if we provided a safe environment for them

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

S Ivy is the Major N-S Arterial and designated truck route in Canby. It provides both local and through access for residents and trucks. The un-signalized intersection at S Township creates a crossing hazard for pedestrians, and creates an unsafe left hand turning movement from Township onto S Ivy for our Canby Area Transit provider as they must pull out across the cross walk in order to see well enough to make the left hand turn. Canby's Transportation System Plan identified this intersection as a high pedestrian volume intersection.

Several community amenities abut this portion of S Ivy, including schools, parks, Community Swim Center, Canby Adult Center, and Senior living facilities. Many of our residents walk along S Ivy to access these facilities and/or to access our commercial districts.

S Ivy is identified as a safe route to school, but because there are intermittent or no sidewalks it is hazardous for children and residents to navigate. The lack of ADA facilities creates a significant hazard for our disabled residents and visitors. On garbage collection days, refuse containers are often set out into the bike lanes and bicyclists, pedestrians, and disabled citizens actually veer out into the roadway to avoid the containers. This in turn creates serious conflicts with trucks and automobiles.

This infill project is not a beautification project, rather a project that addresses the most basic necessities: Safety for our school children, our families, our disabled community, our public Transit providers and citizens navigating S. Ivy in trucks and automobiles.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

S. Ivy is Canby's major North South Arterial which feeds into OR 99E, and is a designated truck route in our Transportation System Plan. ODOT designates OR 99E as a truck route, and it is the main freight corridor used by Canby's industrial areas. Efficient truck movement within and through Canby is vital to maintaining and developing Canby's economic base.

This project directly benefits freight mobility by relieving congestion and delays on S Ivy. It is estimated that delays cost truckers \$77 per hour (Chatterjee et al 2008) in wasted fuel and time. Pedestrians in the roadway create unsafe conditions that reduces freight mobility. This project reduces auto congestion by providing sidewalks so pedestrians and disabled citizens remain safely out of the roadway.

Canby's Transportation System Plan identified the S Ivy and OR 99E intersection as a current and future bottleneck that fails to meet standards. One solution to alleviating this bottle neck was to signalize the S Township and S Ivy intersection. The resulting signalization would ease congestion by reducing future trips at the OR 99E/S Ivy intersection by 2000 vehicles per day. Reducing congestion benefits freight mobility.

(E7) WANAPA STREETScape REDEVELOPMENT

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

There were no risks identified on the project information sheet.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

The proposed streetscape enhancement project will benefit 1,190 local residents of Cascade Locks and their existing vehicular trips on WaNaPa Street. However, these improvements are intended to inspire pedestrian activity on the main street, serving as a catalyst for new commercial development in the downtown core by increasing tourism in our community.

This project will fulfill in part the award-winning "Connect Cascade Locks" Trails Plan for Economic Development that was created via public process in 2012. An improved streetscape environment along WaNaPa Street will provide multi modal access from the west end of town to the east end of town. This September, ODOT will complete the Historic Columbia River Highway State Trail project, connecting Cascade Locks to the myriad attractions along the scenic highway. This in turn will significantly increase bicycle traffic in downtown Cascade Locks. The improvements made possible by this project will create a cohesive and safe bike and pedestrian network with consistent on-street bike paths, parallel sidewalks and adequate crossings.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The traffic calming improvements requested will slow down the traffic. Designated crosswalks and shorter crossing distances will improve the pedestrian safety in the downtown core of Cascade Locks. Clearly visually separated bike lanes will improve the safety of our bike riders.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

There are minimal freight mobility benefits in this project.

(E9) OR-47: OR-8 INTERSECTION IMPROVEMENTS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

Forest Grove feels the risks were overstated and would have been addressed by now had Parametrix been allowed to proceed with the 2014-15 MTIP preliminary design work. Parametrix has indicated to the City that the risks are easily dealt with. Three of the listed risks are re-wording of the same issue: Adding a southbound right turn lane on Highway 47 to westbound Highway 8 may require additional right-of-way and therefore property from the historical Masonic parcel (McMenamins Grand Lodge property – not building). Three of the listed risks relate to the historic nature of the Masonic parcel, and inflate concern by indicating alternative analysis may be necessary, and that the project may increase in complexity and cost. By contrast, the City's preliminary indications from ODOT's senior historian indicate the amount of property necessary would be de minimis and not impact the historic nature of the parcel. (E-mail quote from Bob Hadlow, ODOT, on August 5, 2013: For Section 106, I see the project's impact on the Masonic Grand Lodge (McMenamins Grand Lodge), which is a National Register-eligible property, as a No Adverse Effect. Also, I would characterize the Section 4(f) impacts to the property as de minimis if the project includes some measures to offset the project's impacts. These could include planting new large caliper trees of the same variety on the new planter strip and establishing a new vegetation buffer between the parking lot and the new trees.)

Another risk indicated relates to the existing Tualatin Valley Irrigation District's (TVID) water transmission line, which runs parallel to Highway 47, approximately 24 feet from the roadway. The risk indicated this water line may have to be relocated. Even though exploring this issue is part of Parametrix's yet-to-be-signed contract, the City has done some preliminary analysis and met with TVID on August 14, 2013, to clarify this issue. TVID is an important stakeholder in this project, and the meeting was to identify solutions to potential risks to this STIP enhancement project. TVID agrees solutions exist that do not involve relocating the waterline. The City and TVID are working through these engineering solutions, and the City believes that solutions can be reached within the current project cost estimates. TVID has drafted a letter stating options include purchasing an additional easement on the west side of the TVID line, or replacing casing of short sections of the pipe, or purchasing a performance bond as part of the project, ensuring TVID has funds to replace any damaged infrastructure. This letter is attached for your information. .

The last risk indicates that the intersection may need to be re-built. The City holds the opinion the intersection structure is performing well. Documents show the existing roadway has an 8-inch thick concrete section, with 6-inches of aggregate base. The roadway exhibits structural integrity and no signs of deficiency are present. However, the City understands that a short section of Highway 47 immediately north of the intersection with Highway 8 may be in need of major maintenance, and thus the City would request that Parametrix's design contract include a task of completing a surface design analysis on the area of Highway 47 where the southbound-to-westbound turn lane will be added.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

This project of adding turn lanes (westbound 8 to northbound 47, and southbound 47 to westbound 8) is estimated to benefit 40,000 vehicles per day, and 1,700 freight heavy vehicles between 6:00 AM and 6:00 PM. Capacity analysis shows the intersection currently operates with delay at a level of service D, and is projected to degrade to a level F during peak PM hours if no improvements are made.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

This project dramatically improves safety, and will improve travel for bicyclists, pedestrians, freight, transit and other vehicles. This busy intersection connects two regional freight corridors – Regional Freight Corridor 23 (Hwy 47) and Regional Freight Corridor 24 (Hwy 8). Additionally, Hwy 8 is the only route in and out of the City for the single Tri-Met service in the City, line 57. This route is one of the highest ridership routes in the Tri-Met system. Both Hwy 47 and Hwy 8 have bike traffic and pedestrian traffic. Multi-modal congestion at the intersection increases the likelihood of accidents, impedes mobility, and potentially delays transit operations.

Increasing safety between freight and other users of the intersection are a paramount concern. Freight turning onto northbound Hwy 47 from westbound Hwy 8 often encroaches into the southbound Hwy 47 left turn lane, and vehicles in that lane often have to back up to give freight the necessary radius to safely turn. Other options include freight waiting to make the turn until that lane clears, thereby backing up traffic and impeding mobility, or swinging into the westbound Hwy 8 through-lane to gain enough room to make the turn, endangering traffic moving straight through the intersection

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

The freight traffic through this intersection is heavy, due to its proximity to the City's industrial park, but also because it is the primary through-route access to and from Highway 26, the Oregon Coast, and regional access south of Forest Grove. This project meets the highest level criteria of reducing freight vehicle delay by addressing the bottleneck at this intersection of two major freight routes.

During the 2014-18 MTIP regional flex fund process, the Port of Portland ranked this improvement project as the highest priority for Green Economy/Freight Initiatives projects in Washington County. This project includes direct freight specific design elements that substantively address existing safety and capacity constraints at the intersection of two freight corridors.

(E11) US-26: CORNELIUS PASS RD TO 185TH AVENUE

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

None identified.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

The 2011 daily traffic volume for this segment of US 26 is 73,100. With the anticipated growth of housing and employment in the project area, the traffic volume is expected to grow significantly in the future. Residential growth in the Orenco Town Center, South Hillsboro Town Center and Urban Growth Boundary expansion area, and AmberGlen/Tanasbourne Regional Center will add to significant traffic increases from employment growth in the North Hillsboro "Silicon Forest" industrial lands contained within the Urban Growth Boundary. Together, this segment of US-26 is projected to carry close to 120,000 vehicles per day at buildout of these Urban Growth Boundary areas. Without increased investments on US-26, continued jobs expansion becomes less attractive, and east-west traffic increases will continue to be shifted to arterial surface streets which will be detrimental to transit, bicycle, and pedestrian modes in the neighboring planned high-density AmberGlen-Tanasbourne Regional Center district.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

In the westbound direction of this segment, traffic currently slows down significantly in the a.m. due to the amount of merging (lane-changing) from vehicles positioning themselves for one of the two closely-spaced westbound exit ramps at Cornelius Pass Rd. as well as accommodating merging traffic from the 185th Ave. westbound onramp. As outside lane volumes slow to merge, significant speed disparity results between the inside lane and outside lane as some traffic elects to bypass the congested Cornelius Pass Road interchange to access the Silicon Forest employment center through the downstream Brookwood Parkway interchange. Traffic volumes exiting at Cornelius Pass Road currently exceed the outside lane capacity for approximately 30 minutes each weekday morning, and will exceed capacity by more than 20% for the full morning peak hour as Intel alone adds employees into its latest Ronler Acres campus expansion resulting in westbound capacity failure in both lanes for more than 1-hour each weekday morning. Intel will be widening the Cornelius Pass Road offramp to provide two lanes; an investment that will be underutilized without concurrent widening on US-26 westbound mainline to safely accommodate commuter and freight traffic arriving from eastern Washington County and Portland.

With the proposed widening in the westbound direction, traffic destined for the Cornelius Pass Rd northbound and southbound exits will be able to "pre-sort" themselves into the outside lane (for the Cornelius Pass Rd northbound exit) and the middle lane (for the southbound Cornelius Pass exit lanes and option to continue west to the Brookwood Interchange); thereby providing mainline capacity for the highway segment and avoiding the last second merging that currently occurs on this segment. This will significantly improve lane speed balance and minimize upstream merge capacity deficiency.

In the eastbound direction of US26, the widening will improve the merging capacity as currently both the southbound and northbound on-ramps from Cornelius Pass Road enter onto the same outside lane of eastbound US 26. The proposed widening will provide an additional lane for traffic to enter onto; thereby improving safety conditions. Aggressive ramp meter rates currently protect mainline operations at these merge points, but existing and future traffic demand growth continues to clog the area arterials and will require mainline widening in the future to avoid safety deficiencies on both the arterial system and the highway mainline.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

The widening of US 26 between Cornelius Pass Rd and 185th Ave will improve the safety conditions and provide more mobility for freight movement to and from the Silicon Forest area. US-26 is a NHS route which performs a critical freight mobility function for all of northwest Oregon's economy as the lifeline for coastal communities, agricultural and tourism in western Washington County, and to support the freight demands of North Hillsboro's Silicon Forest, which is the heart of Oregon's export economy.

(E13) KING CITY SIDEWALK INFILL

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

There are no risks noted on the information sheets.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Based on observation, there are currently 40-80 users of the area daily. This number is relative and difficult to assess as there are no improvements in place for their use. We anticipate a significantly higher number of users with the improvements in place due to increased safety and accessibility. It will also improve access to safe lanes for bicycle users in this area. The project will also provide direct access to service and retail centers.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

Current users must navigate unimproved areas without sidewalks or improved paths. The project will ensure substantial improvements in pedestrian, bicycle and handicapped user safety while providing alternative internal access away from busier thoroughfares. The area's unique population (average age 76) will benefit greatly from improvements that provide reasonable and safe access. The project also continues the current efforts for the connectivity of the entire corridor.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

There are no freight mobility aspects to this project.

