

# *City of Walla Walla*

## **South Walla Walla Connectivity Project**

### **TIGER GRANT APPLICATION**



**FY 2017**

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# ***PROJECT NARRATIVE***

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## **Introduction**

Walla Walla has a strong community identity and is consistently ranked among the top cities in the nation in which to live. Our growth reflects that. Between 2010 to 2014, new single-family home construction rose 670%, and commercial permits rose 300%.

The city, incorporated in 1862, has a population of 34,282, and there are about another 9,142 residing in nearby College Place. A little more than half of Walla Walla County's 60,338 people live in Walla Walla. Walla Walla's median household income is \$41,750, compared to \$64,129 for Washington state and \$55,775 for the nation.

Surrounded by farmlands with full views of the Blue Mountains, Walla Walla is a vibrant community with a small-town atmosphere that is rich with local culture. Located in one of the most agriculturally diverse areas in the nation, it is home to the state's oldest bank, newspaper, and college. Walla Wallans take pride in their community and show strong support for local merchants. Follow this link to see what Walla Walla is all about: <https://vimeo.com/228932365>

The city boasts economic diversity that rivals many larger metropolitan areas. There are award-winning restaurants, two colleges, a university, a state penitentiary, a world-class bronze foundry, a hospital, a Veterans Affairs medical facility, 2,800 acres of grapes, and 118 wineries.

Wine production and tourism have replaced agriculture and incarceration as the linchpins of the local economy. The wine industry contributes an estimated \$300 million to the local economy and accounts for 20% of all jobs.

The City conducts annual citizen satisfaction surveys. Citizens identified shopping opportunities as one of their top three priorities in 2013, 2015 and 2016. These surveys help the City of Walla Walla to carry out its mission, to provide municipal services and programs essential to a desirable community in which to live, work and play, and realize its vision, to create a city that is the best of the best in the Northwest.

In this pursuit, the City has implemented the Baldrige Performance Excellence Framework to continually improve its service to the community. The South Walla Walla Connectivity Project is yet another example of how the City of Walla Walla municipal government strives to serve this generation and generations to come.

## **Project Description**

The South Walla Walla Connectivity Project in Walla Walla, Washington is a partnership between the cities of Walla Walla and College Place, and private development. The project will improve the efficiency, safety, capacity, accessibility, connectivity, and development potential for southwest Walla Walla, southeast College Place, and the south Walla Walla Wine region.

The project proposes to extend Myra Road from its' present termini at Washington State Route 125 (SR-125) south to the recently (2015) renovated Taumarson Road linking the South Walla Walla area with US Highway 12 (US-12).

SR-125/OR-11 connects Oregon to US-12 as it navigates northward through Walla Walla. It is posted at 55 MPH in the rural areas and 30 MPH in the urban section, which starts at the intersection of SR-125 and Plaza Way. The planned connectivity improvements to the SR-125 corridor are within Walla Walla city limits, but the extension would serve both cities and the rural areas of southern Walla Walla County and northern Umatilla County (Oregon).



**Figure 1 – Proposed SR-125 Traffic System Improvements**

Key components of this project include:

- Replacement of the existing traffic signal at the SR-125/Myra Road intersection with a multi-lane highway roundabout;
- Construction of approximately one-half mile of new arterial roadway consisting of two travel lanes, bicycle lanes, sidewalks and a two-way left turn lane;
- Construction of an arterial access roundabout on Myra Road south of the intersection with SR-125;
- Construction of 10' wide multiuse paths between the two roundabouts and sidewalks and bicycle lanes to south of the roundabouts;
- Street lighting;
- Water, stormwater and wastewater facilities;
- Planter strips/low impact development bioinfiltration; and
- Construction of a traffic signal at the intersection of Myra Road and Taumarson Road.

See Exhibit 2, located in Appendix A – Project Options  
<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-A.pdf>

This project was first identified through a multijurisdictional planning effort led by Walla Walla County in the early 2000's and adopted as part of the County's 2008 Comprehensive Plan. The northern section of Myra Road, north of Rose Street, connected Myra Road to US-12 in two phases. The first phase, a partnership project between Walla Walla County, and the cities of Walla Walla and College Place, was completed in 2008. The second phase, which included construction of an overpass on US-12 at Myra Road and three interchange roundabouts, was part of the US-12 improvements completed by the Washington State Department of Transportation (WSDOT) in 2010.

See the 2005 Final Draft Long Term Arterial Plan – Principal and Minor Arterials exhibit located in Appendix C. <https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-C.pdf>.

A third major improvement, completed in 2013, again as a partnership project between the two cities, lowered the intersection of Myra Road and The Dalles Military Road/SE 12<sup>th</sup> Street intersection eight-feet to improve freight mobility, safety and traffic capacity.

The final phase, pending this TIGER funding request, proposes to construct a multilane highway roundabout at the intersection of SR-125 and Myra Road and extend Myra Road south to Taumarson Road (see Figure 1). This final project will complete a decade and a half of investments in the corridor and fully connect the south central Walla Walla Valley to US-12 and in terms of local agricultural exports, the rest of the world.

This project will complete the state and region's fifteen year, multimillion dollar investment to connect south Walla Walla to US-12, removing through, agricultural and freight traffic from downtown city streets and instead connecting it directly to US-12.

Benefits provided by this project are many, from jobs to development, to transportation alternatives, and safety:

- It provides access to over 50 acres of commercially zoned land south of SR-125, for which the City of Walla Walla has a developer committed to investing \$40 million into construction of a Fred Meyer retail\* development on 25 acres of the property.
- The initial private development commitment includes creation of 250+ new jobs, 50 of which being salaried family wage jobs.
- Response times for emergency responders to the area will see a projected 40% improvement, cutting response time by two and a half minutes. A huge deal considering the fact that a fire doubles in size every minute and brain death can occur in 4-6 minutes without CPR.
- It will include planter/bioinfiltration strips with street trees (livability benefit) and facilities for bicyclists and pedestrians both of which are

**Specific Benefits of the Project:**

- ✓ Improves vehicle and freight traffic level of service;
- ✓ Improves emergency response times;
- ✓ Improves safety, connectivity and mobility for all traffic modes;
- ✓ Provides alternate routes for traffic by connecting US-12, SR-125 and Taumarson Road; and
- ✓ Decreases emissions by reducing congestion on SR-125.

severely lacking today and further exacerbate traffic demands due to a lack of alternatives to the automobile.

- It will reduce traffic loading at the most congested intersection in the County, one mile northeast on SR-125 at the Plaza Way intersection.
- It will help remove agricultural traffic from city streets and provide a direct connection to US-12.
- It will improve access to/from the City of College Place's commercially zoned area west of Myra Road, north of SR-125 providing much needed access to US-12 via the SR-125/Myra roundabout (the current access is restricted to right-in/out movements only).
- It responds to citizen demands for greater shopping opportunities, improved economic health, transportation infrastructure, jobs, and cost of living (see Appendix J for 2013, 2015 and 2016 citizen survey data).

