

# APPENDIX B TRANSPORTATION IMPROVEMENT PLAN

This chapter presents the capital program that forms the basis of this Transportation Element. Collectively, this program adds up to \$135 million in potential transportation improvements to be constructed over the next twenty years as seen in *Table 33*.

Funding to support this program will come from a number of sources including Ellensburg's general funds, gas taxes, property taxes, impact fees, as well as federal and state grants. Since the City's ability to attract outside funding sources is unknown, this project list may reach beyond the 20-year horizon.

In 2016, city voters approved a sales tax measure with funds earmarked for transit. As of 2017, transit service in Ellensburg transitioned from a community services organization to the City, with operations contracted out. The City is increasing coverage of the route and considering other transit improvements that can be funded with the tax and grant funding.

This Transportation Element strives to create a transportation system that provides a safe, balanced, and efficient multimodal transportation system that is consistent with the City's overall vision and adequately serves anticipated growth.

This vision is guided by the transportation goals outlined in this Element to provide a system that is:

- Safe for all Users
- Connected and Efficient
- Multimodal, Offering User Friendly Transportation Options
- Integrated with Transit
- Maintained and Preserved
- Facilitated by Active Partnerships

With these goals in mind, and in conjunction with completing the layered networks described in the previous chapter, a transportation project list was developed.

*Table 34* and *Table 35* describe the recommended projects, which represent a balance of safety, maintenance, and operational improvements for all modes. The projects are divided into two categories, Tier 1 and Tier 2. The categories are defined based on how well each project scored using the evaluation metrics, and were reviewed by City staff. Tier 1 projects are those that meet multiple criteria in terms of effectiveness, benefit to the community, and ability to be implemented based on the current budget. Tier 2 projects meet fewer criteria and exceed current budget estimates for the next 20 years.

These projects provide a starting point for the City in developing its Six-Year Transportation Improvement Program, which is updated annually and is developed based on knowledge related to project feasibility and funding availability.

**Table 33. Costs of Ellensburg Transportation Element Capital Projects (20+ Years)**

Project Needs	Description	Total Cost*	
		Tier 1	Tier 2
Auto/Freight Priority Projects	Traffic signals, intersection improvements, multimodal roadway improvements	\$18.3M	\$66.4M
Pedestrian Projects	Sidewalks, crossings	\$8.3M	\$24.2M
Bicycle Projects	Bike lanes, sharrows, trails	\$3.7M	\$14.5M
<b>Total</b>		<b>\$30.3M</b>	<b>\$105.1M</b>

\*costs denoted in millions

**Table 34. Twenty Year Project List - Tier 1**

Project #	Project Location	Description	Project Score	Planning Level Cost
1	14th St & Wildcat Way	Signalize intersection	31.5	\$442,000
2	5th Ave & Ruby St	Intersection signal and improvements	31.5	\$430,000
3	Mountain View Ave & Ruby St	Signal modification, widening, and improvements	30	\$1,357,000
4	14th Ave & Alder St	Intersection signal and improvements	28.5	\$494,000
5	Canyon Rd & I90 EB Ramps	Intersection signal and improvements	27	\$400,000
6	5th Ave & Railroad Ave	Signalize intersection	27	\$472,000
7	University Way & Wildcat Way	Signal modification and widening	25.5	\$1,413,000
8	Downtown to CWU University Way Crossing	Pedestrian and bike improvement on Town to Gown Route	24	\$50,000
9	University Way	Crossing improvements	24	\$60,000
10	Dolarway Rd/SR 97 & University Way	Intersection improvements- Roundabout	24	\$2,050,000
11	Ruby St - Mountain View Ave to 5th Ave	Bike lane	22.5	\$9,000
12	Walnut St & 18th Ave	Intersection signal and improvements	22.5	\$636,000
13	Ruby St & 3rd Ave	Signalize intersection	22.5	\$450,000
14	Dean Nicholson Blvd - B Street/JWT to JWT at Alder St	Bike lane	21	\$2,900
15	Wildcat Way/18th Ave - 14th to McElroy Park	Bike lane	21	\$4,400
16	Cora Street to Fairgrounds	John Wayne Trail reconnection	21	\$4,200,000
17	Helena St & Walnut St	Signal modification, widening, and improvements	21	\$1,234,000
18	Chestnut St - I-90 to CWU	Bike lane	19.5	\$7,600
19	Umtanum Rd - West UGA to East UGA	Bike lane	19.5	\$22,400
20	Helena Ave from Cora St to Alder St	Bike lane	19.5	\$16,000
21	Willow Street - Mountain View Ave to Capitol Ave	Road widening, curb and gutter improvements, and bike lanes	19.5	\$965,000
22	Helena Ave - Water St to Airport Rd	Sidewalk addition	19.5	\$1,052,000
23	West City Limits to 14th Ave	Upgrade John Wayne Trail surface	19.5	\$325,000
24	Alder St to East City Limits	Upgrade John Wayne Trail surface	19.5	\$43,000
25	Canyon Rd & Umtanum Rd	Signal modification, widening, and improvements	19.5	\$2,209,000
26	Wildcat Way & 18th Ave	Signalize intersection	19.5	\$500,000
27	Helena Ave - Water St to Walnut St	Fill in sidewalk gaps	18	\$2,020,000
28	South Wilson Creek Trail	Trails	18	\$310,000
29	3rd Ave & Main St	Signal modification	18	\$150,000
30	Airport Rd & Bender Rd	Intersection modification to an all way stop	18	\$25,000
31	Alder St - Fairgrounds to Airport	Bike lane	16.5	\$7,600