(E15) BOONES FERRY RD: OAKRIDGERD/REESE RD – MADRONA ST

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

Design exceptions needed if elements are not designed to at least ASSHTO standards.

- The City anticipates complying with all ASSHTO standards to the maximum extent practicable. In the event compliance cannot be obtained due to site constraints or factors outside of the City's control, the City will seek an exception to the standard. Exceptions, if any, will most likely result from having to design and construct the project in a corridor that is already developed and has an existing constrained right-of-way. The City and ODOT will weigh the tradeoffs between meeting ASSHTO standards and possibly modifying other non-ASSHTO design elements and/or acquiring additional right-of-way over and above what is already anticipated for the project.

Environmental impacts to gas stations.

- The City has included \$500,000 in the preliminary budget to address environmental requirements and mitigation for these properties.

A final preferred median design

- The current design and cost estimate is for an inverted roadway section and median. While this is currently the preferred design and one that meets the goals of the project, alternatives to this design will be considered during preliminary engineering. If one or more of these alternatives proves to be more cost-effective while still meeting the goals of the project, the City will make a request to ODOT to change the design accordingly. This request will only be made if the design change results in cost savings. As such, there should be little, if any, risk to the project.

For the three risks described above, the City will know the implications of these risks prior to the expenditure of funds for right-of-way acquisition and construction. Any additional costs to the project will be the responsibility of the City.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Boones Ferry Road, classified as a major arterial in the City's Transportation System Plan, handles up to 25,000 vehicles per day including around 800 trucks. There are approximately 215 TriMet bus riders that use Boones Ferry each weekday. Pedestrian and bicycle use along the corridor is fairly minimal due to deficient sidewalks and no bike facilities.

Given the prominence of Boones Ferry Road in this portion of the City – an area that includes established neighborhoods, numerous retail and commercial businesses, an elementary school and a post office – the expectation is, with adequate sidewalks and new bike lanes, the project will benefit numerous pedestrians and bicyclists and attract more riders to the #37 bus line.

The Boones Ferry Road Refinement Study predicts by the year 2035, visitation and patronage activity along Boones Ferry will increase 33% to 50%, and the corridor will have at least 150 new housing units and 390 new jobs. These new residents and employees along with existing users will rely heavily on the multi-modal elements of an improved Boones Ferry Road to meet their transportation needs.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The project addresses five key safety issues:

1. Currently, there is no marked school crosswalk on Boones Ferry Road immediately adjacent to Lake Grove Elementary School. This project will install a signalized pedestrian crosswalk at Lanewood Street, which is a primary access to the school.
2. Many sections of sidewalks along Boones Ferry Road are deficient and unsafe. Sidewalks are often narrow and immediately adjacent to the travel lane. The project will construct new sidewalks along both sides of the street. These sidewalks will be separated from the vehicle travel lanes with a bike lane and in most cases, a four-foot planting strip.
3. Boones Ferry Road has insufficient pedestrian crossings. The project will add five (5) new pedestrian crosswalks and improve two (2) existing crosswalks.

4. Currently, there are no bike facilities on or near Boones Ferry Road. The project will add new bike lanes on both sides of the roadway.
5. The existing crash rate on Boones Ferry Road exceeds the statewide average. Many of the crashes are due to drivers attempting to make left turns from the existing through travel lanes. The project anticipates lowering the crash rate by building a center median the entire length of the project. Left turn lanes will be provided at major intersections. The median will not only eliminate mid-block left turn-related vehicle crashes, it will also eliminate the conflict between left turning vehicles and pedestrians walking on the far-side sidewalks.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Boones Ferry Road is part of the National Highway System and is listed as a designated truck route in the City's Transportation System Plan. There are approximately 800 trucks that use Boones Ferry Road each day. Traffic, including truck traffic, is often stopped by left-turning vehicles waiting for gaps in the opposing travel lanes. The full-length median and left turn lanes at major intersections will improve overall mobility for freight traffic along Boones Ferry Road.

(E16) KELLOGG CREEK PEDESTRIAN/BICYCLE UNDERPASS AND MULTI-USE TRAIL

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

- The seasonal height fluctuation of the Willamette River will be taken into account when choosing finishing materials for the pathway. Obviously, materials such as decomposed granite cannot be used for the pathway near the bridge, as they would wash away when the water elevation of Kellogg Creek rises. While lighting is expected to be install above flood levels, waterproofing may likely be necessary. The City will also look into the concept of a permanent gate system to prevent use of the path when flooding occurs.
- If the bridgework was not funded by ODOT in the near future, adjustments would definitely need to be made in order to make the pathway project successful. As of June 18th, the City of Milwaukie has entered into a contract with Wildlands (dba Portland Habitat Holdings IV LLC) for the removal of the dam and the restoration of the Creek affected 14 acres by the damming. At this point in time it is unclear how much of the dam removal can be performed without the replacement of the bridge structure, however, over the next few months, coordination between ODOT, Milwaukie, Clackamas County and Wildlands will need to take place regardless of bridge or pathway funding. Needless to say, having both projects funded under the STIP obviously makes the entire scope more obtainable.
- Moving forward, it is Staff's opinion that these projects should be viewed as concurrent rather than sequential, even if they required to be managed by two separate contracts. Therefore, Staff sees this project as achievable within the 2016-2018 STIP funding period.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

This project will benefit a very large population. One could say all current auto, bike and ped users of McLoughlin Blvd. would benefit from less multi-modal conflicts. However, Milwaukie Staff would argue that this addition to our downtown as an extension of our Adams Street Connector Project to connect the Milwaukie Lightrail Stop to the Trolley Trail and ultimately Springwater Corridor via our 17th Avenue Multi-use path will benefit a large population of additional future users.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

This project is solely about safety. Currently, the only connections between the Trolley Trail, the City's Island Station Neighborhood and Milwaukie's Riverfront Park to the downtown is via at grade crossings at intersections along McLoughlin Blvd. (HWY 99E). The public often complain about how unsafe the intersections feel and how it prevents them from making this connection on foot or bike. This pathway would allow these east/west connections to be made without the potential of auto conflicts in a relatively cheap manner when compared to a bridge in the same area.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

By providing this alternative grade separated crossing of McLoughlin Blvd, less bike/ped/auto conflicts will be enjoyed by all. Inherently this means less large truck freight conflict with bikes and pedestrians allowing less delays through this area.

(E18) OR-211 BICYCLE AND PEDESTRIAN SAFETY ENHANCEMENTS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

The city will address all risks identified related to this project within its capabilities. Where possible, we will assume any and all risks within our jurisdiction, and to the fullest extent of the law. If we find that during construction, that a risk will arise impacting the public or the public's safety, The City of Molalla, ODOT and the contractor working on this O.D.O.T. R.O.W . will be partnering and rectifying all risks to ensure that the public at large, pedestrians, local residents , and traffic flow along the corridor are enhanced by projects' end and close-out.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Existing traffic flow with regard to peak hours average at a rate of approx. 1200 hr. (per 60 minute interval counts) vehicles eastbound, and 1100/ hr. out- westbound in Highway 211 corridor. That's 20,000 vehicles moving through Molalla city limits in any given day of the week. These include commercial trucks transporting commerce through Molalla from East of town , westbound toward the I-5 interchange. With the addition of the sidewalk frontage along the north side, existing pedestrians, (mostly middle school aged children), who traverse back and forth to school will now be out of harm's way related to walking directly on top of the fog line on the north side of 211.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

In Molalla, the OR-211 corridor lacks facilities to accommodate bicycle and pedestrian traffic. In addition, the corridor is surrounded by very deep ditches. The lack of facilities and deep ditches force pedestrian traffic to walk on the state highway when using the corridor. OR-211 is a primary route for pedestrians waking to and from Safeway, the City's main grocery store. The corridor also is a primary route for children attending Molalla Middle School. This project will install facilities and remove bicycle and pedestrian traffic from the state highway and in an area where no alternative residential street or path is available.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

There are freight mobility /commerce/commercial products being moved through the corridor, by way of commercial vehicles. Commercial truck traffic volume utilizes about 30% of total traffic volume , through the corridor, both west and eastbound lanes. Predominantly logging , log trucks, pup trailers, flat bed trailers, double, and triple axel trailers, with mill product , sawdust, bark chips, chipping equipment, trailers hauling logging equipment, through the corridor , and traveling through the downtown core. GOV weight of over 20,000 lbs. in the way of commercial truck traffic is a common sight on highway 211. The benefit for them, pending this new highway widening project is procured;

A) they are not putting the pedestrian traffic in any more threat now that a new sidewalk will be built in a portion of the highway.

B) the truck traffic flow will be smoother and without interruption as a wider lane highway allows for commerce to move freely, and with less entanglements in the way of activity along the shoulders , slowing traffic , as the drivers experience now.

(E21) CONNECTED CULLY

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

No risks identified.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

This project will benefit the most diverse census tract in the state (home to over 2,000 residents and 13,000 people). Since the project will be creating much safer conditions for walking and biking, it will be a major benefit to both existing and new users – including people that live/work in the neighborhood and those traveling through the neighborhood.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

All elements of the Connected Cully project have the primary goal of improving the transportation safety and security for those who live and travel through Cully, particularly vulnerable users such as bicyclists, pedestrians, and those using mobility devices. These goals are achieved by setting aside clear and buffered space for these users via separated paths, completed sidewalks, buffered bike lanes, and crossing improvements. Safety will also be improved by reducing speed on local streets via speed bumps and curb extensions. Finally, by encouraging pedestrians and cyclists to use these improved facilities on local streets, safety on Highway 30 will be improved for motorists.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

The work on Killingsworth will improve freight mobility by decreasing conflicts between freight and people walking and bicycling.

(E22) DOWNTOWN I-405 PEDESTRIAN SAFETY AND OPERATIONAL IMPROVEMENTS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

Risk #1: State Traffic Engineer's approval will be required for signals, Rapid Flash Beacons, and marked crosswalks.

- PBOT and ODOT technical staff have already been meeting to ensure that there is a high confidence that the required work will receive the approval of the State Traffic Engineer. The outcome of these meetings is a shared sense that this risk can be addressed in the project development process.

Risk #2: Parking removal may be contested.

- PBOT understands this risk. We have had extensive conversations with adjoining property owners – mostly driven by their requests to improve the safety of this location. PBOT is confident that these issues will be successfully addressed in the project development process.

Risk #3: Section 106 impacts will need to be evaluated if a change in project scope impacts adjacent historic building.

- At this point, PBOT does not think that project scope will need to be changed in a way that impacts a historic building. If this is determined to be the case, PBOT will work with ODOT as soon as possible to ensure the project remains on time and within budget.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Access ramps to and from I-405 terminate at Burnside St., one of the primary collector routes for the Central City. NW Couch St., one block north of Burnside, crosses both the on- and off-ramps at grade. This mixing of local and freeway traffic creates inefficiencies to I-405 access. NW Couch St. is the only non-arterial street to cross I-405 within one-quarter mile of the project location. Up to 80 pedestrian crossings occur at this location in the PM peak hour. However, the current ramp intersection design prevents NW Couch St. from operating efficiently and safely as a pedestrian and bicycle connection for the Central City. This project will address this deficiency by providing enhanced pedestrian crossings, separating local traffic from off-ramp traffic, and upgrading traffic signals.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

Safety is a primary aspect of all projects in a dense multimodal area like the Central City. The project will increase ped/bike safety by reducing crossing distances, enhancing marked crosswalks, modifying striping to eliminate merging prior to the intersection, providing a dedicated pedestrian signal phase, improving visibility by modifying screening, and removing a slip lane at Burnside St.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Improving the safety of the off ramps will be benefit to freight both by eliminating potential conflicts with pedestrians. In addition, the simplification of these intersection and off-ramps will improve the overall operation safety.