<https://wallawalla.gov/images/depts/publicworks/TIGER/Appendix-J.pdf>

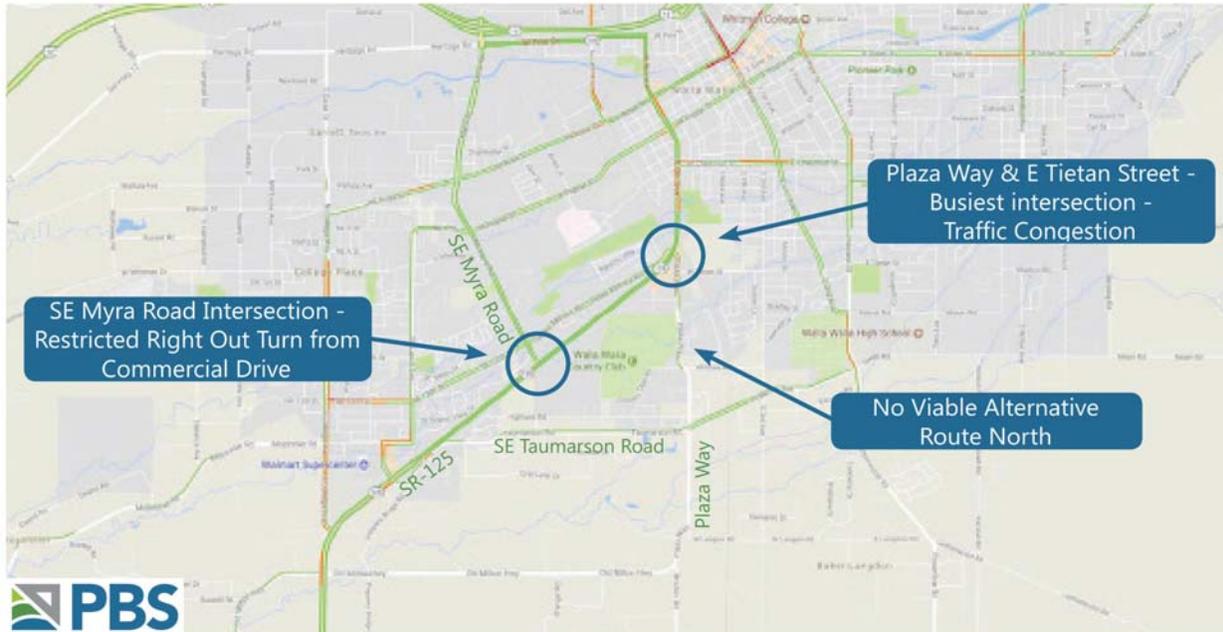
\*Reviewers are strongly encouraged to read the "State of Good Repair" section of this narrative for an explanation of why retail development is so critical for small local agencies in the State of Washington.

Community resources and groups benefiting from this connectivity project include:

- The Jonathan M. Wainwright Memorial VA Medical Center;
- The co-located Washington State Department of Veteran's Affairs Walla Walla Veterans Home;
- Fort Walla Walla Park and Museum;
- Rancho Villa affordable housing development;
- Prospect Point and Blue Ridge Elementary Schools;
- Walla Walla High School;
- Blue Mountain Action Council non-profit low-income resource center;
- Park Plaza Retirement Center;
- Brookdale Assisted Living Center; and
- The Four Seasons R.V. Park to name a few.

The next intersection to the north on SR-125 at Plaza Way is the most congested intersection in Walla Walla County. It is the convergence of SR-125, Plaza Way, The Dalles Military Road, two at-grade railroad crossings, and the arterial intersection of Plaza Way and Tietan Street. This area has inadequate storage available for existing traffic volumes, which results in very long queue lengths, turning conflicts, and idle-time in all directions. This intersection will undergo a major transformation as part of the State of Washington's Connecting Washington transportation package passed in 2015. Under a project administered by WSDOT, the existing SR-125 traffic signal will be replaced with a multilane roundabout in 2020. The South Walla Walla Connectivity project (if constructed) will help alleviate a significant portion of the traffic load at this location and provide an alternative access to the area during construction (see Figure 2 below for an overview of this relationship).

## South Walla Walla Connectivity Project: Current Conditions



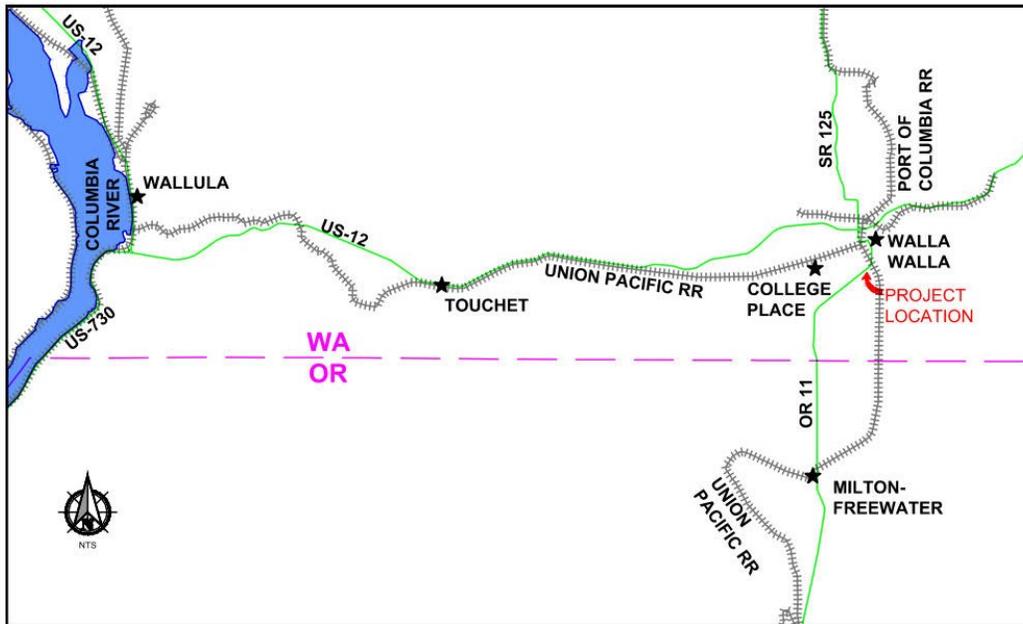
**Figure 2 – SR-125 Current Conditions**

Roundabouts, wonderful as they are at handling traffic and improving safety are extremely challenging and expensive to construct under traffic and can severely impact local economies in the process. By constructing the South Walla Walla Connectivity project in advance of the SR-125/Plaza Way roundabout, the region will have an alternative route to use to mitigate some of the negative effects on commerce associated with road construction. When complete, the resultant effect on SR-125 with both roundabouts will be a calmer, more efficient, safer and friendlier corridor for all users.

Washington State *Highway of Statewide Significance* (HSS) routes include interstate highways and other principal arterials that are key freight transportation corridors, serve marine and land port facilities; high capacity regional transportation systems and connect major communities in the state. SR-125 is a National Highway System (NHS) Highway. It is also a *T2 Freight Route* and a Washington State HSS. *T2 Freight Routes* are categorized as moving between 4 thousand to 10 thousand tons of commodities per year.

**SR-125 & US-12 –  
Moving Goods:**  
Highway  
✓ 4K to 10K tons of freight  
Water  
✓ 5M to 10M tons of freight  
Rail  
✓ 500K to 1M tons of freight  
Port of Walla Walla

As shown on Figure 4, SR-125 is a regional highway, as it connects southeast Washington and northeast Oregon to US-12. Heading north from the proposed project site, SR-125 connects to US-12, which eventually connects to I-84 in Oregon or I-82 in Washington. Toward the south, SR-125 connects to the northern end of Oregon State Highway 11 in Umatilla County, which in turn connects back to I-84. US-12 is a NHS route, and both US-12 and I-82 are HSS and freight mobility routes. Figure 4 shows the regional and interstate connectivity of SR-125.