Project #	Project Location	Description	Project Score	Planning Level Cost
32	Capitol Ave/Pfenning Rd - Water St to Game Farm Rd	Bike lane	16.5	\$11,290
33	University Way - Nanum St to West City Limits	Sidewalk extension	16.5	\$770,000
34	3rd Ave. - Water St. to Depot	Paverstone sidewalks and historic lighting	16.5	\$674,000
35	South River Connector	Trails	16.5	\$160,000
36	15th Ave & Water St	Signal modification and improvements, extend road east to connect to Main St	16.5	\$732,000
37	South Railroad Ave - 1st Ave to 5th Ave	Sidewalk	16.5	\$670,000
38	University Way & Water St	Signal modification, widening, and improvements	16.5	\$1,970,000
39	University Way & Reecer Creek Rd	Signalize intersection	16.5	\$450,000
40	Water St & Bender Rd	Intersection signal and improvements	16.5	\$500,000
41	Cora Street - 15th Ave to John Wayne Trail	Curb and Sidewalk additions and improvements	15	\$390,000
42	IRRP to Thorp Highway Trail	Trails	15	\$265,000
43	University Way & Main St	Signal modification, widening, and improvements	15	\$2,335,000
Plan	Citywide Transit Master Plan	Plan how system can be expanded to address growth, including infrastructure, equipment and staffing, and long term funding	n/a	\$100,000
<b>Total</b>				<b>\$30,384,190</b>