Currently, off-ramp traffic merges with local traffic at NW 15th Ave. and Couch St. (Exhibit B). There is a 4-phase traffic signal at this location. This creates the potential for queuing on the ramp and onto the main line. This project will provide more efficient operations by separating local and freeway traffic, upgrading to a 2-phase signal at Couch, and upgrading the signal at Burnside to current standards.

(E23) N BROADWAY SAFETY CROSSING ENHANCEMENT PROJECT

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

Risk # 1: The project is adjacent to a historic property, which should be avoided to the extent feasible to avoid a Section 106 effect.

- At this point, PBOT does not think that project scope will need to be changed in a way that impacts a historic building. If this is determined to be the case, PBOT will work with ODOT as soon as possible to ensure the project remains on time and within budget.

Risk #2: State Traffic Engineer's approval will be required to install a Rapid Flashing Beacon or HAWK signal

- PBOT and ODOT technical staff have already been meeting to ensure that there is a high confidence that the required work will receive the approval of the State Traffic Engineer. The outcome of these meetings is a shared sense that this risk can be addressed in the project development process.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

This project provides transportation benefits to a large number of people driving, walking and bicycling. The project location is along a major commuting route for motorists and bicyclists leading to the Broadway Bridge and into downtown Portland. Directly north of the project area is an active freight district. By eliminating weaving maneuvers the project is expected to improve traffic flow and enhance connectivity into and out of the freight district in the long term. It will enhance the connectivity to the adjacent Rose Quarter arena complex and the new streetcar stop, increasing the transportation options available for patrons of the complex.

In its role as the major venue in Portland for large indoor sporting events and concerts, the Rose Quarter arena complex is a major employer and tourist destination. The proposed project will enhance the crossing safety for users accessing the Rose Garden Arena and Veterans Memorial Coliseum. The project will also improve traffic flow and access to the adjacent freight district north of Broadway, and support the redevelopment of the area into a high density mixed use area.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The primary goal of this project is to enhance traffic safety and operations along N Broadway St between N Ross Ave and N Wheeler Ave. The project eliminates several complicated weaving maneuvers while facilitating safer and more frequent pedestrian and bicycle crossings of Broadway. This change will reduce crash activity and enhance access to local businesses, a new streetcar stop, redeveloped buildings, and Rose Quarter events. The funds will close a slip lane, reconstruct and extend sidewalks and provide a signalized pedestrian crossing. In addition, the project will complement ODOT's plans to consolidate the I-5 freeway Broadway off-ramp. These improvements are consistent with the recently adopted City of Portland's N/NE Quadrant Plan and ODOT's I-5 Broadway/Weidler Facility Plan.

Protection of vulnerable road users is a key element of this project. Pedestrians and bicyclists cross N Broadway without the benefit of signalized crossings or other safety infrastructure such as curb extensions and ADA ramps. The project will increase safety by reducing crossing distances, enhancing marked crosswalks, and providing enhanced signalization and street lights. As pedestrian and bicycle volumes are expected to increase at this location concurrent with continued development in the Central City, this project is a top safety priority. In addition, the closing of the slip lane between N Broadway and N Weidler will eliminate some of the weaving of traffic and unsafe traffic maneuvers.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Broadway/Weidler are key facilities used by freight to access the Central City. Eliminating conflicts with pedestrians and bicyclists will improve the over all operations of these important facilities. In addition, the proposed change eliminates an existing illegal and unsafe travel movement from N Weidler.

(E29) SE FOSTER ROAD SAFETY AND SIDEWALK ENHANCEMENT PROJECT

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

Risk #1: Project is still in the public involvement is still in the public involvement and planning phase.

- In order to minimize risks associated with this project still being in development, the City identified two options. Both of these options can be completed with the requested resources. Although there are always risks associated with projects still in the planning phase, the development of two funding options helps to minimize this risk. It is also worth noting, that many of the projects on the 150% list still are in the project planning phase. This may be a result of a fairly quick grant cycle and funding being programmed for 1016-18.

Risk #2: Some design elements do not meet the minimum AASHTO Standards

- PBOT and ODOT have been in recent communication about AASHTO standard issues related to lane widths. Project staff are comfortable that these issues can be resolved in the project development phase.

Risk #3: Potential 4(f) impacts at 72nd

- PBOT appreciated ODOT raising this issue in the grant review process. However, our most recent work indicates that the project would not have 4(f) issues because the area identified is not a park.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Foster runs through a vibrant mixed use corridor, and is served by a Frequent Service bus line with several transfer points to other bus lines and light rail service. The street is lined with various commercial uses, schools, activity centers such as the YMCA, and open spaces including Laurelwood Park and Firlands Parkway. This project will fill in key gaps in the bike and pedestrian network across Foster, expanding access to and from residential neighborhoods and the transit and commercial services along Foster for both employees and patrons of those businesses. It will expand transportation choices by reducing the need to use a car to access and cross Foster safely.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

SE Foster Road is a City designated High Crash Corridor. Crossing Foster is a safety challenge and barrier, especially for seniors and children going to nearby schools and transit. Walking along Foster and waiting to access transit is often harsh, uncomfortable and uninviting, given the high volume of fast moving motor vehicle traffic and lack of pedestrian-scale lighting, street trees, and other pedestrian and transit amenities that help buffer from traffic. Since 2001, there have been nearly 70 crashes involving pedestrians and bicyclists on Foster, 5 of them resulting in fatalities.

This project will strategically focus on improving pedestrian and bicycle crossing safety and access to transit. The project will provide additional enhanced crossing safety treatments at existing marked crosswalks and add enhanced marked crosswalks and curb extensions to provide safer and more frequent crossing opportunities. The enhanced crossing safety treatments are proposed at non-signalized marked crosswalks. They will include new median islands with Rectangular Rapid Flash Beacons (RRFB), high-visibility, ladder bar marked crosswalks, signage, advanced stop bar and signage, or similar treatments should new research and technology emerge between now and project design.

The project will also upgrade several existing signals that have out-dated equipment to provide greater safety and compliance. Included will be new signal poles and mast arms, signal head back plates for greater visibility, microwave pedestrian detection to extend the "Don't Walk" phase for slow-moving pedestrians that remain in the crosswalk at the end of the regular phase, in-road vehicle detectors to extend the red light to avoid crashes from red light running, count-down pedestrian signal heads, accessible push buttons, new ADA curb ramps and wider sidewalks near the intersection.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

All of the recommended curb extensions and crossing improvements were designed to facilitate turning movements with the recommended freight design vehicle needs.

(E32) ST. JOHNS TRUCK STRATEGY PHASE II

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

No risks identified.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

The St. Johns Truck Strategy Phase II provides benefits to a number of existing and new users. The City has heard consistently for over a decade, that high volumes of trucks using Fessenden/St Louis as a cut through route is negatively impacting safety for all modes in the St Johns neighborhood.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The project's goal is to improve safety for all transportation modes in the project area. The project will improve ped/bike safety by providing median islands with enhanced crosswalks, reducing travel lane widths and widening existing bike lanes, installing Rapid Flashing Beacons, HAWK signal, advanced detection signal and speed reader boards. Vehicular safety is improved by converting a 5-legged intersection to two offset "Ts," realigning cross streets at 90 degree angles, smoothing the reverse curve on Lombard and providing 15-foot travel lanes.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

This project implements the St Johns Truck Strategy for improving freight mobility and neighborhood livability. Lombard is a critical link on the regional freight network and this project reinforces the function of Lombard as the primary freight corridor serving North Portland. The Fessenden/St Louis corridor is currently used as a cut-through route for regional through traffic which is inconsistent with its functional classification as a neighborhood collector. This project will discourage through traffic from using the Fessenden/St Louis corridor and improve multi-modal access and neighborhood livability which is more compatible with its functional classification.

(E33) SULLIVAN'S GULCH TRAIL UNDERCROSSING OF I-205

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

Risk #1: Encroachment on the railroad ROW or into a HazMat area under the bridge may increase project cost.

- PBOT is aware of this risk. The project was designed to avoid this issue and the project includes contingency if these issues are discovered in project development.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

The project has a huge system benefit in that it connects a substantial area within East Portland including Gateway Regional Center to areas of the city west of I-205. The City of Portland was allocated regional flexible funds (federal funds) to expand bicycle and pedestrian facilities and the greenway network in East Portland. This includes the Pacific/Oregon Greenway, which connects directly into the Gateway Transit Center from the east. Using the Pacific/Oregon Greenway, existing I-205 path and this proposed project, bicyclists and pedestrians could connect to the existing Tillamook-Hancock Bikeway which leads to the Central City. The project serves bicycles and pedestrians and connects those modes to transit at a major transit station (Gateway) served by three light rail lines and multiple bus routes.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

Currently the only bicycle and pedestrian connection between the central area of East Portland (Gateway Regional Center) and Northeast Portland is Halsey Street, a high volume, high speed roadway with no bicycle facility. This street is very intimidating to all but the most experienced cyclists. Therefore, it is a deterrent to widespread bicycle use. Pedestrians can also be intimidated by the traffic on the Halsey Street overpass of I-205 and accessing the overpass at both ends. The project provides a connectivity and safety opportunity of significant magnitude. I-205 is a major barrier to east-west bicycle and pedestrian movement between East Portland and Northeast Portland.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

This project can have a significant benefit to freight mobility. First, it will eliminate conflicts that exist today on Halsey between bicycles and cars on a busy, high-speed facility without bike lanes. In addition, creating a network of all ages facilities is key to ensuring less congested streets by achieving high rates of walking, bicycling and transit.

(E37) SANDY TRANSIT OPERATIONS CENTER PHASE II BUS BARN

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

This project has no identified risks; it is ready to go and cost efficient.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Every vehicle using this portion of the transportation system benefits from the transit systems which are supported by this project. Currently the transit systems supported by this project provide approximately 1100 trips per day (over 275,00/yr) with a potential service area population of approximately 40,000. The Mountain Express, operated by Clackamas County, and Sandy Transit recently received federal lands access grant awards that will expand the service area to Government Camp and Timberline Lodge and include weekend and holiday transit service connections from the Portland metropolitan area and PDX to Mt. Hood seven days a week--363 days per year. The new service will bring 5 new transit vehicles into use prompting a more urgent need for the bus barns. The expanded service adds an annual capacity of approximately 100,000 trips. When transit becomes an option for an entire trip, say from the airport to Timberline 363 days per year, the potential benefits improve exponentially, as the entire breadth of the transportation system is improved by more efficient use.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

One of the transit system's strongest assets is safety. During thirteen years of service, having provided 175,000 hours of service and nearly 2.5 million trips, we have never had a disabling accident. Operating safe, well-maintained vehicles by competent, well-trained professional staff is crucial to the delivery of safe transportation. Every transit employee is subject to regular drug and alcohol training and random testing; they are well trained in defensive driving skills, distracted driver and driver fatigue awareness, and passenger sensitivity awareness. The level of training puts professional drivers on the road and provides an exceptional level of safety while replacing many less safe single occupant vehicles. The completion of this facility will offer greater security and protection for the transit resources needed to provide services to the region.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

As described above, any vehicle trip not taken (or added) to the transportation system, benefits the entire transportation system and its users. Freight is one of the primary users of the system, throughout the metropolitan region and especially on the Hwy 26 Corridor. The transit services reduce the numbers of vehicles on the corridor, reducing congestion, while putting professional drivers on the road along with freight. Transit and freight are very similar; our cargo is living, sensitive and perishable.

(E40) US-26: TEN EYCK RD/WOLF DR – VISTA LOOP SIDEWALKS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

The applicant would mitigate the risk identified in the project information sheet by consolidating unpermitted approaches where possible and submitting permit applications on behalf of the property owner to legalize existing approaches. The impact on right-of-way acquisition costs is considered negligible.