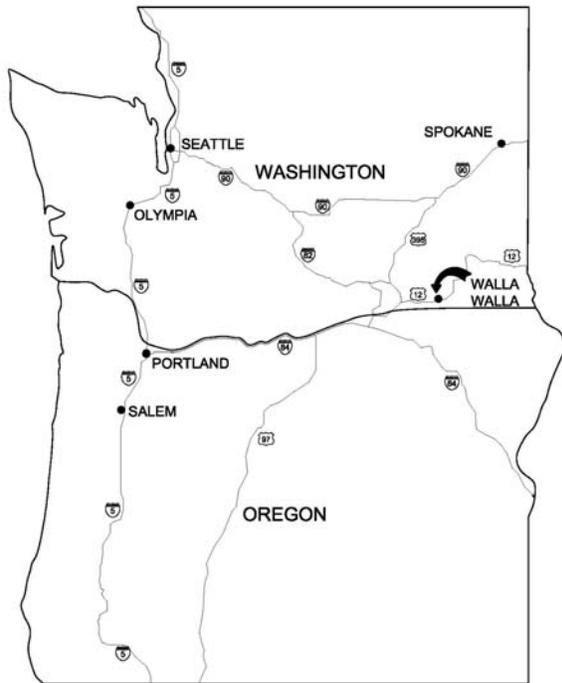
**Figure 3 – Regional Project Area Map**

## **Project Location**

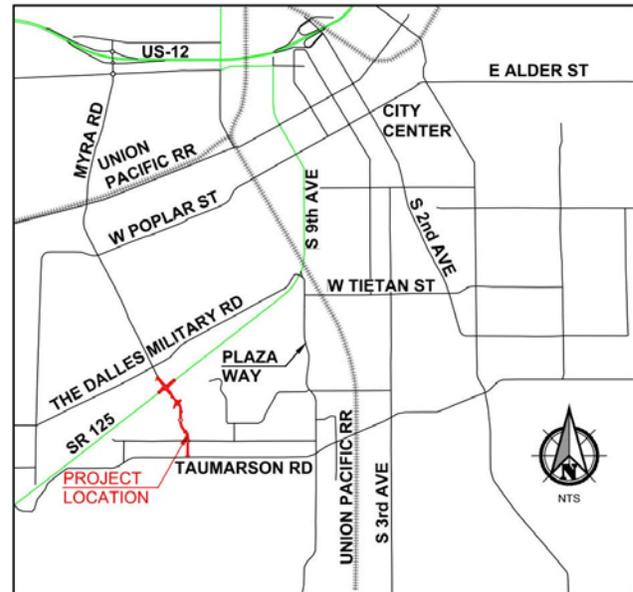
This project is located in the State of Washington, County of Walla Walla, within the city limits of the City of Walla Walla. Walla Walla is part of the Walla Walla WA--OR Urbanized Area, falling under the Walla Walla Valley Metropolitan Planning Organization (WVVMPO), a bi-state Metropolitan Planning Organization in the Walla Walla Valley of southeast Washington/northeast Oregon at the foothills of the Blue Mountains.

The WVVMPO was formally designated on March 27, 2013, by the Governor of Washington and on April 4, 2013, by the Governor of Oregon. A year earlier, the U.S. Census Bureau published the official population numbers for each of the country's urbanized areas (UZAs) and urban clusters. Although technically designated under federal law as an urbanized area (population area greater than 50,000), the area still feels very rural with large expanses of agricultural land and open areas. The area is also over 50 miles from the nearest urban center, the (State of Washington's) tri-cities area – Kennewick, Pasco, Richland.

The area serves multi-state commerce, as the highway system crosses the southern border of Washington State into northern Oregon State as shown above in Figure 4. The project is solely located within the city limits of the City of Walla Walla as shown below on Figure 5. Additional information on freight routes and Washington State's highway system can be found in Appendix C. <https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-C.pdf>



**Figure 4 – Site Location Map**



**Figure 5 – Vicinity Map**

## **Project Parties**

- The City of Walla Walla (lead agency)
- The City of College Place (project partner)
- Powell Development Company (project partner)

Letters of support/commitment:

- Senator Patti Murray (direct to DOT)
- Senator Maria Cantwell
- Congresswoman Cathy McMorris Rogers
- Washington State Senator Maureen Walsh, 16<sup>th</sup> District
- Washington State Representative Terry Nealey, 16<sup>th</sup> District
- Washington State Representative Bill Jenkin, 16<sup>th</sup> District
- Roger Millar, Washington State Secretary of Transportation, Washington State Department of Transportation
- Lauren Powell, Vice President, Powell Development Company
- Andrea Weckmueller-Behringer, Executive Director, Walla Walla Valley Metropolitan Planning Organization
- Michael Rizzitiello, City Administrator, City of College Place
- Dick Fondahn, General Manager, Valley Transit

Note: The letters are contained in Appendix H – *Letters of Support*.

<https://wallawalla.gov/images/depts/publicworks/TIGER/Appendix-H.pdf>

## **Grant Funds, Sources and Uses of All Project Funds**

The project is included in the City's Comprehensive Transportation Plan (CTP/TIP) and accordingly, the State of Washington's Transportation Improvement Program (STIP). The City developed preliminary design and is working to finalize Right-of-Way acquisition for the project.

To date, Walla Walla has incurred approximately \$130,000 in expenses related to conceptual design, right-of-way acquisition, estimates, schedules, and grant writing activities. The \$5.0 million TIGER grant matching funds requested will only be used for construction, with local funding covering design, permitting and right-of-way.

Without TIGER grant assistance, construction of this critical link will be unattainable for local agencies to undertake on their own. Once constructed, this link will provide access to high-potential commercial property and spur continued economic growth. This will allow for innovative cost-sharing with private development.

*Project Costs:*

<b>Table 1 – Cost Breakdown and Allocations</b>					
<b>Item</b>	<b>Cost</b>	<b>Eligible Match</b>	<b>Non-Federal Funds</b>	<b>TIGER Funds</b>	<b>TIGER Participation</b>
Preliminary Design	\$73,000	No	\$73,000	--	0%
Right-of-Way	\$857,000	No	\$857,000	--	0%
Design Engineering & Permitting (15%)	\$915,283	Yes	\$915,283	--	0%
Construction Engineering & Administration (12%)	\$732,226	Yes	\$732,226	--	0%
General Construction	\$4,219,690	Yes	\$0	\$4,219,690	100%
Contingency (30%)	\$1,265,907	Yes	\$485,597	\$780,310	62%
Utility Construction	\$474,069	Yes	\$474,069	--	0%
Utility Contingency (30%)	\$142,221	Yes	\$142,221	--	0%
<b>TOTAL (all costs)</b>	<b>\$8,679,396</b>	--	<b>\$3,679,396</b>	<b>\$5,000,000</b>	<b>58%</b>
<b>TOTAL (Eligible Only)</b>	<b>\$7,749,396</b>		<b>\$3,679,396</b>	<b>\$5,000,000</b>	<b>65%</b>

Unanticipated project costs have been accounted for. The budget includes 30% contingency, considered appropriate for the preliminary level of design. Please refer to Appendix B – *Detailed Project Budget and Schedule* for additional detail.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-B.pdf>

*Funding Sources:*

<b>Table 2 – Funding Sources</b>	
<b>Funding Source</b>	<b>Dollar Amount</b>
Non-Federal	\$3,679,396
TIGER Grant	\$5,000,000
Other Federal	\$ 0.00
<b>Total</b>	<b>\$8,679,396</b>

*Federal Funds Already Provided:*

There are no other federal funding sources included with the South Walla Walla Connectivity Project. The requested \$5.0M TIGER grant funds are the only federal funds to be used with this project.

**Merit Criteria**

The South Walla Walla Connectivity Project addresses the following TIGER Primary Merit Criteria: Safety, State of Good Repair, Economic Competitiveness, Environmental Sustainability, and Quality of Life. The project also addresses the two TIGER Secondary Merit Criteria: Innovation and Partnership. Each individual Merit Criteria, and how it is met, is discussed below.

