

Project Title Lake Tapps Parkway ITS Expansion
Agency City of Auburn

TCC TECHNICAL APPLICATION
2014
PIERCE COUNTY REGIONAL COUNCIL
REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (TIP)
APPLICATION FORM TO REQUEST INCLUSION OF A PROJECT IN THE FFY 2015-2017 TIP

Supplementary information can be found in the Call for Projects. Incomplete or missing answers will be scored zero. Please respond to all unrelated questions with N/A.

APPLICANT INFORMATION

1. Please select an application type:

Other
(Please answer Questions 1-23 and 55-63)
Potential score of 100

1a. Agency Contact Person

Name: James Webb Address: 25 W Main Street, Auburn 98001
Title: Traffic Engineer Telephone: 253-804-5040
Email: jwebb@auburnwa.gov

2. Improvement Type: Please select ONE primary Improvement Type. Please indicate one Primary Improvement (PI) and any number of Secondary Improvements (SI).

OTHER			
	Transportation System Management		Transportation Demand Management
PI	Intelligent Transportation System		Other – Special
	Study or Planning activity		

PROJECT LOCATION INFORMATION

(Roadway projects without a federal route number or a federal functional class may be ineligible for federal funds.)

3. Project Location: Lake Tapps Parkway/East Valley Highway

From: Lakeland Hills Way To: 62nd Drive SE/Sunmer-Tapps Hwy E

Or, other appropriate locating information: _____

Project Length: 17,250 (feet)

4. Federal Route Number 3117

5. Federal Functional Class: Principal Arterial see link
www.wsdot.wa.gov/Mapsdata/tools/functionalclass

5a. Posted Speed Limit: 35,40,45 mph

5b. Average Daily Traffic Volume: 17,650

Project Title Lake Tapps Parkway ITS Expansion
Agency City of Auburn

PROJECT DESCRIPTION

6. **Funding Request: What is the proposed funding source?** STP X CMAQ _____.

7. **Is this project included in a locally adopted plan or program?**
(This is a threshold requirement to compete in this funding process. Projects not shown in the applicants adopted local TIP or Transportation Element of its Comprehensive Plan are not eligible. Please provide a copy of the necessary documentation).

Yes X No _____

If yes, cite document, page(s) and adoption date: The project is identified in both the City of Auburn Comprehensive Transportation Plan and the City of Auburn Transportation Improvement Program. In the Comprehensive Transportation Plan, the project is identified on page 2-17 as project #18. In the TIP the project is #51 on page 54. The TIP was adopted on June 17, 2013. Updated TIP program will be adopted June 16, 2014.

8. **Brief Project Description - Include a 8 1/2 x 11 detailed vicinity map and a cross-section detail of the project, if applicable (100 words maximum):**

The project funds the design, coordination, permitting, and construction of new ITS infrastructure along Lake Tapps Parkway from 62nd Drive SE/Sumner-Tapps Highway E to East Valley Highway, and along East Valley Highway to Lakeland Hills Way. The proposed ITS infrastructure includes conduit, fiber, cameras, VMS signage, network communication improvements, and weather stations along the route.

Confirm word count (55 words).

9. **Purpose and Need – Please provide a clear and concise narrative describing the project’s existing and proposed conditions. If available, provide pictures, technical data and/or other supporting studies or analysis (400 words maximum):**

During 2011 the City completed the South Auburn ITS project which expanded the City’s existing ITS infrastructure along the East Valley Highway corridor to the existing signal with Lakeland Hills Way. The proposed project would complete the southern portion of the City’s ITS system Master Plan to include the signals along East Valley Highway and Lake Tapps Parkway.

Lake Tapps Parkway is a critical facility for the City of Auburn classified both locally and federally as a principal arterial. The project is located within the Auburn Local Center, and serves both local and regional traffic to/from the Auburn Regional Center to the north, the adjacent Sumner/Pacific MIC, and to the Sumner Town Center to the south and Milton and Edgewood Centers to the west.

Presently the most direct route to/from SR-167 from Lakeland Hills and Lake Tapps is via Lake Tapps Parkway to 8th Street E/Stewart Road. However, this option is severely congested due to the use of stop control at the ramp intersections and two-lane roadway section. In addition, SR-167 itself experiences significant congestion during the peak commute periods. As a result traffic chooses to use E Valley Highway, travelling through Auburn to access SR 167 further to the north. This in-turn creates congestion along the E Valley Highway, A Street SE and C Street SW corridors. The project will help to balance demands between the two corridors, maximizing the use of both existing facilities, to the benefit of both local and regional travelers.