Directly benefitting users (those adjacent to the proposed sidewalk and bike lane improvements and those whose soles means of pedestrian or bicycle access to Sandy's commercial core is via US 26) total approximately 150 households, with an assumed population of 2.3 persons per household for an estimated total of 345 persons.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Considering the current zoning if all residential property adjacent to and east of the proposed project area developed at 80% of maximum density another 450 users would benefit from the proposed project.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

This project addresses safety by providing pedestrians and cyclists with a safer alternative to using the shoulder of US 26 for bike and ped trips between their homes and the commercial core of Sandy. Currently, pedestrians and cyclists use the shoulder in the 55 mph section to travel between the commercial core of Sandy and single and multi-family developments east of the downtown couplet of US 26. By providing a buffered sidewalk pedestrians would be separated from vehicular traffic.

Safety for motorists would also be improved by avoiding distractions caused by pedestrians on the shoulder of US 26.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

The proposed project would improve freight mobility by removing pedestrians from the shoulder and providing a wider shoulder bike lane for cyclists. This would allow over-size or over-width loads to travel on US 26 without concern for conflicts with pedestrians on the shoulder.

(E42) FANNO CREEK TRAIL: WOODWARD PARK – GRANT AVENUE

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

The project will use design techniques that reduce or minimize potential impacts within any floodplain areas in accordance with the regulations governing these areas. This is likely to include elevated walkways, no-rise analyses, reducing excavation/fill volumes, and other means to lessen potential impacts of the trail in accordance with appropriate regulations and the overall goals of trail development.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Analysis in the “Regional Pedestrian Analysis” identifies the completed Fanno Creek Trail as one of the region’s top 10 performing trails in increasing access to destinations for the most people and for underserved populations for a low cost per person (p.35 <http://library.oregonmetro.gov/files/2.pdf>). Trail counts conducted in 2011 indicate approximately 220,000 annual trail trips. Regarding future users, transportation modeling and GIS analysis conducted as part of the Active Transportation Plan (draft) indicates a considerable amount of increased pedestrian and bicycle activity along the completed Fanno Creek Trail. Analysis in the “Regional Bicycle Network Evaluation” identifies high bicycle volumes along the Fanno Creek Trail once it is completed, and identifies Tigard as one of the areas in the region with a high level of bicycle activity in 2035 (pg. 5 and 7, <http://library.oregonmetro.gov/files/3bikeevaluation.pdf>).

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The proposed new sections will improve safety in several ways. It provides an off-road alternative, where the current roadway does not have sidewalks or bike lanes. It connects to several key existing and planned safety features, including:

- Overhead flashing beacon crossing on Hall Boulevard near the library
- Connection to the Main-to-Grant Avenue segment, with a grade-separate crossing under Hwy 99W from Main Street (planned for construction in Summer 2013 with local funds)
- Connection to other pedestrian crossing improvements to be constructed as part of Main Street Green Street
- Connection to planned RRFB crossing on Bonita Road.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

This project would benefit freight mobility by providing off-street trail facilities for pedestrians and cyclists to use, rather than the on-street routes they currently use which affect freight mobility.

(E48) KINSMAN RD: BOECKMAN RD – BARBER STREET

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

There are no project risks identified at this time.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Users (existing and additional) who benefit from the project:

- This is a new minor arterial segment that is a critical piece of Wilsonville's basic west side transportation network. This alternate arterial route will benefit current and future system users of all modes by reducing trip length and volume on the existing network.
- The Kinsman Road project will improve the City's north-south mobility and become the new truck route connecting Wilsonville Road with Boeckman Road and Tooze Road. Both existing and future freight trips will benefit from this new link.
- The project will provide enhanced transportation facilities for existing and future users who want to connect between the WES commuter rail and SMART bus transit center to the industrial and employment lands to the north, including Boeckman Road, 95th Avenue, and Commerce Circle.
- The project will benefit existing and future commuters, school busses, emergency vehicles, and other vehicles through improved connectivity to Villebois Village.
- Local north-south trips will have an alternate to I-5 with this connection; the I-5/Wilsonville Road interchange capacity will be preserved for future users.
- Based on NCHRP 255 methodology, the 2035 PM peak volumes for the new Kinsman segment are forecasted to be 580 northbound and 510 southbound trips.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The project addresses safety by:

- The project will take trucks off of Brown Road and 110th Avenue which both primarily serve residential land uses that are incompatible with truck traffic. The Kinsman Road connection provides a new and more compatible truck route between Wilsonville Road and the Commerce Circle area along routes that serve primarily industrial land uses.
- The improved transportation network on the west side of I-5 will reduce the potential for crashes by mitigating congestion at the I-5/Wilsonville Road interchange and nearby signalized intersections.
- A roundabout designed for freight movements will be constructed at the north end of the project (at the Kinsman/Boeckman Road intersection). Data for roundabouts indicate reduced severity and frequency of vehicle crashes.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Freight mobility benefits of the project include:

- A designated truck route is created on the west side of the interstate (I-5). Kinsman Road provides a direct link from Wilsonville Road to Wilsonville's primary industrial areas on the west side of I-5.
- The enhanced connection expedites freight travel by providing an inner/intra-city freight route option from Wilsonville Road to the industrial/warehouse area in northwest Wilsonville making goods and materials transport more efficient.
- Removes "short-hop" trips from the interstate and maintains traffic capacity for through-trips.

(E53) OTTY STREET-82ND AVE REALIGNMENT

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

The following are how the County intends to address the project risks:

- Potential HazMat issue – The existing propane is stored in an above ground tank. Because the tank is above ground and the nature of propane, it is unlikely any contamination has occurred on the site. However, early on in the project's design, the County will perform the required environmental studies to determine the impacts to the budget and the County's liability. To minimize the risks, costs of any hazardous material remediation or decommissioning of the tank would be included in the negotiations for acquiring the property.
- Parking impacts to one parcel – The cost of this acquisition was included in the project cost estimate; therefore, this risk is already minimized.
- Acquisition of four parcels – The cost of this acquisition was included in the project cost estimate; therefore, this risk is already minimized.
- Signal replacement – The cost of signal replacement was included in the project cost estimate; therefore, this risk is already minimized.
- ROW decreased by \$500k – The County believes the ROW budget remains conservative and covers the potential risks of the project.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

The most recent traffic count that was conducted at the intersection was in 2011. The average daily traffic on Otty Street was 480 vehicles and the average daily traffic was 6,580 vehicles on Otty Road immediately east of 82nd Ave (OR 213). According to 2011 ODOT traffic counts on 82nd Ave (OR213), the average daily traffic near this intersection was 46,900 vehicles. Assuming all vehicles will benefit from the improvement because the project will improve safety at the intersection, the total users benefitting from this project are 53,960 vehicles per day. It difficult to project the amount of additional users as a result of the project improvements. However, it is expected the intersection will see an immediate increased use because the intersection is safer to travel and it would be easier for vehicles to make turn movements at all legs of the intersection.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The project's intent is to improve the safety at the intersection. As stated in the application, this intersection is on ODOT's 2012 5% SPIS list and this project is listed as a potential remedy. Safety will be increased by realigning this intersection, which will reduce travel on 82nd Ave (OR 213) as the improvement enhances east-west travel by eliminating the need to make the left hand turns from 82nd Ave onto Otty St. The following is an excerpt from our grant application addressing safety:

Many crashes have been reported in this area. This site is on ODOT's 2012 5% SPIS list and this project is listed as a potential remedy. Otty St is located about 80 feet north of Otty Rd, resulting in poor access management. 82nd Ave/Otty Rd is signalized. 82nd Ave/Otty St is unsignalized. Queues back up to the north on 82nd Ave and block access to and from Otty St. Northbound left turning vehicles from 82nd Ave to Otty St wait in the through lanes of 82nd Ave or line up in the southbound left turn lane area causing southbound left turning vehicles to queue up in the through lanes of 82nd Ave. Realigning Otty St to the south to align with Otty Rd should reduce the number of crashes and improve traffic operations. The project will improve safety for vulnerable road users such as bicyclists and pedestrians by providing a direct signalized link across 82nd Ave. Presently users traveling east on Otty St must engage in out of direction travel and make a left turn in order to continue their path of travel on Otty Rd. This current inconvenience encourages dangerous mid-block crossings and also promotes pedestrian and bike travel through a congested shopping center parking lot. Aligning the Otty intersection would also improve access for emergency responders, particularly for vehicles traveling from the fire station on the east side of Interstate 205.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

The proposed project will improve connections and access for freight coming from Interstate 205 and 82nd Ave (OR 213) to shopping centers (such as the Clackamas Town Center Mall, Winco and WalMart shopping center) and

other businesses (such as Miles Fiberglass) on the east side of 82nd Ave. Due to southbound access restrictions at the Fuller Road/Johnson Creek Boulevard intersection, all freight movement headed south of Johnson Creek and east of 82nd Ave needs to take a circuitous route via 92nd Ave, a topographically challenging route through residential areas, or utilize the 82nd Ave corridor. Due to the topography and nature of the 92nd Ave route, the majority of freight chooses to use the 82nd Ave corridor. As a result of the proposed improvements, freight mobility at this intersection and adjoining 82nd Ave (OR 213) corridor will be improved with a safer, more efficient intersection.

(E54) UNION MILLS AT OR-213 INTERSECTION IMPROVEMENTS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

Only one risk was identified that is associated with a potential hazardous material issue at the corner property. This risk is based on performing all of the project widening to the north. To minimize this risk, the county will perform Phase 1 and Phase 2 Hazardous Material Assessments early in the project's design (30% design) to identify the extent of the impacts to the budget and the County's liability. If the associated costs impact the budget and/or liability is a major concern, then widening Union Mills to the south or widening equally on each side would be considered as the preferred alternative. This would minimize or eliminate the hazardous material costs, thereby minimizing the risks to the project.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

The most recent traffic count that was conducted at the intersection was in November of 2011. The average daily traffic on Union Mills was identified as 4,729 vehicles (daily westbound traffic is 2,413 vehicles and daily eastbound traffic is 2,316 vehicles). According to 2011 ODOT traffic counts on OR 213, the average daily traffic near this intersection was 13,700 vehicles. Assuming all vehicles will benefit from the improvement because the project will improve safety at the intersection, the total users benefitting from this project are 18,429 vehicles per day. It difficult to project the amount of additional users as a result of the project improvements. However, it is expected the intersection will see an increased use because the intersection is safer and it would be easier for vehicles to take a right hand turn on Union Mills to northbound OR 213.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The project's intent is to improve the safety at the intersection. As stated in the application, this intersection is on ODOT's 2012 10% SPIS list and the widened turn lane at this intersection will improve the ability for large trucks and other motor vehicle users to expand sight distance and make more effective right hand turns onto OR213. As indicated by rural residents, this intersection is in need of improved safety and this project will work to minimize crashes and enhance the effectiveness of the intersection.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

As stated in our grant application, the rural agricultural industry is a vital part of Clackamas County's identity. Freight traffic along Union Mills and along OR 213 is accessing agricultural and rural job areas. Further, large logging trucks traveling along this road are servicing county-owned and U.S. forested areas. The project will provide better access and freight mobility for these services and linking rural and urban areas.