**Safety**

Studies have shown that roundabouts are safer than traditional stop sign or signal-controlled intersections. Other studies have shown significant safety improvements at intersections converted from stop sign or signalized to roundabouts. The physical shape of roundabouts eliminate crossing conflicts present at traditional intersections, thus reducing the total number of conflict points and the potential severity of those conflict points. According to a study by the Insurance Institute for Highway Safety (IIHS), roundabouts have been shown to reduce injury crashes by 75 percent at intersections where stop signs or signals were previously used for traffic control. Studies by IIHS and Federal Highway Administration (FHWA) show roundabouts achieve several benefits such as:

- 37% reduction in overall collisions
- 75% reduction in injury collisions
- 90% reduction in fatality collisions
- 40% reduction in pedestrian collisions

Travel speeds as drivers enter a roundabout are typically between 15 MPH and 20 MPH. This results in collisions that are minor and cause few injuries since they occur at such low speeds. Roads entering a roundabout are gently curved to direct drivers into the intersection and help them travel clockwise around the roundabout. The curved roads and one-way traffic design at the Myra Road roundabouts will eliminate potential head-on and T-bone collisions possible at signalized intersections.

Collision data for the existing SR-125/Myra Road (signalized) intersection can be found in Appendix F – WSDOT Crash Analysis Report.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-F.pdf>

Safety analysis of the SR-125/Myra Road Roundabout vs. an upgraded traffic signal can be found on the Traffic Analysis SR-125/SE Myra Rd Intersection Layout Options exhibit included in Appendix E. <https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-E.pdf>

Traffic calming design practices are planned for the Myra Road extension. Design speeds used for the planned roundabouts and horizontal curves will assure motorists are much more likely to yield the right-of-way to a pedestrian crossing the roadway. The 10-foot wide sidewalks on the extension will provide for pedestrian and bicycle traffic, reducing the number of cyclists in the roadway and increasing safety for cyclists.

The geometric alignment of Myra Road south of the SR-125 intersection will also contribute to a safer facility by slowing and calming traffic through the dual roundabouts as Myra transitions from a major multilane thoroughfare between two highways to the blended rural/urban setting found along Taumarson Road. Myra Road, south of the second roundabout is proposed to be a three-lane facility consisting of a through lane in each direction, bicycle lanes and a two-way center turn lane, a configuration touted for its safety over two and four-lane sections.

### *State of Good Repair*

This project proposes to replace a multilane traffic signal on SR-125 at SE Myra Road with a multilane roundabout. Multiple studies have shown roundabouts to be safer and more efficient at traffic control than traffic signals. This is also why WSDOT's standard for at-grade intersections is a roundabout.

Highway roundabouts are the optimum (at-grade) choice for mobility, safety and livability, and typically have a longer service life than an upgraded "equivalent" traffic signal at the same location (see WSDOT's traffic signal vs. roundabout comparison for the SR-125/Plaza Way intersection improvements in Appendix E).

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-E.pdf>. Similarly, the SR-125/Plaza Way intersection located approximately one mile northeast of the proposed SR-125/Myra Road roundabout was similarly determined to be the "optimum" choice for that location. So why is that important in the context of keeping a facility in a state of good repair? Simple, because a roundabout provides a longer service life than a traffic signal, exceeding the projected future traffic demands, further delaying future upgrades. Additionally, building roundabouts with Portland cement concrete pavement assures longer pavement life. Roundabouts also have lower operational costs than traffic signals all of which translate into lower life cycle costs. Longer life, lower maintenance and operational costs – build the most efficient and cost effective option now and avoid future replacement costs (more lanes, bigger traffic signals, etc.). When suitable for a location, this reduces the future burdens on federal, state and local agency resources.

The most important aspect of any asset management program is having the resources to maintain the asset. This, unlike many other transportation system improvements is where this project

really shines and provides enormous benefits. Private development’s \$40 million commitment to bring retail development to address citizen demand (see Appendix J for 2013, 2015 and 2016 citizen survey data) <https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-J.pdf> will be an enormous boost to the local economy. That investment will not only bring jobs, but it will also help keep sales tax dollars local, reducing the estimated \$101 million in retail sales lost to the tri-cities area (Kennewick, Pasco, Richland) every year (see Appendix I - Walla Walla County - 2016 Taxable Retail Sales - Capture or Loss report) <https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-I.pdf>. The project will also reduce the number of 100-mile round trips made to the tri-cities, reduce traffic burden in those cities, the impacts on that infrastructure, and the consumption of productivity and resources spent making the trip.

Local agencies in the state of Washington are highly dependent upon sales tax as a revenue source to support local government and streets. Over half (53% in 2016 and 55% in 2015 and 2014) of the City of Walla Walla’s state gas tax allocation goes towards paying street lighting and traffic signal electricity bills. Property tax increases in the State of Washington are statutorily limited to one percent (1%) per year. This creates a significant dependence for cities on sales tax, and the private development component of this project will help bring this much-needed revenue back to the Walla Walla Valley. In addition to the one-time sales tax from construction of the \$40 million-dollar private investment, the initial annual sales tax receipts for the Fred Meyer retail development are estimated to be approximately \$3.0 million per year. The City of Walla Walla’s portion would be nearly \$350,000 per year.

<b>Table 3 – Breakdown of Sales Tax and Corresponding Annual Revenue</b>		
<b>Agency</b>	<b>Percentage</b>	<b>Annual Revenue</b>
State	6.50%	\$2,190,000
City	1.04%	\$350,000
Transportation Benefit District	0.20%	\$70,000
County	0.56%	\$190,000
Valley Transit	0.60%	\$200,000
<b>TOTAL</b>	<b>8.90%</b>	<b>\$3,000,000</b>

These are critical funds that will go towards supporting operation and maintenance for the State, the County, Valley Transit and the City. In Walla Walla’s case, when combined with the city’s new pavement management program, the plan and the resources are combined to keep good roads in good condition.

Upon completion, WSDOT will share operation and maintenance responsibilities for the SR-125 Corridor Connectivity Project – primarily the SR-125/Myra Road intersection roundabout. The City of Walla Walla will assume operation and maintenance responsibilities for Myra Road. The estimated costs associated with maintenance and operation of the project are: \$2,000/year per roundabout (two each) and \$5,000/year for illumination, totaling \$9,000/year. Pavement preservation is discussed at the end of this narrative under the “Cost Share” section.

### Economic Competitiveness

As noted previously, this project proposes to improve the efficiency, safety, capacity, accessibility, connectivity, and development potential for southwest Walla Walla, southeast College Place, and the south Walla Walla wine region. The private development commitment from Powell Development will add over 250 new jobs, 50 being salaried family wage jobs and will address one of the citizen's top priorities noted in the 2013, 2015 and 2016 citizen surveys – local shopping options (see Appendix J for 2013, 2015 and 2016 citizen survey data).

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-J.pdf>

There are four principal goals for this project:

- 1) To improve access and connectivity for the south Walla Walla area to US-12 and SR-125/OR-11 and all the ancillary connected locations, services and facilities they serve;
- 2) To provide access to the 50 commercially zoned acres directly served by the project so it can be developed;
- 3) Job creation beyond construction; and
- 4) To provide local shopping opportunities and reduce sales tax leakage and trips to the tri-cities.

At present, motorist must travel one mile east or west on SR-125 from Myra Road to connect to the south Walla Walla area and even then, it is a circuitous route from there. Traveling west from Myra on SR125, motorist have to travel approximately 2.2 miles to get to the point of proposed (future) connection of Myra Road and Taumarson Road. Traveling east from Myra on SR-125 requires motorist to access the most congested intersection in the County, the SR-125/Plaza Way intersection. From there, motorists have to travel almost two more miles to get to the planned (future) Myra Road connection with Taumarson Road. With the Myra Road extension, a direct (half-mile) route will be created connecting to SR-125/OR-11 and ultimately US-12.

As for bicycle and pedestrian access, there are no connections from Myra Road at present, which is unfortunate since both Myra Road and Taumarson Road have wide multiuse pathways and bicycle lanes (Taumarson) that connect to community resources such as Fort Walla Walla Park, Fort Walla Walla Museum, Walla Walla High School, the State and Federal Veterans Affairs Facilities. This project will complete a critical missing link, resulting in nearly six-miles of continuous and safe multi-modal access between the two cities and the adjacent county areas.