**Table 35. Twenty Year Project List - Tier 2**

Project #	Project Location	Description	Project Score	Planning Level Cost
44	Railroad Overpass- No specific Location <sup>1</sup>	Bridge	21	\$30,000,000
45	Capitol Ave - Willow St to Oak St	Sidewalks and bike lane	15	\$1,271,000
46	Capitol Ave/Pfenning Rd - Oak St to JWT	Sidewalk on north and west sides	15	\$1,318,000
47	Capitol Ave & Chestnut St	Intersection modification	15	\$750,000
48	Lake Mattoon Trail	Trails	13.5	\$1,250,000
49	Helena Ave & Water St	Signal modification, widening, and improvements	13.5	\$710,000
50	Wenas St & University Way	Signalize intersection	13.5	\$450,000
51	Bull Rd/Willow St & Mountain View Ave	Signalize intersection	13.5	\$450,000
52	West Ellensburg Trail - Rotary Park to JWT	Trails	13.5	\$1,300,000
53	Manitoba Ave & Ruby St	Intersection signal and improvements, align north and south Ruby streets	13.5	\$2,898,000
54	Capitol Ave- Main St to Sampson St	Sidewalk replacement	12	\$907,000
55	Brook Lane - 11th Ave to 18th Ave	Sidewalk	12	\$1,403,200
56	Canyon Multi-Use Pathway - IRRP to S. City Limits	Trails	12	\$25,000,000
57	University Way & BNSF RR	Overpass structure replacement/widening	12	\$20,000,000
58	University Way & Alder St	Signal modification, widening, and improvements	12	\$1,160,000
59	Reecer Creek Rd - University Way to North UGA	Bike lane	10.5	\$13,360
60	Brick Rd/Sanders Rd - McElroy Park to Alder St	Bike lane	10.5	\$14,460
61	Bull St /Willow St - I-90 to Capitol Avenue	Bike Lane/Sharrows	10.5	\$14,600
62	Brick Rd - Skyline Dr to Cemetary	Sidewalk addition on west side	10.5	\$1,044,800
63	Idaho Ave - Water St to Airport Rd	Sidewalk addition on both sides	10.5	\$1,046,000
64	Willow St - Spokane Ave to Seattle Ave	Fill in sidewalk gaps	10.5	\$112,000
65	University Way - Okanogan St to Reecer Creek Rd	Sidewalk	10.5	\$1,832,000
66	Umptanum & Anderson	Road widening	9	\$10,000,000
67	Pfenning Rd - Vantage Hwy to Ashford Way	Sidewalk addition on west side	7.5	\$848,400
68	University Way - Brick Rd to Pfenning Rd	Sidewalk	6	\$1,275,000
<b>Total</b>				<b>\$105,067,820</b>

<sup>1</sup> Although the Railroad Overpass scored in Tier 1, it was moved to Tier 2 due to high cost.

\*All of the recommended transportation projects in *Table 34* and *Table 35* would require further analysis prior to actual construction