(E55) AGA RD: MP 0.0-0.3 BIKE/PED IMPROVEMENTS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

County Road Order from the 1880s shows different boundaries than the plats and deeds, which are to the section line

- ORS 368.201 – 368.221 provide procedures for legalization of county roads. Legalization of a road is an action the county governing body may take to clarify the record as to the location of the right-of-way for a road. According to the statutes, the legalization process may be used if the road as traveled and used for 10 years or more does not conform to the location of the road described in the county records.
- The county proposes to begin the legalization process immediately upon notification of award of Enhance funds. We anticipate that the process could be completed prior to the 2016 commencement of all other work on the project. In the unlikely event the legalization process does not set the record straight on the location of the right-of-way, the county would withdraw the project before any STIP funds are spent.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Over 2000 people reside in the unincorporated area of Odell. This includes almost 500 families, many with children that would like to walk or bicycle from their homes to the elementary school and the downtown Odell. Many of the residents walk or bicycle already, but we expect the number would increase significantly with the propose improvements.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

Due to the absence of improved sidewalks or shoulders, students are frequently observed walking to and from school in the travel lane. This project proposes new AGA Road sidewalks and widened shared roadway substantially improving the safety of students who walk or bike this corridor to get to school. Safety is also improved for residents that use AGA Road to walk or bike between local subdivisions and community focal points such as the elementary school, downtown Odell, the county fairgrounds, and the nearby middle school.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

AGA Road receives freight traffic by farmers taking their produce to local packing plants. Freight mobility would be improved by reducing the likelihood of conflicts between trucks and pedestrians or bicyclist.

(E57) OR-281 CURVE WIDENING

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

Potential need for wall/culvert at Orchard portion of project

- Due to the proximity of Cedar Creek, the County's preference is that grade changes on Orchard Road are minimized and mitigation of the "hump" at the Orchard/282 intersection is accomplished primarily by adjusting the grade and superelevation on OR281. If project scoping identified a need to significantly raise the grade of Orchard Road at Cedar Creek, then the costs of any wall/culvert improvements and right-of-way should be assumed to be part of this project.

Potential HazMat issue on Orchard due to gas station

- The project area with potential HazMat issues due to the gas station appears to be on right-of-way owned by ODOT. If HazMat issues are identified during the project it is expected that these issues would be corrected either by ODOT or by liability/financial responsibility of the gas station owner.

ROW costs may increase due to encroachment on Orchard

- Encroachments identified near the gas station appear to be on existing ODOT right-of-way. The County would participate with ODOT in working with the land owner to re-locate these encroachments, but it is expected that any cost related to re-location or removal would be borne by the land owner or ODOT. If ODOT does not have a separate budget for this, the anticipated costs should be included in the requested enhance funds.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

In the immediate vicinity of the project, freight access would immediately be improved to about 65 acres of commercial and light industrial zoned land. Much of this land is already developed, but about 20 acres is suited for new or re-development and we have heard that limited truck access has impeded development.

Beyond the immediate project area, truck access would be improved to all commercial, industrial, and farm lands south of Hood River. When future improvements to OR281 to the north and east of the project occur, truck access to the south part of the City of Hood River will also be improved.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The proposed curve widening will allow trucks to negotiate the project intersections without unsafe tracking into the oncoming traffic lane. Safety will also improve for bicycles and pedestrians that share the roadway and shoulders in the area by providing more room for trucks to maneuver around them.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

See #2 above. By providing access for trucks over 60' long, freight will be moved more efficiently and at a lower cost.

(E58) HOOD RIVER CITY PARK AND RIDE

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

Right-of-way files would need to be updated to ensure compliance with the Uniform Act. ODOT Region 1 staff have not provided the District with a specific course of action to resolve this risk. The District is assuming that problem isn't a fatal problem as our project is still under consideration. The District would cooperate with ODOT to attempt to resolve this problem.

Sewer pipeline conflicts underneath parking lot. The District and City have spent considerable time and legal resources to solve this problem. We have an agreement in principle with the city, the District will allow the sewer line to remain where it is as long as the site is used as a parking lot. If the City needs to access the sewer line, we will allow them access and they will have to repair any damage they do to the parking lot. If in the future, the District decides to build something else on the lot, the City will move the sewer at their expense. My Board approved the easement that we are granting the City today and we are expecting City Council will approve the easement on the 26th.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

The District will be building the first official Park and Ride facility in Hood River County. The fully built out project will provide up to 43 spaces for people to park their vehicles. Those parking spaces will be available 24/7, so at full capacity, 43 vehicles will not be using the street system. The second phase will allow the second half of those spaces to be completed (approximately 22). We would assume some turn-over in the spaces, so at times we could expect more than the total number of spaces would be used.

This is a new facility, so all of the users would be new users and those would new and additional vehicles that would no longer be using the street system.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

Our project reduces congestion, thereby reducing the odds of an accident.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Reduced congestion can reduce the time freight carriers have to deal with slow traffic.

(E60) WILLAMETTE GREENWAY TRAIL: CHIMNEY PARK/KELLEY PT PARK

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

If the project proposes to construct the trail through the Chimney Park dog park_ the resulting 4(f) impact may not be considered de minimis, in which case, a 4(f) evaluation would be required.

- The trail and bridge alignment have been moved to the northwest of Chimney Park's dog park and no impacts on the dog park are now anticipated.

Requires a No Rise certification because the project is within the 100-year floodplain

- A professional engineer will evaluate any rise in the 100-year flood elevation during preliminary engineering and we will mitigate to ensure that the no rise condition is met

Requires a hazardous material assessment to determine how to address materials

- A hazardous materials assessment will be undertaken in specific areas where needed. Any existing assessment from the City of Portland will be utilized.

Requires permit for railroad crossing

- We are currently negotiating with UPRR and anticipate a successful conclusion to our discussion.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Currently, this 4-mile gap in Portland's 140-mile regional multi-use trail system separates 51,000 residents in North Portland neighborhoods from 600 employers in the Rivergate Industrial area and abundant nearby recreational and natural resources, including Chimney Park, 2000 acre Smith and Bybee Wetlands Natural Area, Kelley Point Park and the 40- Mile Loop trail along the Columbia River. Children attending 14 nearby secondary schools deserve a safe route to the natural area to experience it and learn in nature. Closing this gap of a regional system that encircles Portland will ensure residents and visitors have access to 140+ miles of trails.

Each year for the past four years, Metro and the City of Portland have conducted bicycle and pedestrian traffic counts at locations along trails in North Portland and around the metropolitan region. The count data allows us to estimate bicycle and pedestrian traffic volume projections for the proposed project. Following the methodology of the National Bicycle and Pedestrian Documentation Project, data from nine two-hour counts conducted at three nearby locations from 2008 to 2011 were extrapolated to generate the following traffic volume projections for the future trail, connected to Marine Drive Trail. The project is the first segment in this connection.

19 trail users per peak weekday hour
270 trail users per day
2,250 trail users per week
9,643 trail users per month
120,536 trail users per year

There are people who bicycle and walk in this area today. However, there are no specific counts to reliably project existing and additional users.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The North Portland Greenway is an important regional trail that provides alternative transportation between North Portland and the Rivergate Industrial area. This trail has been in adopted plans for over two decades and it is essential that it cross Columbia Blvd. in a safe and efficient manner. The bridge proposed eliminates safety conflicts with freight trucks and fast-moving vehicles.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Columbia Boulevard is a high-priority designated freight corridor. In order to maintain its utility as a direct route between the Rivergate Industrial area, freeways and the Portland International Airport, everything possible must be done to maintain free flow and remove impediments. All agree that the separated grade crossing over Columbia Boulevard included as part of this project is the safest way to accomplish this.

(E61) NE 238TH DR: HALSEY ST TO GLISAN ST FREIGHT AND MULTIMODAL IMPROVEMENTS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

The County will work with ODOT to address any design exception needs identified for the project. In addition, options for design can include consideration for a shoulder that can be explored further as part of the PE/design of the project. Mitigation for tree removal, as needed, will be provided. It is anticipated that impact to the Water Quality Zone will be minimal and effort will be made to reduce and keep the impact low. The county has been working with Wood Village to address this.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

NE 238th is classified as a Minor Arterial and carries an annual average daily traffic of over 20,000 trips. This north-south corridor was identified as a key corridor as part of the recently completed East Metro Connections Plan (EMCP). Currently freight is limited on this route and this improvement will improve freight mobility and multimodal connections on this corridor.

Creating a safe and usable facility for bicyclists and pedestrians, the project also improves a critical multimodal link between low income communities and essential services such as civic activities and commercial services located north and south of the project. Services include Wood Village City Hall, city parks, grocery stores, schools and a local library. The project will also result in improved access and multimodal links to regional transit lines located on Halsey St and 238th Drive expanding travel options for all users.

This project will support long-term employment within the town center and key employment areas north and south of the project, by providing a high quality connection between workers and the jobs in the nearby town centers of Wood Village and Fairview, and civic, industrial and commercial services located south on Glisan St. By filling the gaps in sidewalks and addressing the gap in bicycle facilities in this area, key connections north and south of the project will be completed for users to access essential services via foot, bike or transit.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

Designs and techniques will be used to provide safe facilities for all users. Safety is a major concern on NE 238th Drive due to a steep and curvy grade. Currently there are sidewalk gaps and no bicycle lanes. The project design will reduce the conflict between bicyclists and pedestrians with motor vehicles by adding bicycle and pedestrian facilities on both sides of NE 238th Drive to accommodate both north and south bound users. In addition, safety between road travelers will be improved with the widening of the travel lane to accommodate truck turning. Access management will prioritize mobility and safety with access being focused and limited to lower classified facilities.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

The project contributes to reduced freight delay and improved reliability fixing truck turning capabilities, and separating conflicts between freight, and bicyclists and pedestrians. This project improves and better integrates freight facilities and improved connections between I-84 and US-26. The project allows for improved truck turning. Currently, freight traffic is limited to shorter trucks due to the road curvature. By changing the curvature of the roadway, this key north/south corridor will be accessible to longer freight trucks and will even out the truck volumes on the four East County I-84 interchanges.

This improves freight connections between industrial areas north of I-84 and south of US-26. North of I-84 along Sandy Blvd is an area that includes key employment and industrial areas for East County. To the south, at the intersection of NE 238th Dr and NE Glisan St, is the Gresham Vista Business Park, which is located in Gresham's strategic investment zone and enterprise zone. Further south is downtown Gresham and connections to Gresham's Springwater Community Plan Area that contains over 1,000 acres of land that the city plans to develop into an industrial employment center, eventually attracting thousands of jobs. In addition to improving the transportation system link to this area and linking workers to jobs, this project also improves access to regional transit (#77 and #21 TriMet buses on Halsey St and 238th Ave).

The project builds on the existing transportation facility and provides opportunity to balance mobility among the four I-84 interchanges. This also improves efficiency and capacity of existing highway facilities. This corridor supports efficient movement of goods and people between Interstate-84 (I-84) and US Highway 26 (US-26), and comes out of the first corridor planning effort completed from the adopted 2035 Regional Transportation Plan.

(E62) SANDY BLVD (FAIRVIEW CITY LIMITS – 210TH AVENUE): FREIGHT AND MULTIMODAL IMPROVEMENTS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

Water quality is proposed to be handled in a bio-swale. Additional mechanical treatment, such as a storm water filter to treat runoff, is available if it is found that the bio-swale cannot handle treatment.

The county will be responsible for cost over-runs.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Sandy Blvd is classified as a Minor Arterial and carries an annual average daily traffic of over 9500 trips. This project will manage the existing transportation system by building out desired street cross-sections without the need to acquire additional right-of-way and by leveraging recent and planned improvements in the area. The project will improve the efficiency and operation capacity of existing infrastructure by building the three-lane minor arterial cross-section, providing separated facilities for all the. The project will add capacity to the system for bicyclists and pedestrians by providing each a separated facility, and will add capacity for freight and motor vehicles by constructing a 3-lane cross section including a center turn lane.

The proposed project will greatly improve multimodal connectivity as well as allow for more efficient freight accessibility through the industrial and employment land corridor. By constructing curb, sidewalk gaps, and bus stop enhancements, the area's diverse residents will have improved access to transit stops along Sandy Blvd, including the bus stop at 205th Ave / 206th Place which receives on average nearly 800 on's and off's per week. Bus Line 21 which serves Sandy Blvd connects the local residents with the Wood Village/Fairview Town Center, the Gresham Regional Center, several large-scale commercial areas such as Walmart near 238th Ave, and the employment and industrial lands along Sandy Blvd. Similarly, the construction of gaps in the bicycle lanes will add connectivity to the bike network, linking residential areas with commercial, industrial, and employment areas.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

Sandy Boulevard lacks the urban infrastructure to realize its minor arterial classification and to provide safe multimodal access along a busy freight corridor. This project proposes constructing improvements to a segment of Sandy that improves multimodal access and safety improvements along the substandard corridor along Sandy Blvd between Gresham/Fairview city limits and the 210th Ave.