Farm to market truck traffic from the south and southwest primarily utilize Plaza Way to SR-125 and US-12. The Myra south extension provides direct connection to US-12 resolving the current vulnerabilities of Plaza Way. Without these project improvements, the most significant congestion in the region (SR-125/Plaza Way) remains, in terms of network efficiency, mobility, and economic growth.

The Myra extension will help alleviate congestion at the SR-125/Plaza Way intersection and open up approximately 50 acres of land for future development by connecting the Taumarson/Prospect/Reser Road east-west arterial located along the southern edge of Walla Walla all the way to US-12.

Transportation system improvements will include facilities for bicyclists and pedestrians, both of which are severely lacking today, further exacerbating traffic demands due to the lack of

alternatives to the automobile. If successful, this project will address not only the capacity, safety, accessibility, and congestion problems that currently exist, but also the multimodal transportation connectivity needs voiced by Walla Walla Valley residents over the past year through the Blue Mountain Region Trails Initiative (facilitated through a USFS in-kind grant) and the City's 2018 Comprehensive Plan Update.

At present, pedestrian and bicycle accessibility is severely hindered by this stretch of SR-125 and will be fully resolved with the proposed project as it includes sidewalks, bicycle lanes and a multiuse pathway to connect the existing facilities on Myra and Taumarson Roads.

Private development's \$40 million commitment to bring local retail development to address citizen demand (see Appendix J for 2013, 2015 and 2016 citizen survey data) <https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-J.pdf> includes a commitment to assist in funding water and sewer utilities for the project, a \$475,000 project expense. Their investment will be an enormous boost to the local economy and help keep local sales tax dollars local and reduce the estimated \$101 million in retail sales lost to the tri-cities area (Kennewick, Pasco, Richland) every year (see Appendix I - Walla Walla County - 2016 Taxable Retail Sales - Capture or Loss report)

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-I.pdf>

Reducing the number of 100 plus-mile round trips made to the tri-cities is also a goal. A reduction in miles traveled will have a direct reduction in total accidents, productivity time loss and the use of resources. At the estimated 5,000 trips per week, that is 26 million miles of travel each year. Walla Walla County has an average fatality rate of 1.39/100M VMT miles traveled and a severe crash rate of 3.58/100M VMT. Eliminating these trips equates to the possibility of preventing 9 fatalities and 22 severe crashes over a 20-year period.

Lastly, with almost 20% of the population at or below the statewide poverty level, saving trips for retail shopping means more dollars in the pockets of our most vulnerable populations.

Continued growth in the south Walla Walla area has also put a strain on emergency services. So much so that the city had identified the need for an additional fire station/satellite police station in the area at an estimated cost of \$3.0 million. The Myra extension will virtually eliminate this need by cutting response times by 40% (2.5 minutes). With the Myra extension to Taumarson, Fire Station #1, located just east of Myra Road will have far more direct access, thus greatly improving response times for fire and ambulance services. Similarly, Walla Walla County Sheriff Deputies and City of Walla Walla Police officers will have greatly improved access to the area enabling them to avoid the congested Ninth Avenue area.

### *Environmental Sustainability*

The city is committed to greenhouse gas reduction and building complete streets as evidenced by the goals stated in the City's 2008 Comprehensive Plan:

- Walla Walla will seek unity through strong linkages between the City and County, Region and beyond to collaborate regionally on transportation and communications including the expansion of destinations, connections and modes.

- Walla Walla will seek unity through strong linkages between the City and County, Region and beyond to incorporate urban design to concentrate development and improve transportation and commuting choices.
- Streets should incorporate facilities for non-motorized transportation.
- Accessibility by pedestrians, cyclists and automobiles should be considered in each commercial center.

2012 Greenhouse Gas Reduction policy:

- Reduce the impacts of transportation on air and water quality, and climate change.
- Protect and seek to enhance the environment and public health and safety when providing services and facilities.
- Provide safe and convenient travel areas for pedestrians and bicyclists pursuant to goals of the Walla Walla Regional Bicycle & Pedestrian Plan.

2017 Complete Streets policy, a policy the City received award recognition from the Transportation Improvement Board of the State of Washington for implementation:

- A community in which all residents and visitors, regardless of their age, ability, or financial resources, can safely and efficiently use the public right-of-way to meet their transportation needs regardless of their preferred mode of travel.
- Plan for, design, construct, operate, and maintain an appropriate and integrated transportation system that will meet the needs of motorists, pedestrians, bicyclists, wheelchair users, transit vehicles and riders, freight haulers, emergency responders, and residents of all ages and abilities.
- Transportation facilities that support the concept of complete streets include, but are not limited to...bicycle accommodations including appropriate signage and markings, and as appropriate, streetscapes that appeal to and promote pedestrian use.

These policies can be found in Appendix K.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-K.pdf>

This project will adhere to these policies by:

### *Reducing the Consumption of Resources*

Although very difficult to quantify because it depends on consumer behavior, a primary goal of this project is to reduce shopping trips to the tri-cities (Kennewick, Pasco, Richland) area of eastern Washington. Data to support this comes from two principal sources:

- 1) The Walla Walla County - 2016 Taxable Retail Sales - Capture or Loss Report (see Appendix I - Walla Walla County - 2016 Taxable Retail Sales - Capture or Loss report); and <https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-I.pdf>
- 2) The statistically valid Walla Walla citizen survey data from 2013, 2015 and 2016 (see Appendix J for 2013, 2015 and 2016 citizen survey data). <https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-J.pdf>

Both of these references strongly support the desire of citizens to shop local and avoid the time and expense of nearly two hours of automotive travel time. Reducing the need/demand for these 100+ mile round trips will provide enormous environmental, financial, productivity and safety benefits in addition to reducing the burden on that infrastructure. Please also refer to the discussion under “Economic Competitiveness” for additional details regarding trip reduction.

### *Connecting Multimodal Facilities*

This project will provide bicycle and pedestrian connectivity between the northern and southern portions of Walla Walla and College Place connecting the existing facilities on Myra Road to the facilities on Taumarson/Prospect/Reser Road. These connections are severely lacking at present, a gap voiced by Walla Walla Valley citizens during the Blue Mountain Regional Trails Planning public outreach conducted over the past year. This connection will provide alternatives to, and reduce dependence on the automobile, addressing a critical gap in the existing transportation network; improving social equity for those that are either unable to drive, choose not to, or cannot afford to drive, but need access to other portions of the cities for employment, shopping, health care, social services, etc.

The local transit authority, Valley Transit, also supports this connectivity project as noted in the General Manager's letter of support where he notes that, "the City has an underdeveloped street network to support the growing population in this area." He also goes on to point out that, "Due to limited access points, our transit vehicles must travel a circuitous route to reach passengers. This adds time and miles to our service, which causes Valley Transit extra expense and contributes to making public transportation less time competitive to a single occupant vehicle trip." This project's connectivity improvements will also benefit the transit system users as well by creating a more efficient transportation network supportive of public transit.

### *Use of Roundabouts vs. Traffic Signals*

With the exception of the connection at Taumarson Road, this project proposes to use roundabouts as the principal traffic control system. The existing traffic signal at SR-125 and Myra Road is proposed to be replaced with a modern multilane highway roundabout designed to facilitate the movement of goods and people. Not only are roundabouts safer than traditional signal-controlled intersections, they also have greater environmental benefits. Compared with signalized intersections, roundabouts move traffic through an intersection more quickly and promote a continuous flow of traffic, often reducing vehicle delays by up to 89 percent and the number and duration of stops by 56 percent according to the Insurance Institute for Highway Safety (IIHS).