The project will improve traffic flows along the corridor, reducing vehicle delays and increasing travel times as a result of the ability to coordinate adjacent signals. The proposed project is designed to allow expansion of the system to the west along 8th Street E/Stewart Road via interconnection with the City of Sumner, Pierce County and WSDOT to reduce travel times along this corridor in the future.

In addition, the VMS signage will enhance safety along the Lake Tapps Parkway corridor by providing wayfinding information to road users regarding travel conditions along alternate routes such as SR 167, E

Project Title Lake Tapps Parkway ITS Expansion
Agency City of Auburn

Valley Highway and Lakeland Hills Way due to weather or traffic related issues. The weather stations will allow City staff to better manage Lake Tapps Parkway during adverse weather events allowing more appropriate treatments and more timely closures, reducing collisions along the corridor.

Confirm Word count (386 words)

PROJECT TRACKING AND FUNDING

NOTE: Sponsors may request funding for any single phase of the project, but requests for multiple phases is limited to preliminary engineering plus the subsequent phase necessary. For instance, requests for multiple phases are limited to the combination of (1) preliminary engineering and right-of-way or (2) preliminary engineering and construction (no right-of-way and construction requests will be considered).

Required Match: A minimum of 13.5% of local matching funds is required for PSRC’s FHWA funding. The following formula may be used to calculate the projects match:

To calculate the amount of matching funds, divide the federal funds requested by .865 and subtract the federal funds from this amount.

Example: Federal funds requested = \$100,000

$$\begin{aligned} \$100,000 / .865 &= \$115,607 \\ \$115,607 - \$100,000 &= \$15,607 \text{ local match required} \end{aligned}$$

Please note: The combination of the requested PSRC funds plus all other funding must be adequate to fully fund that phase. Requests that do not result in a phase being fully funded cannot be approved into the regional TIP and therefore will be considered ineligible for PSRC funding.

10. Grant Funds Requested

Phase (e.g., Planning Study/Project,, Preliminary Engineering, Right of Way, Construction, Other)	Estimated Obligation Date (year only)	Federal Funds Requested
Design	2015	\$82,950
Construction	2016	\$711,000
		\$
		\$
		\$
		\$793,950

IMPORTANT: Please select 2015, 2016 or 2017 for estimated obligation year. Per PSRC’s adopted project tracking policies, the deadline for obligating funds is June 1 of the selected obligation year. For more information, see:
<http://www.psrc.org/transportation/tip/tracking>

**Project Title Lake Tapps Parkway ITS Expansion
Agency City of Auburn**

11. Total Project Cost (\$1,005,000)

Guidance: To be programmed into the state Transportation Improvement Program, funds for the phase being requested must be secure or reasonably expected to be secure. Unsecured funds will not be considered. Please use the website following link to assist in completing the following table:

www.psrc.org/assets/7911/Definitions_SecuredandUnsecuredFunding.pdf

A	B	C	D	Project Phase			
				E	F	G	H
Fund Source	Secured, reasonably Expected, or Unsecured?	Obligation Date (Yr Only)	\$ Amount by Funding Source	Planning	Prelim. Eng/ Design	Right-of-Way	Construction / Implementation
Local	Secured	2015/2016			\$22,050		\$189,000
(name) Co-op Jurisdiction							
(name) Private Funds							
(source) Grant							
Other							
Other							
Other							
Grant Request	Unsecured	2015/2016			\$82,950		\$711,000
TOTAL					\$105,000		\$900,000

If unable to completely fill out Tables #10-12, please explain why:

11a. Provide additional information on any funds identified in the table above as reasonably expected to be secure. For example, identify the estimated approval date of funds for the project into the 6-year program; if pursuing a limited improvement district, bonding, or other local funding mechanism, when will that occur and what additional steps are required, etc. For more information on the definition of secured, reasonably expected, and unsecured funds, refer to:

<http://www.psrc.org/assets/11214/FinancialConstraintGuidance.pdf>

Local funds for the project are programmed, as identified in the City of Auburn Transportation Improvement Program for the proposed project. Updated Transportation Plan will be adopted by Auburn City Council on June 16th, 2014.

Project Title Lake Tapps Parkway ITS Expansion
Agency City of Auburn

THE FOLLOWING RESPONSES WILL BE SCORED FOR PROJECT PRIORITIZATION.