Figure 29. Tier 1 Project Locations

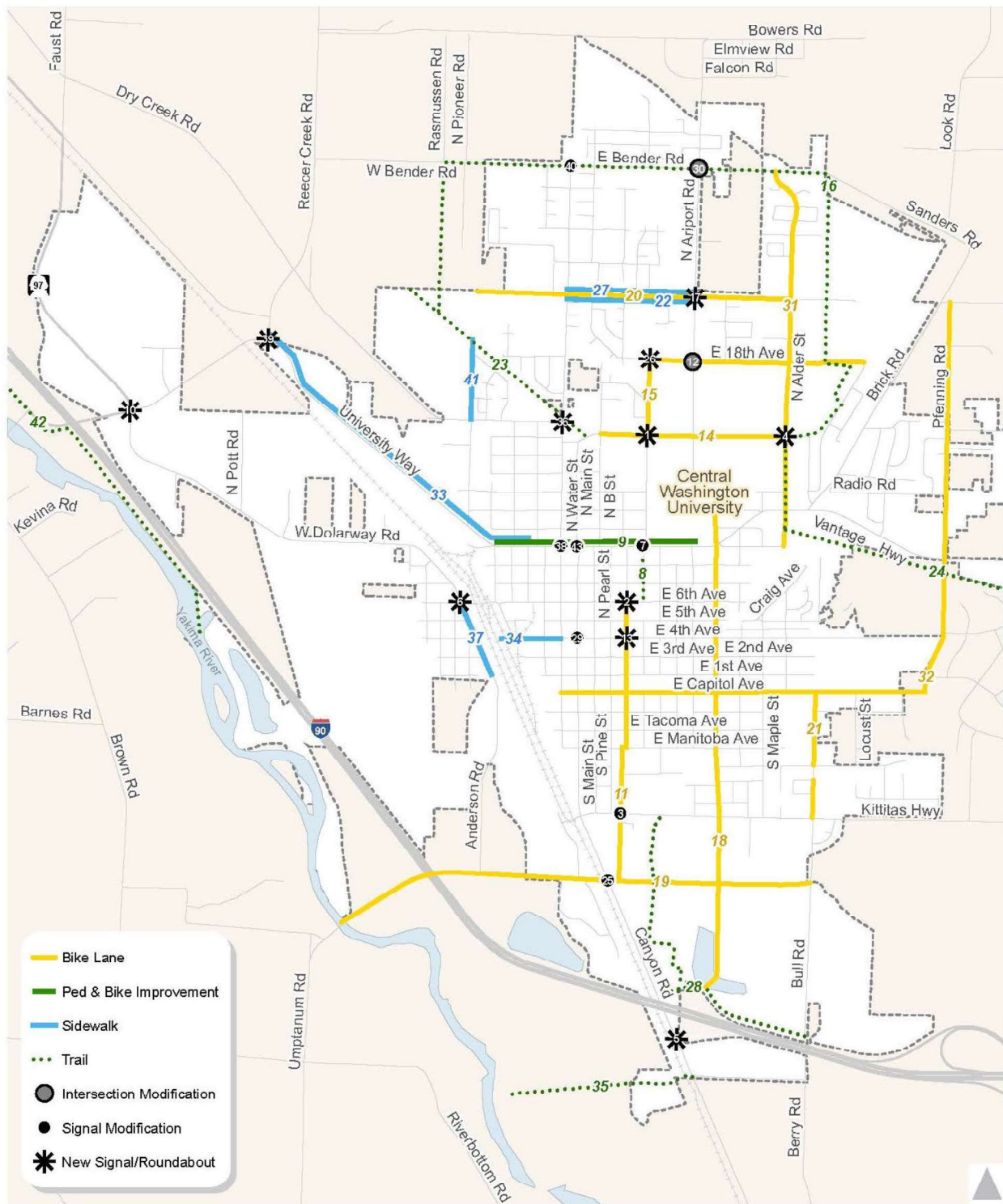
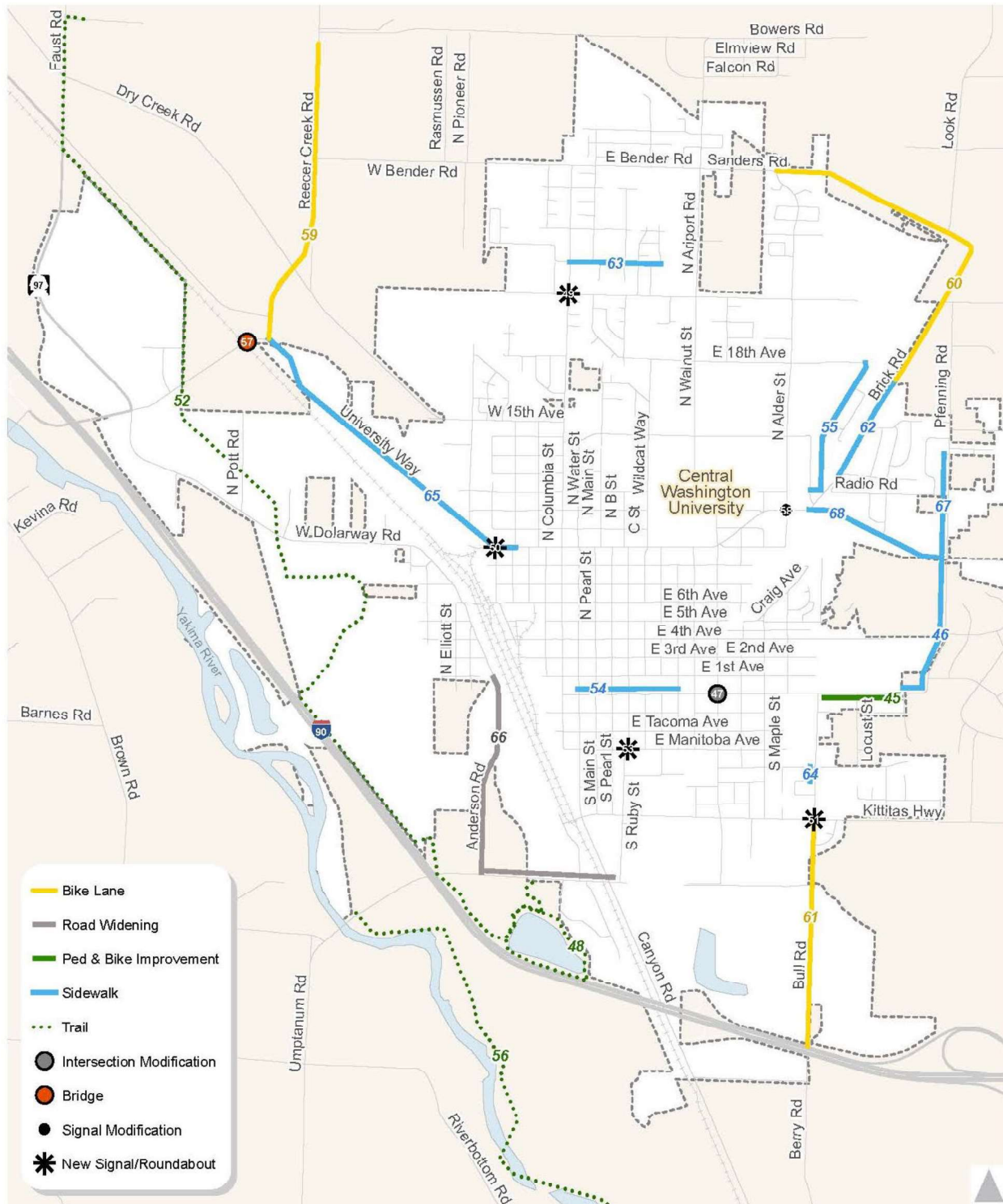