The Federal Highway Administration's Technical Summary on Roundabouts (<https://safety.fhwa.dot.gov/intersection/innovative/roundabouts/fhwas10006/fhwas10006.pdf>) describes the benefits of roundabouts as they reduce noise, air pollution, and fuel consumption significantly by reducing the number of acceleration/deceleration cycles and the time spent idling. A study by the IIHS showed that roundabouts can reduce fuel consumption by approximately 30 percent, carbon monoxide emissions by 29 percent, and carbon dioxide emissions by 37 percent. Roundabouts also require less energy usage than traditional traffic signals and the area within the roundabout may be planted with vegetation which will allow for stormwater infiltration thus reducing the potential contaminants within the stormwater from reaching creeks and rivers.

### *Providing a More Direct Route to US-12 and SR-125*

Congestion at the SR-125/Plaza Way intersection stems from a lack of alternative connections, transportation options and inadequate storage capacity for the volume of traffic flowing through this corridor resulting in long queue lengths and idle time. Improvements are scheduled to be

made at this location by WSDOT in 2020. However, the South Walla Walla Connectivity Project provides a far more direct route to US-12 and SR-125 for much of the area south of SR-125 and avoids the congestion on Plaza Way, reducing traffic demands at that location. Benefits of trip distance reductions are discussed in the prior “Economic Competitiveness” section above.

### *Effectively Managing Stormwater Runoff*

Stormwater runoff for this project will be accounted for and designed to avoid negative impacts to surface and groundwater in accordance with the Stormwater Management Manual for Eastern Washington.

The City strives to incorporate stormwater management within the built environment through the application of Low Impact Development (LID) Best Management Practices (BMPs). This is accomplished by integrating bioinfiltration areas into roadside planter strips located between curbs and



sidewalk and other available landscape areas. Subsurface infiltration galleries will be used to retain higher flows allowing runoff events to naturally infiltrate for groundwater recharge. This approach avoids large concentrated flows to surface waters, which often contain high levels of pollutants and minimizes the negative effects of urbanization on the environment.

### *Quality of Life*

As noted under the Environmental Sustainability section, this project will address a critical gap in the area’s bicycle and pedestrian connectivity. Current facilities connecting the southern areas of Walla Walla, College Place and adjacent areas of Walla Walla County to the central business districts of both cities and the county’s social and governmental support facilities are severely lacking. This project, as its title states, will provide multimodal connectivity to reduce dependence on the automobile and address social equity for those that are either unable, choose not to, or cannot afford to drive, but need access to other portions of the cities and county for employment, shopping, health care, social services, etc.

Perfectly located along the border of Walla Walla and College Place, Myra Road provides ideal north-south connectivity for both cities. Bicycle lanes and multimodal pathways included with this project will connect with existing non-motorized facilities along Myra Road (north of SR-125), and the Taumarsen /Prospect/Reser Road corridor. Those corridors have excellent bicycle and pedestrian facilities consisting of sidewalks, multiuse paths and bicycle lanes extending from

the southwestern edge of College Place to the southeastern edge of Walla Walla. The Myra Road connection will enable access to the centers of both Cities, County support facilities, Fort Walla Walla Park, Fort Walla Walla Museum, the State and Federal Veterans Affairs Facilities (located adjacent to Fort Walla Walla Park), Blue Mountain Action Center, Walla Walla High School (located on Reser Road), and highly popular recreational cycling routes in the rural area south of town.

Landscape strips with integrated Low Impact Development (LID) stormwater management elements will further enhance walkability and livability, providing separation between motorists and users of sidewalks and/or multiuse pathways. Roundabouts and the geometric roadway alignment will contribute to livability as well by slowing, calming, and safely and efficiently conveying traffic as Myra transitions from a major multilane thoroughfare between two highways to the blended rural/urban setting along Taumarson Road.



Although not a non-motorized enhancement, this project provides an alternate route for agricultural freight to access US-12 and SR-125 otherwise seen on city streets. This benefits the quality of life for residents and businesses by not having to contend with truck traffic through town.

### *Innovation*

Merriam-Webster defines innovation as, “the introduction of something new; a new idea, method, or device.” To claim that this project has some new idea, method or device would be false. Though not in the same vein as this traditional definition of innovation, this project’s innovation comes from determination and dedication to deliver on the City’s Mission to, “provide municipal services and programs essential to a desirable community in which to live, work and play;” and achieve the City’s Vision to be, “The best of the best of the NorthWest.”

The innovation here is a compilation of elements, from the two Cities, County and Port’s yearly attendance at the International Council of Shopping Centers (ICSC) to recruit retailers to the area; to responding to citizen demand for local shopping options, job growth and economic development; to facilitating development agreements between prospective developers and property owners; to improving transportation safety, choices and capacity by replacing traffic signals with roundabouts and adding sidewalks and bicycle lanes. It all stems from what locals refer to as, “the Walla Walla way.” So what is the Walla Walla way? Well, it’s certainly not new, it’s actually very old and it is simply the way the Walla Walla Valley operates – in partnership to accomplish great things for the citizens of the Walla Walla Valley.

Specific elements of innovation for this project center around three primary items:

- 1) Long-term transportation planning and investment in the corridor (see the “Economic Competitiveness” section above for additional details on these investments);
- 2) The recruitment and commitment of a private developer and major retailer targeted to address citizen demands; and
- 3) The facilitation of property negotiations between local landowners and the developer.

Developer/retail recruitment has been a top priority for city leaders for years. This priority is driven not only by citizens, but also by the critical need for sales tax revenue to support local government and infrastructure. Walla Walla depends on sales tax for approximately one sixth of its General Fund revenue. Funding used to support Police, Fire, Ambulance, Library, Parks, Administration, and Transportation (roads, bridges, traffic signals, street lighting, sidewalks, etc.).

The other innovative effort here is the long-term facilitation of the purchase and sale agreements between the property owner and the developer. Prior efforts in past years to accomplish this failed, but all parties are now in agreement with commitments and letters of intent in place.

Powell Development Company will provide a portion of the funding to construct underground utilities for the project, estimated at \$475,000. This commitment is part of their estimated \$40 million investment to bring Fred Meyer to the area. Additional development will inevitably follow on the remaining 20 acres, but landing a major retailer after more than a decade of effort is an enormous win for the area.

The City of Walla Walla’s funding contribution to the project will consist of a form of (TBD) local government debt issuance paid back over a period of time by the sales tax generated by this development commitment (less the facility O&M costs). However, pivotal to all of this is the success of this grant request.

### Partnership

The South Walla Walla Connectivity Project in Walla Walla, Washington, is a partnership between the cities of Walla Walla and College Place and the private development company, Powell Development Company. This project and partnership will facilitate over \$48 million in new public and private investments.

The City of Walla Walla will be the lead agency for the project (DUNS #099836058). The City has a long history of successfully delivering Federal Aid projects including projects funded by the various federal transportation funding packages ARRA, MAP-21, FAST Act, etc.

Walla Walla listens to its citizens through multiple Citizens Satisfaction Surveys. The City is working to provide the jobs and local shopping options consistently requested by its citizens. Support for the project is broad including citizen, State and Federal congressional delegates, Private Development, the Walla Walla Valley MPO, and WSDOT to name a few. Senator, Patty Murray, who envisioned this type of project for TIGER grant funding gave her support and stated that she would provide a support letter directly to the Department of Transportation for the project.

## **Project Readiness**

Preliminary design for the South Walla Walla Connectivity project was completed in 2016. This effort identified the horizontal alignment, right-of-way needs and traffic/lane configurations and controls for the project. Following that, in consultation with WSDOT’s local agency right-of-way personnel, the City hired a state certified right-of-way agent, certified appraiser and surveyor to prepare the project funding estimate, appraisals and move forward with acquisitions. Negotiations are currently in process and are expected to be complete by spring, 2018.