Sandy Blvd is a regionally designated freight route with a high amount of daily freight traffic. Nearly 25% of observed traffic during a 2011 traffic count were trucks with two or more axels. A primary benefit to the proposed project is completing the separated bicycle and pedestrian networks in the project area. Currently there are gaps in both bicycle lanes and sidewalks along Sandy Blvd. The most vulnerable road users (bicyclists, pedestrians, and transit users) will experience real and perceived safety improvements with the construction of separated facilities such as sidewalks, pedestrian-scaled street lighting, paved bicycle lanes, and enhanced bus stops as they will no longer be forced to share a narrow and substandard right-of-way with fast-moving freight traffic.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Sandy Blvd is a regionally designated freight route with a high amount of daily freight traffic. Nearly 25% of observed traffic during a 2011 traffic count were trucks with two or more axels. Sandy Blvd throughout the four northeast Multnomah County cities is a significant industrial corridor with prime, state-certified industrial lands located throughout. This proposed project will fill gaps left by recently completed, funded, and soon-to-be funded projects throughout the freight corridor including: Multnomah County Sandy Blvd Project from 230th to 238th, roadway and multimodal improvements funded by Regional Flex Funds 2014-15; City of Gresham Sandy Blvd Project from 181st to Gresham/Fairview city limits, an East Multnomah County top priority project for 2016-18 Regional Flexible Funds allocation; and Multnomah County NE 223rd Ave Railroad Overcrossing Replacement Project at Sandy Blvd, completed in 2011.

The improvements to Sandy Blvd as proposed in this project will improve existing freight mobility through the corridor and open constrained access points to the Townsend Business Park, a "shovel-ready" development with over 30 acres of prime industrial land and 1,100 employees. The CCRD and the East Metro Economic Alliance identified infrastructure barriers as being a primary deterrent to attracting new firms and development in the northeast County industrial area. Investing in the proposed capital improvements to improve constrained

roadways and intersections will help attract new firms and in turn preserve the existing jobs and also attract new long-term jobs to the area. At a regional scale, the proposed improvements would leverage significant investment to the transportation network in adjacent industrial areas to provide a more efficient and seamless flow of goods and products along Sandy Blvd, connecting to I-84 and key north-south freight corridors identified in the recently completed East Metro Connections Plan such as NE 181st Ave and NE 238th / 242nd Ave, and the proposed Troutdale Interchange Project at NE 238th Ave.

(E64) HISTORIC COLUMBIA RIVER HIGHWAY STATE TRAIL: SHELLROCK CROSSING

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

No project risks were identified on the project information sheet.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Use of the Historic Columbia River Highway State Trail is anticipated to increase exponentially as the effort to create an uninterrupted State Trail Corridor comes closer to completion. In 2011, the Historic Highway State Trail saw 360,000 visitors and recreational users; nearly a 200% increase over the State Trail's 2004 annual usage. As future trail segments are complete use patterns are expected to continue to increase.

The Wyeth Trailhead has received conditional approval for construction through the Federal Lands Access Program. This approval is contingent on the STIP Enhance funding request. This trailhead parking area will provide safe parking and recreational access to the proposed trail. The Wyeth Trailhead includes a picnic shelter and an interpretive trail which will have added benefits in conjunction with the trail access.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

To currently access many recreation areas in the Gorge from Portland, Hood River and other nearby communities, cyclists and hikers must use the Interstate 84 shoulder for a portion of their journey. Interstate 84 in the Columbia River Gorge National Scenic Area is an interstate freeway with over 22,600 average daily trips (2010, MP 54). The current shoulder width on I-84 where the freeway traverses around Shellrock Mountain is less than 4 feet wide. With a speed limit of 65 miles per hour, accessing the Columbia River Gorge through this segment in a mode other than a vehicle is dangerous and often too daunting for the average rider. Construction of this project would provide safe access around Shellrock Mountain, this project alone would increase safety through the I-84 corridor

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Removing cyclists from the narrow shoulder around Shellrock Mountain will have positive benefits on freight mobility. Trucks will no longer have to squeeze by the cyclists in this narrow corridor which often complicated by high winds and inclement weather.

(E67) I-205 SB: I-84 EB ENTRANCE RAMP TO STARK/WASHINGTON AUXILIARY LANE

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

No risks were identified on the project information sheet.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

This recurring bottleneck was identified in the Corridor Bottleneck Operations Study (CBOS). The CBOS objective was to develop low cost solutions, highly effective and immediate solutions to improve safety and operations of the bottleneck. CBOS describes the I-205 SB traffic conditions at localized recurring bottleneck:

- Volume: I-205 SB mainline volumes is 81,760 (2011ADT)
- Queue: Congestion/queuing starts from weaving section between Stark/Washington St. entrance-ramp and Hwy 26/Division St./Powell Blvd. exit ramp
- Duration: Congestion/queuing are approximately 3 hours daily between 3:00PM to 6:00PM
- Speed: Average speed drop as low as 20 mph within this area during this time

The contributing factors are the high volumes from I-84 EB merging with I-205 SB mainline traffic. Conflicts between entrance-ramps create turbulence at merge points with the mainline, and difficult weaving movements.

The project benefits will reduce congestion, improve lane balance and travel time reliability, and sustain stable traffic flow.

- Queue: Congestion/queuing would be reduced in all lanes and completely reduced in the two leftmost lanes.
- Duration: It is anticipated that the queue would be reduced to an hour during the peak periods.
- Speed: Average speeds within the congested areas are expected to increase to between 40 and 45 mph.

The auxiliary lane will serve approximately 17, 390 (ADT) from I-84 EB of which approximately 4,350 ADT (25%) exit to Division/Powell.

BENEFITS (week day only)

Daily Users	Annual Savings of Delay		
Delay Reduction	Auto	Truck	Total
20,550 users	\$1.2 million	\$160,000	\$1.3 million

Safety	Annual Savings of Crashes
96,140 users	\$380,000

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

Currently the project area crashes are:

- Rate: 0.60 per MVMT; Frequency: 112 crashes from 2007 to 2011;

This auxiliary lane is anticipated to result in a 30% reduction in mainline crashes, based on comparable auxiliary lane improvements.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

The auxiliary lane will directly benefit freight users by reducing congestion, improving lane balance and travel time reliability, and sustain stable traffic flow within the project area. Approximately 8% (approx. 6,500 trucks) of I-205SB ADT in this area is freight traffic.

The travel time savings (based on speed and delay) would be approximately \$160,000 annually for freight users.

(E69) I-205 SHARED USE PATH: PEDESTRIAN BRIDGE AT JOHNSON CREEK

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

No significant risks were identified.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

The existing counts on the I-205 path are around 1000 to 1500 users per day. According to the 2012 Portland Bicycle Count Report, city wide bicycle use is growing at a rate of 3.3 percent annually.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The proposed structure will eliminate out-of-direction travel and will reduce the number of motorized vehicle/Bike-Pedestrian conflict points. The new path location provide path users with an alternative to crossing Flavel at the signalized intersection thus reducing the crossing distance and the number of lanes to cross – from 4 lanes to 2 lanes.

Also, design elements such as improving sight distances and user visibility will be incorporated that improve user safety. Additional consideration will be made in the design to reduce misuse of the State R/W by transients.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Use of alternative modes reduces overall demand on the important interstate freeways and freight corridors.

(E70) I-5 NB: LOWER BOONES FERRY EXIT RAMP

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

ODOT will develop appropriate noise mitigation for the project.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

This recurring bottleneck was identified in the Corridor Bottleneck Operations Study (CBOS). The objective was to develop low cost solutions, highly effective and immediate solutions to improve safety and operations of the bottleneck. CBOS describes I-5 NB traffic conditions at the localized recurring bottleneck:

- Volume: I-5 NB mainline volumes is 73,070 (2011 ADT); The NB Exit-Ramp to Lower Boones Ferry Rd volume is 12,810 (2011 ADT).
- Duration: Based on observation, the duration of the queue at the Lower Boones Ferry Road exit-ramp is approximately 7:15AM to 8:30 AM and 3:00PM to 5:00PM.
- Speed: Based on observation, speeds between the Nyberg and Lower Boones Ferry interchanges drop to as slow as stop-and-go conditions in the outside lanes.

The queuing occurs intermittently between the Lower Boones Ferry exit-ramp and the westbound Nyberg St. entrance-ramp. The cause of the queuing is a combination of the high volume of traffic entering from the two Nyberg Street entrance-ramps, the high volume of exiting traffic at Lower Boones Ferry Road and the associated weaving maneuvers that happen between the Nyberg and Lower Boones interchanges. The mainline traffic south of Nyberg currently has to make a lane change to the right in order to exit off to Lower Boones Ferry.

The proposed project will reduce weaving conflicts and congestion, enhance to stable traffic flow and travel time reliability.

- Queue: The proposed project helps to alleviate queuing in the outside lanes on I-5 northbound. Mainline traffic south of Nyberg would have the ability to exit to Lower Boones Ferry Road without having to make a lane change, thereby reducing the turbulence near the exit gore area.
- Duration: It is anticipated that the queue would be mostly reduced.
- Speed: The speeds through the project focus area would increase to 45-50mph.

BENEFITS

- 73,070 (2011 ADT)I-5 NB users and the 12,810 (2011 ADT) users of the NB Exit-Ramp to Lower Boones Ferry Rd.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

Project Focus Area Crashes: Rate: 0.45 per MVMT; Frequency: 63 crashes from 2007-2011; 1 fatal crash.

This would result in safety benefit due to enhanced traffic operations. A similar project was built at the I-5 SB exit-ramp to Nyberg Road in 2010. The Nyberg improvement widened the southbound Nyberg Road exit-ramp from one lane to two lanes. A study of the crash history indicated that crashes were reduced by 50%.

Annual estimated safety savings would be \$345,000

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

The 2-lane-exit will directly benefit freight users by reducing congestion, improving lane balance and travel time reliability, and sustain stable traffic flow within the project area. This improvement would benefit the approximately 10% (7,300 trucks) of I-5 NB freight moving through this localized bottleneck area as speeds would increase to 45-50mph.

(E71) I-5 SB: LOWER BOONES FERRY EXIT TO LOWER BOONES FERRY ENTRANCE AUXILIARY LANE

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

There were no risks identified.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

This recurring bottleneck was identified in the Corridor Bottleneck Operations Study (CBOS). The CBOS objective was to develop low cost solutions, highly effective and immediate solutions to improve safety and operations of the bottleneck. CBOS describes I-5 SB traffic conditions at the localized recurring bottleneck area:

- Volume: I-5 SB mainline volumes is 77,020 (2011 ADT); The Exit-Ramp to Lower Boones Ferry Road is 13,610 (ADT); Entrance-Ramp from Lower Boones Ferry Road is 12,870 (ADT) and the Exit-ramp to Nyberg St. is 21,190(ADT). Queuing experienced from the Lower Boones Ferry Road exit-ramp to the Lower Boones Ferry Road entrance-ramp
- Duration: Approximately 2 hours daily between 4:00PM to 6:00PM.
- Speed: Bottleneck activation speeds drop as low as 30 mph.

Contributing factors for queuing are the auxiliary lane from Hwy 217 entrance-ramp drops at Lower Boones Ferry Road exit-ramp, and a high volume weaving movement to Nyberg St. exit-ramp, resulting in an unbalanced lane utilization and operational deficiency.