Figure 30. Tier 2 Project Locations



## REGIONAL COLLABORATION

As stated earlier, one of the City's top priorities in this plan is effective coordination with regional partners to ensure that the local and regional transportation systems complement one another. A key element of this will be partnering with neighboring cities, Kittitas County, and WSDOT to ensure regional travel patterns do not impact quality of life in Ellensburg.

### *Roadway Facilities*

There are projects outside of Ellensburg's purview that will affect travel in and around the City. One of the biggest projects that will impact travel in the region is the WSDOT I-90 Snoqualmie Pass East widening. The first two phases of the project will complete widening, paving, and safety improvements along seven miles of I-90 and are projected to be finished in 2019. Completion of this roadway is expected to improve safety and mobility within Kittitas County, which will directly impact Ellensburg's residents and visitors.

As part of this planning process, transportation projects were identified that fall outside Ellensburg's city limits and local authority including:

- The new roundabout at the intersection of Dolarway Road and University Way.
- Intersection improvements at University Way and Reecer Creek Road.

### *Transit Facilities*

On the transit side, Ellensburg is working to improve Central Transit service and facilities within the City that will connect with regional transit options. Envisioned improvements include:

- Adding a northeast route stretching east to Pfenning Road and north to Bender Road
- Adding a west route traveling out to Dolarway Road and University Way
- Development of a transit center

With the anticipated future growth in the region, the transit system will need significant capital to keep up with demand. The City is planning to conduct a transit master plan in the coming years to identify how the current transit system can be improved to meet these demands.

Greater Kittitas County currently only has on-demand transit service within the region, but a more integrated Central Transit city network will support the county transit and any future expansions. Increased Central Transit service will also connect residents to the intercity Yakima Commuter route that travels between Ellensburg and Yakima during the week.

### *Trails*

Many of the trails in Ellensburg connect to recreational opportunities throughout the County. The John Wayne Trail, that stops at the east and west edges of the city, stretches over 220 miles crossing many other jurisdictions in the county and state. The network of trails west of the city wind through city parks and out into greater Kittitas County. Regional coordination for trail upkeep and improvements ensures that bicyclists and pedestrians can reach all of the amenities Ellensburg has to offer.



## IMPLEMENTING THE TRANSPORTATION ELEMENT

The recommended projects and programs of the Transportation Element were identified in the previous chapter based on their consistency with overall goals of this Element and the anticipated revenues over the next 20 years. Implementing the Transportation Element will require close coordination among the City departments, citizens, businesses, and other agencies within the region.

In order to guide the City's implementation of the plan, projects were prioritized to assist in assembling an updated six-year Transportation Improvement Program (TIP), working toward the 2037 planning horizon. This chapter summarizes the recommended plan, likely revenue sources, and criteria used to prioritize projects.

The Transportation Element is a living document and serves as the blueprint for transportation in Ellensburg over the next several years. Realistically, the plan is most useful over the next five years, at which point it should be updated.