## **Technical Feasibility**

Permitting and design are the next steps in the project, but are dependent upon funding sources (i.e. federal funding involvement). The overall goal is to start construction in early 2019 to align with private development’s construction schedule. Risks associated with environmental documentation will be minimized due to its lead-time before construction and the lack of environmentally sensitive resources on the site.

As noted above, preliminary design was completed in 2016 and included geometric design, layout, right-of-way needs and traffic analysis. Analysis of the major intersections on Myra Road from SR-125 to Taumaron Road to include Level of Service, v/c ratio; queueing analysis; auxiliary lane layout; and right-of-way recommendations. Although a new traffic signal was initially considered for the SR-125/Myra intersection (Alternative 1), subsequent discussions with WSDOT and design by the City’s consulting engineer, PBS, resulted in the change to a multilane roundabout (Alternative 2) for improved safety, accessibility, performance and longevity.

See the geometric design exhibits in Appendix A; and The September 26, 2016 Myra Road Extension Traffic Analysis contained in Appendix E.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-A.pdf>

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-E.pdf>

Roundabout capacity for the SR-125/Myra Road intersection is similar to the signalized intersection alternative but the delay, travel distance, travel time, and fuel consumption all outshine the traffic signal option, as shown on the Traffic Analysis SR-125/SE Myra Rd Intersection Layout Options exhibit in Appendix E.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-E.pdf>

**Table 4**  
**2040 Design Hour Level of Service**

<b>SR-125/MYRA ROAD INTERSECTION</b>	<b>2040 Weekday Level of Service</b>		
	<b>PM</b>		
	<i>LOS</i>	<i>Delay (sec)</i>	<i>V/C</i>
Traffic Signal - Alternative 1	C	29.3	0.89
Roundabout – Alternative 2	C	20.3	0.80

## **Project Cost Estimate**

A detailed cost estimate including contingency can be found in Appendix B <https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-B.pdf>. Additional cost and funding information can be found in the prior “Grant Funds, Sources and Uses of All Project Funds” section of this narrative.

## **Project Schedule**

As noted above, right-of-way is expected to be complete in spring 2018. Design beginning in early 2018, with bidding in winter 2018. Construction will ensue in spring 2019 and be completed by fall 2019. This schedule would seek to obligate TIGER funds in 2018 for construction. See Appendix B for the detailed project schedule.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-B.pdf>

## **Required Approvals**

No environmental approvals or permits have been acquired to date.

As the project is located entirely within the city limits of the City of Walla Walla, the City will be the primary local reviewing agency for the Myra extension, through its Development Services Department.

As the local agency liaison to FHWA, WSDOT approvals will be required for right-of-way certification, and environmental processes (NEPA). Intersection improvements and construction sequencing at the SR-125/Myra intersection will also require WSDOT authorization.

## **Public Engagement**

The City of Walla Walla has frequently participated in extensive efforts to engage the public and seek input for local transportation projects and planning efforts. The Myra Road/SR-125/Taumarson Road project has been included in all applicable local and regional transportation plans, and has withstood the scrutiny of this public review. This project proposal is special because the private development opportunities align so well with the transportation needs, creating a rare self-sustaining project (generating sales tax revenue to support the improvements).

### *City of Walla Walla Comprehensive Transportation Plan (CTP/TIP) (2017)*

The CTP showing the Myra Road Extension from SR-125 to Taumarson Road was approved by the City Council following an advertised public hearing. Additionally, the draft CTP and project maps were posted in public facilities for review and comment. Citizens were encouraged to offer written comments for any project needs.

*Walla Walla Valley Metropolitan Planning Organization (WWVMPO) 2040 Regional Transportation Plan (2016)*. WWVMPO conducted numerous public workshops prior to adoption of the 2040 Regional Transportation Plan, which includes the Myra Road/SR-125 to Taumarson Road project.

### *City of Walla Walla Bicycle and Pedestrian Plan (2017)*

The project list included in the Bicycle and Pedestrian Plan is updated every two years. The Myra Road bike and pedestrian improvements between SR-125 and Taumarson Road are specifically listed, and would be included as an integral part of this project. This list was developed in cooperation with the City's Bicycle and Pedestrian Citizen Advisory Committee, during several regularly scheduled meetings open to the public. The advisory committee members were very supportive of a project to connect the multimodal enhancements on Myra Road to those on Taumarson Road. Additionally, the plan and project list were approved by the City Council following an advertised public hearing.

### *Blue Mountain Regional Trails Planning (2017)*

In partnership with the WWVMPO, the City of Walla Walla participated in this multi-jurisdictional effort to identify needed bike and pedestrian connections within the entire Walla Walla valley, and surrounding communities. Access to the existing Myra Road trail facilities was listed as a concern, as were bike and pedestrian access in the vicinity of the SR-125/Plaza Way/The Dalles Military Road intersection.

### *2013, 2015, 2016 Citizen Surveys*

In order to better respond to the priorities of the citizens it serves, the City of Walla Walla conducts regular, statistically valid citizen surveys. The feedback received consistently shows that increasing local shopping opportunities is a major citizen priority.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-J.pdf>.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-L.pdf>.

### *Assessment of Project Risks and Mitigation Strategies*

The risks to this project have been analyzed and mitigation strategies formulated. Right-of-way acquisition poses a risk to capital improvement projects. Time and funding resources need to be budgeted accordingly, to account for unforeseen delays. Walla Walla has mitigated this by advancing design far enough to identify the right-of-way needs. Also, by starting the process early in the project life, there is enough time to acquire the property needed and prevent the increase in real estate costs.

Environmental uncertainties can also pose a risk to projects. This can delay the process and lead to missed project milestones. There are no known sensitive areas within the project boundaries and by providing enough lead-time in the project schedule, Walla Walla has mitigated this risk by providing enough time to work through the approval process.

Project funding is another risk common to capital improvement projects. The long-term transportation system plan (Walla Walla MPO) calls for the extension of Myra Road from SR-125 to Taumarson Road. The City has anticipated this project and secured the funding through its budget process to begin design and fund right-of-way acquisition.

Follow-through of private development is always a potential risk, however, Powell Development has signed a letter of intent to purchase property and is moving forward with that acquisition.

Powell also has a commitment from Fred Meyer as well. These two aspects are major achievements toward the success of this project.

## **Benefit Cost Analysis (BCA)**

A benefit-cost analysis (BCA) for the South Walla Walla Connectivity Project was completed with the intention of quantifying net benefits and costs generated by the project. The BCA benefits quantified are safety, mobility, and fuel. The costs include engineering, construction, and operations and maintenance. These are only some of the benefits that this project offers. This project has many societal benefits that are qualitative and are discussed below.

### **Methodology**

The BCA was calculated with the assumption of the project to be fully constructed in 2019 along with a 20-yr lifecycle. Although the roundabouts in the project will have a longer service life, 20 years was selected because it is the typical service life of a roadway. Traffic volumes were collected for PM peak hour turning movement counts in August 2016 to best analyze existing traffic on Myra Road and estimate future design hour volumes. These volumes were then estimated to grow at 0.53% between the model 2014 base year and the 2040 future year. These volumes were then used to calculate monetary benefits for network safety, mobility, and fuel usage. Benefits were then discounted back to the present year value using the required 7% discount rates (per USDOT's – TIGER BCA Guidelines), with 3% added for comparison.

### **Safety**

Safety benefits are the values associated with the reduction of fatalities, injuries, and property damage. These benefits are a comparison between the year 2040 traffic signal alternative 1 and the 2040 roundabout alternative 2 scenario. The existing condition was not chosen because the existing intersection at SR-125/Myra Road is a 3-legged intersection. The roundabout is designed with the extension of Myra Road south to Taumarson Road. This includes the development area adjacent to the extension where the 50+ acre commercially zoned real estate will be developed and included in the traffic analysis. A traffic signal at SR-125 and Myra Road (4-legged intersection) is alternative 1 and the base line. Network safety was calculated using vehicle miles traveled (VMT), collision rates and recommended monetized values (per USDOT's – TIGER BCA Guidelines). Trip distribution from the conceptual development is based on a Flow Bundle Analysis from the Walla Walla Valley Metropolitan Planning Organization's (WWVMPO) transportation model output. The analysis distributes the trips from the Traffic Analysis Zone (TAZ) surrounding the Myra Road extension onto the adjacent street network.