The project will reduce congestion, improve lane balance and travel time reliability, and sustain stable traffic flow within the area of the auxiliary lane. Extension of the auxiliary lane would provide continuous auxiliary lane from Hwy 217 to Nyberg St. exit.

- Queue: Congestion/queuing would be reduced in all lanes by providing a balanced roadway section.
- Duration: It is anticipated that the queue would be reduced to less than an hour during the peak periods.
- Speed: Average speeds within the congested areas are expected to increase to between 40 and 50 mph.

BENEFITS (week day only)

Daily Users Delay Reduction	Annual Savings of Delay		
	Auto	Truck	Total
18,690 users	\$250,000	\$40,000	\$290,000

Safety	Annual Savings of Crashes
87,860 users	\$195,000

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

Currently the project area crashes are:

Rate: 0.39 per MVMt; Frequency: 56 crashes from 2007-2011; 1 Fatal Crash.

Construction of the auxiliary lane is anticipated to result in a 30% reduction in mainline crashes, based on comparative auxiliary lane improvements.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

The auxiliary lane will directly benefit freight users by reducing congestion, improving lane balance and travel time reliability, and sustain stable traffic flow within the project area. Approximately 10% (approx.7,700 Trucks) of I-5SB ADT in this area is freight traffic. The travel time savings (based on speed and delay) would be approximately \$40,000 annually for freight users.

(E72) OR-224-212 CORRIDOR ITS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

None identified.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

These segments of OR224 and OR212 provide a critical connection between communities in the southeast metro region with downtown Portland. Average Daily Traffic within the corridor ranges from 14,100 to 46,900 ADT. Because of the high traffic volumes and congestion, the corridor has become unreliable or at times underutilized due to drivers lack of information about traffic conditions. By providing users with real time information about alternative routes or current traffic conditions the collective highway system (I-205, OR99E, I84, US26 etc.) can more efficiently serve the traveling public and improve reliability and operations along this critical corridor and more efficiently manage the demand on the regional transportation facilities.

This project includes incorporating closed circuit TV cameras and blue tooth devices that can be used to provide information about the current traffic conditions allowing ODOT to better respond or monitor incidents and improve long range project planning decisions. This technology infrastructure will be integrated into existing or planned ITS equipment and expand the information available to the Region Operations Center.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

Improving system utilization by providing traffic data that can be used to feed real-time traffic updates to users will allow drivers to make more informed decisions about what routes to take, potentially reducing the overall congestion in the collective highway system.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

The proposed ITS upgrades will directly benefit freight users by providing travel time and traveler feedback information through ODOT Trip Check, Google Maps and other travel time information sites. The information collected by the proposed equipment can also be used with existing or proposed VMS equipment on I-205, I-84, OR99E and other corridors. These types of treatments have successfully shown increased trip reliability and reduced delay in other areas. This section of roadway is classified as a Federally Designated Truck Route, state Freight Route, NHS and an Expressway between I-205 and OR99E.

(E73) OR-99E CORRIDOR ITS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

None identified.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

This segment of OR99E provides a critical N-S route connecting the communities of Canby, Oregon City, Milwaukie and the City of Portland with some segments exceeding an average daily traffic count of 60,000 vehicles and four major bus lines. Because of the high traffic volumes and congestion, the corridor has become unreliable or at times underutilized due to drivers lack of information about traffic conditions. By providing users with real time information about alternative routes or current traffic conditions the collective highway system (I-205, OR43, OR224, etc.) can more efficiently serve the traveling public and improve reliability and operations along this critical corridor and more efficiently manage the demand on the regional transportation facilities.

This project also includes incorporating closed circuit TV cameras and blue tooth devices in addition to multiple new Variable Message Signs (VMS) that can be used to provide information about the current traffic conditions allowing ODOT to better respond or monitor incidents and improve long range project planning decisions. This technology infrastructure will be integrated into existing or planned ITS equipment and expand the information available to the Region Operations Center.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

Improving system utilization by providing real-time traffic updates users will be able to make more informed decisions about what routes to take, potentially reducing the overall congestion in the collective highway system. In addition, variable message signing can reduce the likelihood of both primary and secondary accidents by notifying the traveling public of roadway conditions.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

The proposed ITS upgrades will directly benefit freight users by providing travel time and traveler feedback information. These types of treatments have successfully shown increased trip reliability and reduced delay in other areas. This section of OR99E is classified as a Federally Designated Truck Route and a state Freight Route between OR224 and the Ross Island Bridge.

The proposed ITS upgrades will directly benefit users by providing travel time information through ODOT Trip Check, Google Maps and other travel time information sites.

(E74) OR-212 AT RICHEY ROAD: PEDESTRIAN/BICYCLE/TRAIL IMPROVEMENTS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

R/W Risk – Design efforts will be made in project delivery to minimize encroachment upon the gas station property. Attention will be given to the path profile and alignment to reduce impact to the driveway approaches.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Based on available data, a projected count of users currently crossing OR212 at the intersection or those that would benefit, would be approximately 9,000 annually or about 1.5 users per hour (during a 16 hour day). As part of determining a projected count for the crossing, better weather months were considered.

As improvements to both regional trails leading to the intersection continue to be made, use of the pedestrian crossing could easily double (or triple) within the next several years. The proposed crossing improvements are meant to improve safety for these users.

The crossing is integral to the Springwater- Cazadero trail connection or system and enhances the ability of users (mainly cyclists) to safely access the downtown community of Boring. There cyclists have access to restaurants, shopping, logging, etc. The added spending could also benefit the local tax base.

With continued trail development, which would include the intersection connection, the City of Boring could realize an economic benefit. A recent report on bicycle tourism within the state mentions that, users spent 89 million in the Metro Region in 2012.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The project will enhance the pedestrian crossing at the OR212 / Richey Rd intersection, providing ADA ramps and improved pedestrian signal elements. The project will also construct a bike/ped connection along Richey Rd., from OR212 to the Cazadero Trail alignment south, reducing inadvertent user travel across the gas station property and adjacent parking areas.

The construction of the crossing and path connection will provide safer facilities for equestrian users.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

The proposed sidewalk/ADA ramp at the intersection of OR21/Richey Rd will be designed to allow truck turning movements from OR212 eastbound to Richey Rd southbound. Use of alternative modes reduces overall travel demand on important freight corridors.

(E76) US-26 ATMS/ITS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

None identified.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

There are over 195,000 daily users in this corridor. Because of the high traffic volumes and congestion, the corridor has unreliable mobility that creates long delays for users and long queues. The 2011 Corridor Bottleneck Operation Study determined that the US-26 EB recurring bottleneck at I-405 SB and NB ramps created a 4 hour PM bottleneck that had a queue to the Cedar Hills Blvd Interchange. Within this area there were over 800 crashes (2004-2008).

Variable advisory speed and variable message signs are designed to utilize regularly spaced, over lane speed and lane control signs to dynamically and automatically reducing speed limits in areas of congestion, accidents, or special events to maintain traffic flow and reduce the risk of collisions due to speed differentials at the end of the queue and throughout the congested area.

Variable advisory speed and message signs will increase the average throughput for the congested periods of 3 to 5%, increase the trip reliability and delay the onset the freeway total breakdown.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

Variable advisory speed and queue warning (variable message signs) will result in the following safety benefits:

- A decrease in primary incidents of 3 to 30%
- A decrease in secondary incidents of 40 to 50%

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

The ITS will directly benefit freight users by harmonizing the speeds during congestion, increase the average throughput for the congested periods 3 to 5%, increase the trip reliability and delay the onset the freeway total breakdown. Approximately 4% (approx. 5, 200 Trucks) of US-26 ADT in this corridor is freight traffic.

(E81) COLUMBIA/ALDERWOOD/CULLY

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

No project risks were identified on the project information sheet.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Based on peak hour intersection counts taken at Columbia/Alderwood in 2010, it is estimated that approximately 20,000 vehicles a day use the intersection. Over 10 percent of the vehicles are trucks. From the Airport Futures traffic study the project is intended to accommodate an increase in background traffic as well as an increase in passenger and air freight traffic at the airport. The bike and pedestrian improvements will also help to serve the new park and industrial users associated with the Colwood plan amendment that is underway.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

The project addresses safety by adding a southbound left turn lane on Alderwood Road, adding a northbound right turn lane on Columbia Boulevard, signalizing the Columbia/Alderwood intersection, and adding a separated multi-use path on the north side of Columbia between Alderwood Road and Cully Boulevard for pedestrians and bicycles.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Columbia Boulevard and Alderwood Road are designated as Priority Truck Streets in the City of Portland Transportation System Plan. Additionally, Alderwood Road is designated as a National Highway System Intermodal Connector. The project will help to keep Columbia Boulevard a viable freight route within the Columbia Corridor. Ensuring that Columbia Boulevard functions as intended helps to keep vehicles from using the interstate system. Alderwood provides the primary access for air cargo trucks to access the air cargo operations at PDX. Fed Ex, UPS and DHL are among the users that rely on this access to make the truck to air connections efficiently. The improvements support the development of a multimodal freight system, including for delivery of time critical air freight associated with Portland International Airport.

- Multimodal

By providing sidewalks and a multi-use path within the project area, the project contributes to improving worker access to jobs between the Cully neighborhood and PDX and the Columbia Corridor in general and provides separation between freight and other modes. During public outreach for the Port's Bicycle and Pedestrian Plan the Alderwood-Columbia-Cully connection was cited numerous times as an important bicycle improvement.

- Leverage

The project compliments the East End Connector (Key 8838), 47th and Columbia (Key 13987), Alderwood at 82nd and Alderwood at Columbia (Key 13988) and Signalization of 82nd and Columbia (Key 15596). All of the listed projects were identified more than 18 years ago to improve freight mobility in the corridor and air cargo connections. All have been completed representing about \$40 million in improvements and all have freight benefits. Two additional funded projects which have not yet been implemented will also improve the Columbia Boulevard corridor for freight travel. These are the Columbia/MLK project (Key 13502) and Columbia Boulevard ITS, funded through MTIP (RTP # 10342). The Columbia/MLK project is in design and will go to construction within the next two years. The Columbia Blvd. ITS project could be implemented within the next two to three years and includes truck prioritization at signals. Together all of the listed projects improve the Columbia Corridor for freight mobility, address safety and support bike and pedestrian mobility.

(E84) BARBUR-99W CORRIDOR SAFETY & ACCESS TO TRANSIT

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

No risks are currently identified on the project information sheet.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Weekly passengers boarding in the corridor are currently at 35,000 per week, and are projected to grow including the potential addition of high capacity transit in the future. Specific access improvements such as sidewalk infill and enhanced crossings will have an immediate access and safety impact for all pedestrians including transit riders in these areas, and moreover will benefit the adjacent communities and enhance local livability by increasing local access to jobs, retail, shopping, and walking for short trips to meet daily needs, reducing vehicular demand on the corridor. These projects will also make it easier for the local population to access transit in order to reach employment areas in the corridor and throughout the Portland metropolitan region.

In addition to better serving existing active transportation and transit users in the corridor, these improvements will attract more transit riders by making the connections to transit safer and more convenient as the corridor sees increased transit service, ridership, and supporting development patterns in the future.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

This project is directly focused on safety. The request for improved access to transit via sidewalk infill and enhanced crossings improves safety of the most vulnerable roadway users, pedestrians, and reduces potential conflicts by clearly delineating and physically separating pedestrians from other roadway users.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Improving access to transit and transit operational speed and reliability will increase transit ridership, reducing personal vehicular demand on the roadways, which in turn will help to preserve and make efficient use of roadway capacity for freight mobility.

(E85) CORNELL-EVERGREEN-229TH CORRIDOR SAFETY & ACCESS TO TRANSIT

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

No risks are currently identified on the project information sheet.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Weekly passengers boarding in the corridor are currently at 2,500 per week, and are projected to grow with increased bus service in the future as illustrated through TriMet's recent Westside Service Enhancement Plan (SEP). Specific access improvements such as improving bus stops, constructing landing pads, and enhancing crossings will have an immediate access and safety impact for all pedestrians including transit riders in these areas, and moreover will benefit the adjacent communities and enhance local livability by increasing local access to jobs, retail, shopping, and walking for short trips to meet daily needs, reducing vehicular demand on the corridor. These projects will also make it easier for the local population to access transit in order to reach employment areas in the corridor and throughout the Portland metropolitan region.