In addition to the capital program described in the prior chapter, the transportation program includes \$16 million for maintenance, operations and roadway rehabilitation as seen in *Table 36*. Maintaining Ellensburg's transportation system is important for sustaining the quality and safety of roadways.

**Table 36. Twenty Year Transportation Program**

Investment	Description	Planning Level Cost
Pavement and maintenance	Annual maintenance programs	\$16M
Annual projects	Bridge inspections, engineering transfer, signal optimization, and alley reconstruction	\$1.9M
Capital projects	Tier 1 projects	\$30.3M
<b>Total</b>		<b>\$48.2M</b>

### **Overview of Costs and Revenues**

A key GMA planning requirement is the concept of fiscal restraint in transportation planning. A fiscally constrained Transportation Element must first allow for operation and maintenance of existing facilities, and then capital improvements. To introduce fiscal constraint into the plan, an inventory of anticipated revenues and costs was undertaken to identify funds that are likely to be available for capital construction and operations.

The proposed Transportation Element for the City of Ellensburg contains approximately \$48 million in transportation investments over the next 20 years. The Transportation Element focuses on capital projects that will complete the layered network plan, as well as ongoing pavement maintenance to ensure that the roadway network is kept in good condition.

It is worthwhile to note that the City of Ellensburg anticipates generating approximately \$2.4 million annually for transportation capital projects and system upkeep. Revenues include those from outside sources and grants, general city funds, impact fees, and gas tax receipts. If the City were able to maintain this level of revenue, the City could afford around \$30 million in

transportation projects over the next 20 years, after funding needed maintenance and rehabilitation.

The project list included in the previous chapter includes \$135 million in transportation investments, in recognition that the City will be awarded grants over the duration of the plan. In addition, the designation of Tier 1 and Tier 2 transportation projects within the Element acknowledges that should supplementary funding become available, projects that would further support the development of the transportation network have been identified and prioritized as part of this planning process.

### ***Funding Approach***

The comparison of revenues to costs indicates that the City will need to carefully prioritize its projects, since not all of the transportation needs may be affordable with existing revenue sources during the 20-year period. If this occurs, the City has several options:

- Increase the amount of revenue from existing sources, including impact fees, Transportation Benefit Districts or increased general fund revenues
- Adopt new sources of revenue, such as a vehicle license fee that could fund either transportation capital or programmatic expenditures
- Develop a grant strategy to secure additional funding for capital projects
- Lower the level of service standard, and therefore reduce the need for some transportation improvements.

The following section describes impact fees, transportation benefit districts, and grant strategies in more detail, and forecasts potential revenue based on stated assumptions.

### ***Impact Fees***

State law (RCW 82.02.050) authorizes communities to impose impact fees. Transportation impact fees are a one-time charge paid by development, proportional to their impacts to fund improvements that provide new transportation system capacity.

While transportation impact fees cannot be used for roadway maintenance or projects that exclusively address an existing traffic operations or safety issue without providing future capacity, they can fund a wide variety of projects in the street right-of-way.

The City currently has a transportation impact fee program that funds a limited number of roadway improvements. The current fee was updated in 2013 and has a base rate of \$1,758/PM peak hour trip. The city maintains an impact fee schedule that associates individual land uses, such as single family homes or retail or restaurant space, with the number of PM peak hour trips that they generate. The current budget estimates over \$100,000 in revenue each year with the current fee schedule.

Given the needs identified in the previous chapter, it may make sense for the City to consider updating its impact fee program to increase revenues for transportation and fund a more robust list of projects. Many jurisdictions around the state are looking to increase their impact

fee rates and more communities are updating their programs to fund projects that benefit both motorized, as well as nonmotorized travelers.

#### **WHAT ARE POTENTIAL NEW REVENUE SOURCES?**

- Proceeds from General Obligation Bonds
- Creation of Local Improvement Districts
- Mitigation fees for pedestrian and bicycle facilities
- Reciprocal impact fees with adjacent jurisdictions
- Property tax levy lid lift for transportation
- Business license fee per employee

The City can explore the feasibility and likely revenue amounts from these or other sources as the plan is implemented over the next several years.