See the Traffic Analysis SR-125/SE Myra Rd Intersection Layout Options exhibit in Appendix E for the 10-year expected injury/fatality analysis.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-E.pdf>

Collision rates were obtained by the 2011 Washington State Collision Data Summary. The recommended monetized value for fatal collisions was referenced from the 2017 Benefit-Cost Analysis Guidance for TIGER and INFRA Applications (TIGER BCA Guidance) and is MAIS Level 6 with a unit value of \$9,600,000. Similarly, injury collisions were extrapolated for MAIS Level 2, Moderate rating and value of \$451,200 and property damage only (PDO) with a value of

\$4,252. The Injury Collision value was obtained from averaging the cost of a PDO, moderate, and not survivable. Those values were \$56,745, \$2,376,922, and \$1,626,758, respectively. The annual results from this analysis are \$1,729,440 at a discount rate of 7%. These results can be seen in Appendix D – Benefit Cost Analysis Data.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-D.pdf>

Table 5 below shows the expected annual crashes for a future traffic signal and future roundabout. Existing average annual crash history was included for reference.

<b>Table 5 – Collision Data/Predictions</b>				
<b>Collision Types</b>	<b>Existing Average Annual Crash History</b>	<b>Expected Annual Crash History Same Period</b>	<b>Predicted Annual Crashes with Traffic Signal (Alt. 1)</b>	<b>Predicted Annual Crashes with Roundabout (Alt. 2)</b>
Fatal and Serious	0	0.4	1.5	0.3
Evident Injury	0.3	-	-	-
Possible Injury	0.5	-	-	-
Property Injury Only	2.7	0.6	3	0.6
<b>Total</b>	<b>3.5</b>	<b>1.0</b>	<b>4</b>	<b>0.9</b>

WSDOT collision data can also be found in Appendix F.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-F.pdf>

### **Mobility**

Mobility is the cost associated with travel time reduction. To calculate the mobility benefits, the 2040 traffic signal (Alternative 1) was compared to the 2040 roundabout (Alternative 2) scenario. The difference between these two is the overall benefit and shown in Appendix D – Benefit Cost Analysis Data.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-D.pdf>. Mobility is calculated using network VMT's and this was based on a combination of WWVMPO and SIDRA analysis. SIDRA analysis was used to generate the roundabout and traffic signal level of service (LOS), Delay (sec), and v/c ratio.

### **Fuel**

Fuel consumption is based off the project VMT and vehicle miles per gallon (MPG). Fuel is calculated as a benefit of the fuel usage saved in the comparison between the two alternatives. Roundabouts are more efficient and mobility increased as shown in the results from the SIDRA analysis for the traffic signal as compared to the roundabout option. Total gallons saved was calculated from the output generated in the analysis from SIDRA. The fuel saved per year was multiplied by the assumed gas price of \$3.00 per gallon and interpolated with a growth rate of 1.25% over the life of the project. See Appendix D – Benefit Cost Analysis Data for results.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-D.pdf>

### **Additional Benefits and Costs not included in the BCA**

This project has a positive benefit for mobility as shown in the appendix mentioned above. This benefit has a more regional benefit, but was not included in this analysis. By providing an alternative route north, the ability to bypass Plaza Way and directly access US-12, alleviates congestion. This was not studied now or quantified. However, a benefit to the region will be realized nonetheless.

Another benefit to the area is the economic impact this project will have in providing access to high-potential commercial property. Already, a developer has plans to build an anchored retail shopping center that is estimated to be above \$40 million dollars.

The addition of bike and pedestrian paths also enhance this region and addresses a major gap within the existing network. This will enable the mobility of its users to access more destinations with an alternative to the automobile.

### **Conclusion**

A BCA analysis was completed for the South Walla Walla Connectivity project using, safety, mobility, and fuel usage savings as the benefits. The results show a NPV of \$1,729,440 with a 7% discounted rate. The project has several benefits that are not quantified, but their benefit to the community should not be ignored.

### **Cost Share**

The partners participating in the project are the Cities of Walla Walla (lead agency) and College Place, along with a private development company, Powell Development. Construction of this critical link will be unattainable for local agencies to undertake on their own. The right-of-way needs, length of the project to link SR-125 to Taumaron Road, the higher design requirements for State Highway systems all add up to more than local jurisdictions can afford. Given Washington's dependence on sales tax to support local government, this creates a financial paradox for local agencies. Rural areas, such as Walla Walla desperately need the sales tax revenue that comes with retail development, but rarely have the infrastructure or resources to land them. Walla Walla has done everything it can to build a strong connection between US-12, SR-125 and the southern areas of the two Cities and County. This is the last and one of the most important pieces as it brings with it not only critical transportation infrastructure, but also jobs, shopping options and revenue to support local government.

As noted in the "State of Good Repair" section of this narrative, local agencies in the state of Washington are highly dependent upon sales tax as a revenue source to support local government and streets. Over half (\$379,382 in 2016) of the City of Walla Walla's state gas tax allocation goes towards paying street lighting and traffic signal electricity bills. Property tax increases in the State of Washington are statutorily limited to one percent (1%) per year, which forces cities to be very reliant on sales tax revenue. The City has a significant contribution to this project with \$3.7 million of local funds for this project. Approximately \$1.0 million for right-of-way acquisition and \$2.7 million for design and construction.

This City has also explored other local agency funding, as well as private development funding. City of College Place recognizes the benefits and contributed \$10,000 to the project. A portion of

the nearly \$0.5 million in utility costs (water and sewer) will also be borne by the private developer. The only other source of potential federal funding for the project is STBG, however the next allocation for the WWVMPO won't be available for spending until 2020 and is typically in the range of \$1.0-1.5 million. The total TIGER grant ask is \$5.0 million. When matched with the total project cost of \$8.7 million, the participation rate is approximately 58% and 67% when preliminary design and right-of-way are excluded from the costs as proposed. Taking into consideration Powell Development's \$40 million investment brings the total project to roughly \$48 million. A return of over 9:1 on the TIGER grant contribution. This doesn't even take into account the remaining 20 acres yet to be developed.

Maintenance and operation of Walla Walla's city streets are of great importance. Walla Walla City Council established the Infrastructure Repair and Replacement Plan (IRRP) program in April 2010. This plan considers the life-cycle costs associated with capital improvement projects and the operation and maintenance of them. This provides a systematic approach to replace the City's three failing critical infrastructure systems: water, sewer, and streets. This program is funded by a six-year stepped utility rate of approximately \$5.0 million per year. In addition to this program, the Street Maintenance Division is responsible for maintaining 149 miles of streets, pothole patching, crack sealing, chip sealing, and small paving projects, to name a few. The City would plan to hot seal this project around 2029 as part of their pavement preservation with an associated 2029 future year cost of approximately \$100,000. This is based on the present cost to hot seal at about \$5.30/square yard of roadway surface multiplied by the estimated project road surface area and a 3% inflation rate per year. As discussed in the "State of Good Repair" the funding needed for this type of maintenance treatment is possible with this unique self-sustaining project.

Information pertaining to the City of Walla Walla's Infrastructure Repair and Replacement Program can be found in Appendix G.

<https://wallawallawa.gov/images/depts/publicworks/TIGER/Appendix-G.pdf>

Should additional information be required for the evaluation of this request, please contact the City's Public Works Director, Ki Bealey via email at [kbealey@wallawallawa.gov](mailto:kbealey@wallawallawa.gov) or by phone at 509-527-4463.