In addition to better serving existing active transportation and transit users in the corridor, these improvements will attract more transit riders by making the connections to transit safer and more convenient as the corridor sees increased transit service, ridership, and supporting development patterns in the future.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

This project is directly focused on safety. The request for improved access to transit via sidewalk infill and enhanced crossings improves safety of the most vulnerable roadway users, pedestrians, and reduces potential conflicts by clearly delineating and physically separating pedestrians from other roadway users.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Improving access to transit and transit operational speed and reliability will increase transit ridership, reducing personal vehicular demand on the roadways, which in turn will help to preserve and make efficient use of roadway capacity for freight mobility.

(E86) HIGHWAY 8 CORRIDOR SAFETY & ACCESS TO TRANSIT

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

No risks are currently identified on the project information sheet.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Weekly passengers boarding in the corridor are currently at 10,000 per week, and are projected to grow with increased bus service and the potential addition of high capacity transit in the future as illustrated through TriMet's Westside Service Enhancement Plan (SEP). Specific access improvements such as improving bus stops, constructing sidewalks, and enhancing crossings will have an immediate impact at the bus stop area for transit riders, but will also benefit the adjacent communities and enhance local livability by increasing local access to jobs, retail, shopping. These projects will also make it easier for the local population to access transit in order to reach employment areas throughout the Portland metropolitan region.

In addition to better serving existing active transportation and transit users in the corridor, these improvements will attract more transit riders by making the connections to transit safer and more convenient as the corridor sees increased transit service, ridership, and supporting development patterns in the future.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

This project is directly focused on safety. The request for improved access to transit via sidewalk infill and enhanced crossings improves safety of the most vulnerable roadway users, pedestrians, and reduces potential conflicts by clearly delineating and physically separating pedestrians from other roadway users.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Improving access to transit and transit operational speed and reliability will increase transit ridership, reducing personal vehicular demand on the roadways, which in turn will help to preserve and make efficient use of roadway capacity for freight mobility.

(E87) POWELL-DIVISION CORRIDOR SAFETY & ACCESS TO TRANSIT

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

No risks are currently identified on the project information sheet.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

Weekly passengers boarding in the corridor are currently at 71,000 per week, and are projected to grow including the potential addition of high capacity transit in the future. Specific access improvements such as sidewalk infill and enhanced crossings will have an immediate access and safety impact for all pedestrians including transit riders in these areas, and moreover will benefit the adjacent communities and enhance local livability by increasing local access to jobs, retail, shopping, and walking for short trips to meet daily needs, reducing vehicular demand on the corridor. These projects will also make it easier for the local population to access transit in order to reach employment areas in the corridor and throughout the Portland metropolitan region.

In addition to better serving existing active transportation and transit users in the corridor, these improvements will attract more transit riders by making the connections to transit safer and more convenient as the corridor sees increased transit service, ridership, and supporting development patterns in the future.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

This project is directly focused on safety. The request for improved access to transit via sidewalk infill and enhanced crossings improves safety of the most vulnerable roadway users, pedestrians, and reduces potential conflicts by clearly delineating and physically separating pedestrians from other roadway users.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

Improving access to transit and transit operational speed and reliability will increase transit ridership, reducing personal vehicular demand on the roadways, which in turn will help to preserve and make efficient use of roadway capacity for freight mobility.

(E94) OR-217: ALLEN-DENNEY SOUTHBOUND SPLIT DIAMOND

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

Risks:

- Work in floodplain requires a No Net Rise Certification or floodplain mitigation.
- Impacts to natural resource buffer areas will require a Service Provider Letter and mitigation in the form of restoration, weed removal, and plantings may be required.
- May be difficult to locate water quality facilities given constraints caused by wetlands, the 100-year floodplain, and the high groundwater table.

Response: Agreed, the project is mostly within the 100-year floodplain. However, much of the existing paved area would be repurposed, and the project's additional horizontal footprint would be less than that of an entirely separate collector/distributor road with shoulders (such as the existing C/D road between Canyon Road and Beaverton-Hillsdale Highway). In the middle segment of the project, the existing auxiliary lane would be moved west just far enough to accommodate a traffic barrier and the required shy distance. The northern and southern segments of the project would be elevated and have lesser impacts on the floodplain. ODOT and Washington County have decades of experience building transportation facilities in the wet lowlands of the Tualatin Valley, and will work to secure the necessary permits and certifications, and to determine and implement mitigation and stormwater treatment strategies.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

- In 2011, Highway 217 had an average annual daily traffic of 116,100 between Allen Boulevard and Denney Road. Southbound traffic is estimated at half that amount, or roughly 58,000 vehicles per day. Using an average vehicle occupancy rate of 1.7 (source: National Household Travel Survey, 2009), that amounts to approximately 99,000 people passing through the project location daily. All southbound vehicles in this segment, including through traffic, are affected by the merge/weave conflict here, most notably when a crash occurs.
- This portion of Highway 217 is one of the most congested roadway segments in all of Washington County. PM peak demand/capacity ratio is above 1.0, and PM peak hour travel speeds are below 60% of free flow speed. This project is expected to reduce congestion and delay for all southbound travelers of Highway 217 from Walker Road to Denney Road. Average PM peak-period travel times are estimated to improve (drop) by five to eight minutes from Walker Road to Greenburg Road. Average PM peak travel speeds are estimated to increase from 30 to 48 miles per hour.
- Highway 217 provides access to the Beaverton Regional Center as well as to high tech employment areas further west in Washington County. It is a key regional connection to Washington County from points south and southeast, including Tigard, Tualatin, Wilsonville, Lake Oswego and Clackamas County. Southbound traffic through the project area is particularly heavy in the evening when Sunset Corridor / Silicon Forest workers return home to points south and southeast.
- This project is a first-tier priority interchange project in the Highway 217 Corridor Transportation Plan, adopted by Metro Council in 2006 (Resolution No. 06-3658.) Only one other interchange project was in the first tier list – the more expensive Beaverton-Hillsdale/Allen ramp braids. Current funding realities have precluded the implementation of the adopted six-lane profile for Highway 217, so pursuing less costly interchange improvements is critical.
- Safety and capacity improvements to Highway 217 can reduce cut-through trips on city and county arterials, and reduce the need to explore new or expanded arterial projects further west.

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

- Safety is the key issue being addressed with this project. The southbound onramp from Allen Boulevard is approximately 500 feet from the southbound offramp to Denney Road. The existing auxiliary lane in this space is host to merge/weave conflicts between motorists entering and exiting the freeway. The collector/distributor road would eliminate this conflict point.

- In the five-year period between 2004 and 2008, 154 crashes were recorded southbound on OR 217 between Allen Boulevard and Denney Road. This makes it one of the highest crash frequency segments on Highway 217. The segment is also has a Category 4 rating (5 is the worst) on ODOT's Safety Priority Index System (SPIS, 2009-2011). It is estimated that the proposed improvement has the potential to prevent 13 crashes per year on this section of highway.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

- Southbound Highway 217 provides a critical connection for west side freight bound for points south via I-5. The forthcoming Westside Freight & Logistics Study final report (led by the Port of Portland and Portland Business Alliance) finds that much of Washington County's high value freight is shipped to major air hubs in California (SFO and LAX) for consolidation and shipping to global markets. Southbound Highway 217 is a major bottleneck on these trips.
- The Allen/Denney interchanges are a gateway to Beaverton's industrial areas, with hundreds of jobs and dozens of businesses focused along Allen Boulevard, 107th Avenue, Western Avenue and Arctic Drive and to the east, and 110th/111th Avenues to the west. These areas are critical to Beaverton's economic development strategy, and two enterprise zones were established here in 2012 to encourage investment. Improving the operation and safety of the Allen/Denney interchanges is critical for goods movement and employee commuting to and from this area.

(E95) US-26: CEDAR HILLS BOULEVARD INTERCHANGE AREA IMPROVEMENTS

HOW DOES YOUR JURISDICTION INTEND TO ADDRESS TO THE PROJECT RISKS IDENTIFIED ON THE PROJECT INFORMATION SHEETS?

Risks:

- Horizontal shift in roadway alignment towards Forest Hills Park or any right-of-way acquisitions from the park will require a 4(f) impact analysis.

Response: Roughly 50 feet of right-of-way exists behind the retaining wall on the east side of Cedar Hills Boulevard, and a similar amount of right-of-way exists between the south edge of pavement on Butner Road and the Forest Hills Park property line. The retaining wall on Cedar Hills is assumed to be held constant in this project, with the turn lane to be converted into a shared bike lane / bus stop. While survey confirmation will be needed, there appears to be more than enough right-of-way for the project.

HOW MANY TRANSPORTATION SYSTEM USERS BENEFIT FROM THE REQUESTED IMPROVEMENT? HOW MANY EXISTING USERS WILL BENEFIT FROM THE IMPROVEMENT AND/OR HOW MANY ADDITIONAL USERS WOULD THE IMPROVEMENT ATTRACT?

- Approximately 20,000 vehicles (or roughly 34,000 people) use Cedar Hills Boulevard through the interchange area each weekday. Over 4,000 vehicles per day use the eastbound off-ramp, and over 9,000 use the eastbound on-ramp.
- The Sunset Transit Center Station Community on the north side of the interchange is zoned for some of the highest residential densities in Washington County and includes a proposed 63 acre mixed-use development (Peterkort Master Plan) that could result in 1,900 new residential units and up to 10 million square feet of office/retail space.
- Cedar Hills Boulevard underneath Sunset Highway was revealed to be one of the top 30 gaps in the arterial/collector bicycle/pedestrian system in Washington County, out of hundreds of segments studied in the US Department of Energy-funded Washington County Bicycle and Pedestrian Improvement Prioritization Project in 2012. Criteria for prioritizing segments included safety, land use density, connectivity and social equity. This project would fill the sidewalk and bike lane gaps.
- The project would implement the recommendations of several third party studies, including a Portland State University bikeway design project, and the Bicycle Transportation Alliance's recommendation to improve Highway 26 crossings in Washington County (Building Our Future: A blue Print for World-Class Bicycling, 2013)

HOW DOES YOUR PROJECT REQUEST ADDRESS SAFETY?

- ODOT crash data from 2008 to 2011 showed 34 crashes at the eastbound offramp intersection with Cedar Hills Blvd. (a four-legged unsignalized intersection). Approximately 70 percent of these crashes involved turning movements and a failure to yield. The proposed traffic signal would address the need for better traffic control at the eastbound off-ramp.
- The lack of sidewalks and bicycle lanes on the east side of Cedar Hills from Butner to north of the interchange, make it very unsafe for people traveling on foot or by bike. Not only do they have no sidewalk or bike lane in many places, but they must interact with high speed traffic, cross an onramp and pass beneath a dimly-lit overpass. This project would fill the sidewalk and bike lane gaps and be designed to maximize safety for all modes.
- Emergency vehicle access is also an issue, especially if US 26 eastbound is gridlocked and ambulances headed for St. Vincent Medical Center on Barnes Road exit the highway at Cedar Hills and encounter the typical delay at the unsignalized offramp. This project would clear the queue at that offramp.

DESCRIBE THE FREIGHT MOBILITY BENEFITS OF YOUR PROJECT, IF ANY.

- The US 26 / Cedar Hills Boulevard interchange is a connecting node between the state freight route on U.S. 26 and a designated Washington County Through-Truck route on Cedar Hills Boulevard.
- Upcoming construction at the Peterkort properties north of US 26 may bring additional truck traffic from US 26 eastbound to Cedar Hills Boulevard northbound – the unsignalized movement described above.