PROJECT READINESS

12. **Cooperating Jurisdictions and Private Sector Support, if any: Provide names of all jurisdictions and private parties, contributing funds would be applied, and the percentage of total project funds provided. The percentage shall be expressed based on the costs of the requested phases under the current application. Contributing funds for prior phases shall not be considered. Applicants that have been previously awarded grant funding for their project CANNOT use the grantor as a cooperating jurisdiction.**

Letters of Commitment from all cooperating jurisdictions and private sector support must be attached to receive points: Yes No

Cooperating Jurisdiction	Phase	Dollar Amount of Participation	Percentage of Current Application
Total:			

- _____ 5 % or more 3 points
- _____ 3 to 4 % 2 points
- _____ 1 or 2 % 1 point

COMMITTEE SCORE _____
 (Max. score of 3)

Private Sector Support	Phase	Dollar Amount of Participation	Percentage of Current Application
Total:			

- _____ 5 % or more of total project costs 3 points
- _____ 3 to 4 % of total project costs 2 points
- _____ 1 or 2 % of total project costs 1 point

COMMITTEE SCORE _____
 (Max. score of 3)

**Project Title Lake Tapps Parkway ITS Expansion
Agency City of Auburn**

13. Has the jurisdiction secured/obligated state or federal funding for any of the projects below phases or has it completed a phase of the project using local funds only? (Please check all that apply)

Planning 1 point P/E Design 2 point
ROW 2 point Construction 2 point
(ROW is required to receive points)

If any are checked, name project title and Funding Agency ID# _____

Funding Source: Local Funds
Funding Amount(s): _____

Name and completion date of Planning Study: Auburn ITS Master Plan Adopted 12/7/2009

COMMITTEE SCORE _____
(Max. score of 7)

14. Federal Functional Classification: Principal Minor Collector

Principal 3 points
Minor 2 points
Collector 1 point

COMMITTEE SCORE _____
(Max. score of 3)

15. Will this project include additional ADA improvements that are not required by the 2013 City/County Design Standards (LAG Manual)? Example: Construction of a sidewalk that is wider than the minimum requirements.

Yes 2 points
No 0 points
If yes, what are they?

COMMITTEE SCORE _____
(Max. score of 2)

16. Local Agency Over Match Incentive:

More than 30% of total project costs 3 point
21% to 30% of total project costs 2 point
15% to 20% of total project costs 1 point

COMMITTEE SCORE _____
(Max. score of 3)

Project Title Lake Tapps Parkway ITS Expansion
Agency City of Auburn

17. Is the project or phase ready for implementation? (One point per box. Please check all that apply)

Obligate funds in 2015 (receives 2 points)	X	Environmental process complete* (must provide a signed ECS by FHWA or WSDOT H&LP)	
Obligates funds in 2016 (receives 1 point)		Funding requested here completes project or fully implements the project	X
ROW plans approved by WSDOT		Purchase of ROW certified or not required	X

*Note: NEPA will NOT be finalized until the "next" project phase is funded in the STIP.

COMMITTEE SCORE _____
 (Max. score of 6)

Please provide information on your project readiness to proceed:

Design Status (% complete): Choose an item.

Project Phase	Status	Actual or Expected Completion Date
Preliminary Engineering	Not complete	9/30/2015
Environmental Approval	Not complete	2/29/2016
Right-of-Way Certification	N/A	Click here to enter a date.

If construction funds are being requested, please describe any ROW needs for the project, including the number of parcels needed, whether property owners are expected to cooperate (and your agency's experience with condemnation and/or whether it is willing to go to condemnation if needed).

No ROW is needed to complete the proposed project.

17a. Will other secured or reasonably secured funding benefits be missed if the project remains unfunded in 2015, 2016 or 2017?

Yes _____ No X (Include information about other funding benefits.)

Please explain:

COMMITTEE SCORE _____
 (Max. score of 1)

Project Title Lake Tapps Parkway ITS Expansion
Agency City of Auburn

18. Pierce County Regional Growth Centers Hierarchy and Connecting Corridors criteria: Is the project located in (1-3) or serving (4-6) any of the following? (Please check all that apply).

1. Metropolitan Center (scores 1 point)		4. Corridor Supporting one (1) or more Regional Manufacturing/Industrial or Candidate Center (scores 2 point)	X
2. Regional or Candidate Growth Center Manufacturing/Industrial or Candidate Center (scores 2 points)		5. Corridor Supporting one (1) or more Centers (scores 1 point)	
3. Countywide Center or Locally Identified Center (see approved PCRC Map) (scores 1 point)	X	6. Corridor Supporting two (2) or more Centers (scores 1 point)	X

Local city and town centers provide local job, service, cultural, and housing areas for their communities. They serve as focal points where people come together for a variety of activities, including shopping and recreation. These central places must be identified in local comprehensive plans, or should be advancing towards that goal. These areas are to become priority areas for future investments and growth at the local level.

List and describe centers and attach map.

The project is located within the Auburn Local Center. In addition, the project will support access and connectivity with the Auburn Regional Center to the north, the adjacent Sumner/Pacific MIC, and to the Sumner Town Center to the south and Milton and Edgewood Centers to the west.

COMMITTEE SCORE _____
 (Max. score of 8)

19. Is the project on a transit route? (Transit routes that “intersect” are okay only when the project improves the intersection)

Guidance: Sound Transit route information is available at <http://www.soundtransit.org/Schedules>
 Pierce Transit route information is available at <http://www.piercetransit.org/pierce-transit-routes/>

Yes, full project length _____ 2 points
 Yes, partial or intersection _____ 1 point
 No X 0 points

If yes, provide route number(s) _____

COMMITTEE SCORE _____
 (Max. score of 2)

20. What is the peak number of transit vehicles per hour within the project limits? (Transit routes that “intersect” are okay only when the project improves the intersection)

Guidance: Sound Transit route information is available at <http://www.soundtransit.org/Schedules>
 Pierce Transit route information is available at <http://www.piercetransit.org/pierce-transit-routes/>

Peak number of transit vehicles per hour 0 (see pages 26 and 27 of the call for projects)

4 or more transit vehicles _____ 2 points
 1 to 3 transit vehicles _____ 1 point

COMMITTEE SCORE _____
 (Max. score of 2)

Project Title Lake Tapps Parkway ITS Expansion
Agency City of Auburn

21. Does this project specifically improve non-motorized access for trips to any of the following (check all that apply). Provide a map showing all checked items.

Transit locations (0-2 trips/day)	<input type="checkbox"/> Schools	<input type="checkbox"/> Household/Retail	<input type="checkbox"/> Commercial Areas
Transit locations (0-5 trips/day)	<input type="checkbox"/> Grocery Store	<input type="checkbox"/> Parks and Recreation	<input type="checkbox"/> Cultural Facilities (museums, libraries, etc.)
Transit locations (0-5+ trips/day)	<input type="checkbox"/> Medical	<input type="checkbox"/> Employment Centers	<input type="checkbox"/> *Other

1 point each item

*Please describe:

COMMITTEE SCORE _____
 (Max. score of 12)

22. Does this project provide contiguous gap-closure to a previously funded transportation route?

(Gap closure projects may improve the facility to a standard equal to those sections on either end of the project. Gap closure project may provide a missing link of a facility that leads to a single connected facility. Gap closure projects are not limited to roadway sections and may include pedestrian paths, bicycle paths, trails, bridges, or any other transportation project which completes the system.)

- Yes, Final Section X 3 points
- Yes, Next Section 2 point
- No 0 points

If yes, please name adjacent segments; provide their funding source, and completion date:

The South Auburn ITS project constructed ITS improvements along the 15th Street SW, C Street SE and A Street SE corridors to the north of the proposed project. The existing ITS infrastructure currently ends at Lakeland Hills Way, the beginning point for this project. The South Auburn ITS project was funded using CMAQ funds from 2009. The project was completed during 2011. The proposed project would complete the southernmost portion of Auburns ITS system.

COMMITTEE SCORE _____
 (Max. score of 3)

Project Title Lake Tapps Parkway ITS Expansion
Agency City of Auburn

23. Describe how the project has the potential to reduce emissions?

Guidance: The application process will walk project sponsors through specific questions designed to determine the potential emissions reductions of their project. For example, projects involving fuel or vehicle conversions will be asked to provide information on the total number of vehicles affected, the current fuel and vehicle usage conditions, as well as the conditions after the project is implemented. Projects expected to result in an increase in transit usage will be asked to provide information on the current transit ridership and transit routes affected, as well as the specifics of the project – i.e., how will the individual project encourage or promote new transit riders. Projects providing new or more frequent/expanded transit service would be expected to result in a higher level of new transit riders than projects providing improvements in existing transit travel times or enhanced amenities to existing service. Projects resulting in improvements in traffic flow will be asked to provide information on the current travel conditions, amount of idling, number of trucks using the route, etc. As mentioned above, the magnitude of the project and the timing of the anticipated benefits will play a role in the final score, and all projects will be evaluated against each other.

Please explain:

This ITS expansion lowers emissions by reducing overall congestion and vehicle delay along the project corridors including A Street SE (East Valley Highway) and Lake Tapps Parkway. The completion of this ITS expansion improves air quality by:

- Reducing the number of idling of vehicles at various intersections; and
- Decreasing the overall consumption of energy.
- Air quality benefits will be realized immediately following completion of the project.

High: A project will rate high if:

- It will substantially reduce emissions of greenhouse gases and other air pollutants, or will substantially reduce fine particulates from diesel exhaust; and
- The air quality benefits will occur by 2020.

Medium: A project will rate medium if:

- It will moderately reduce emissions of greenhouse gases and other air pollutants, or will moderately reduce fine particulates from diesel exhaust (for example, a project that reduces VMT by shortening a vehicle trip, rather than eliminating a vehicle trip); and
- The air quality benefits will occur by 2025.

Low: A project will rate low if:

- It results in a low amount of emissions reductions; and
- The air quality benefits will occur after 2025.

High = _____ 5 points
Medium = _____ 3 points
Low = _____ 2 points
0 = _____ 0 points

COMMITTEE SCORE _____
(Max. score of 5)

**Project Title Lake Tapps Parkway ITS Expansion
Agency City of Auburn**

OTHER APPLICATIONS

- 55. Please explain how the project addresses transportation issues or needs of two or more jurisdiction/agencies and/or has countywide impact and benefit.**

Guidance: Projects resulting in physical construction must be built in multiple jurisdictions to acquire multiple points.

Please explain:

The project is being constructed in both Pierce and King Counties within the City of Auburn. The corridor is a natural conduit to the active freight and commuter Urban Centers in the Puget Sound Region, supporting access and connectivity with the Auburn Regional Center to the north, the adjacent Sumner/Pacific MIC, and to the Sumner Town Center to the south and Milton and Edgewood Centers to the west.

4 or more agencies affected _____ 8 Points
2 or 3 agencies affected _____ 5 Points

COMMITTEE SCORE _____
(Max. score of 8)

- 56. Please explain how the project addresses transportation Safety.**

The proposed ITS infrastructure will enhance traffic operations along the proposed corridors, reducing delays and vehicle queues at intersections. This will improve safety by reducing collision types associated with congested traffic operations such as rear-end collisions. In addition, the proposed ITS infrastructure will improve safety during weather events by providing drivers with information about adverse conditions along Lake Tapps Parkway.

COMMITTEE SCORE _____
(Max. score of 4)

- 57. Please explain how the project addresses security and mobility.**

The proposed ITS infrastructure allows the more efficient movement of people and goods through enhanced data management using data stations to collect analyze, and optimize traffic flow, and adapt signal timing to traffic patterns – all of which can be shared regionally. Security is enhanced through the provision of ITS cameras and the ability to alert City staff of potential issues along the subject corridor. The project also supports emergency responders from the Valley Regional Fire Authority, WSDOT, and Auburn Police Department.

COMMITTEE SCORE _____
(Max. score of 4)

- 58. Please explain how the project addresses environment.**

The ITS expansion project will lower emissions by reducing overall congestion and vehicle delay throughout the corridor with verifiable reduction in delays. Less delay would mean reduced travel times with less idling time at intersections, conditions typically conducive to a reduction in pollutant emissions from vehicle exhaust.

COMMITTEE SCORE _____
(Max. score of 4)

- 59. Please explain how the project addresses Transportation System Integration.**

The project will integrate the remaining signalized intersections in southern Auburn into the City's ITS system and the traffic operations center, improving capacity, security and safety.

COMMITTEE SCORE _____
(Max. score of 4)

Project Title Lake Tapps Parkway ITS Expansion
Agency City of Auburn

60. Please explain how the project addresses preservation.

The reductions to braking and vehicle delays at signalized intersections and reduced queuing will reduce rutting on the approaches to the intersections, extending the pavement life in these locations.

COMMITTEE SCORE _____
(Max. score of 4)

61. Please explain how the project addresses global competitiveness.

By reducing delays and travel times within southern Auburn, freight mobility will be enhanced helping both deliveries to/from local businesses and freight moving through the area. Commute trips will also be enhanced as a result of reduced travel times for residents with the Auburn Local Center and for through trips to/from neighboring communities.

COMMITTEE SCORE _____
(Max. score of 4)

62. Please explain how the project addresses productivity and efficiency.

By reducing delays and travel times within southern Auburn, access for local residents to/from local and regional employment, retail and recreational destinations will be enhanced. The same is true for trips which travel through southern Auburn. In addition, freight mobility to/from and through southern Auburn will also be enhanced.

COMMITTEE SCORE _____
(Max. score of 4)

63. Please explain how the project addresses connectivity.

By reducing delays and improving travel times along the project corridor, the project enhances the connectivity of the Auburn Local Center with the Auburn Regional Center to the north, the adjacent Sumner/Pacific MIC, Sumner Town Center to the south and Milton and Edgwood Centers to the west, and with the regional transportation system (I-5, SR-167, and SR-18) to enhance connectivity the other centers in the Puget sound region.

COMMITTEE SCORE _____
(Max. score of 4)