#### ***Transportation Benefit District***

State law (RCW 36.73) authorizes cities and counties to form transportation benefit districts (TBDs) to raise revenue to fund local transportation projects, usually through vehicle license fees or sales taxes. TBD revenue is typically used for transportation projects such as roadway improvements, sidewalks, bike infrastructure, and transportation demand management. Construction, maintenance, and operation costs are also eligible.

Ellensburg established a TBD in 2016, and voted in a sales and use tax within the City to fund transportation services. The levy is established for ten years with the possibility of a continuation. It is estimated that the 0.2% tax will generate over \$700,000 each year, a total of over \$7 million in the next 10 years to benefit public transit. The Transportation Benefit District is also authorized to establish a motor vehicle license fee of up to \$100 to further fund transportation projects.

#### ***Grant Strategy***

While grants are among the best ways for cities to attract outside funding, they can be time consuming to put together, straining staff resources at unpredictable times.

Some communities develop annual grant strategies, which identify the projects they want to fund, the grant programs where these projects are most likely to successfully compete, and program resources (either staff time or consultant support) to develop grant applications. Given the robust public outreach process and strong safety and multimodal justifications for many of the projects, many of the projects on this Plan's Tier 2 Contingency List would likely perform well for Safe Routes to School, WSDOT Bike and Pedestrian Safety, Transportation Investment Board, or Federal Aid grants. Ellensburg should consider developing an annual grant strategy to identify funds for design and construction of Tier 2 Contingency Projects.

## SETTING PRIORITIES

Project prioritization is needed, in order to help identify when best to fund and implement the projects since funding is limited. Criteria were established to help prioritize the projects and implementation. These criteria, not listed in any priority order, are identified in the following text box.

Using these criteria, the recommended projects were evaluated and ranked based on how well each could meet the criteria. High priority projects for Ellensburg are those that meet multiple criteria in terms of effectiveness, benefit to the community, and ability to be implemented.

## 20- YEAR PROJECT LIST METRICS

The following information describes the process by which the 20-year project list was developed and evaluated. The 20 year project list was developed to create a transportation system that realizes Ellensburg's ultimate transportation vision: to provide a safe, balanced, and efficient multimodal transportation system that is consistent with the City's overall vision and adequately serves anticipated growth. This vision is guided by the following transportation goals outlined in the Transportation Element:

- **Safe for All Users**
- **Connected and Efficient.**
- **Multimodal**
- **Integrate Transit**
- **Fund Maintenance and Preservation**
- **Facilitate Active Partnerships**

With these goals in mind, as well as, completing the layered networks; evaluating existing and future infrastructure needs based on adopted LOS; reviewing existing transportation plans; and working with the public, Planning Commission, and City Council to identify areas in need of transportation improvements, a draft project list was developed. The draft project list included over 70 potential projects. Each project was evaluated and scored relative to the transportation goals using a scoring matrix. The scoring matrix included 11 metric covering the 6 goals. Each metric's description, as well as its scoring potential, can be seen as follows.

## CRITERIA FOR PROJECT PRIORITIZATION

1. Meets City's transportation goals:
  - Safe for all Users
  - Connected and Efficient
  - Multimodal, Offering User Friendly Transportation Options
  - Integrate Transit
  - Fund Maintenance and Preservation
  - Facilitate Active Partnerships
2. Project costs are aligned with City budget constraints and leverage non-city (federal, state, private) funds

### Evaluation Metrics

1. **Provides safe connections for all users.** Create a transportation network that provides safe and comfortable connections for all users to key destinations, including Downtown, Central Washington University, local schools, parks, retail, and services. To do this, streets should be designed to accommodate priority users.

Addresses a location with a history of injury/fatality collisions	6=Serious injury and/or bike/ped collision
	3= Addresses location with high number of collisions
	0=Low collision rate

2. **Supports commerce through efficient connections.** Prioritize connections with state routes and removal of bottlenecks that delay the movement of people and goods. Key to achieving this goal will be coordination with the Washington Department of Transportation and evaluation of projects that improve citywide mobility over constraints like railroads and natural features.

Project improves or eliminates bottleneck location to LOS standard under current or future conditions	6=Solves LOS Issue
	3=Improves but does not eliminate LOS deficiency
	0=Does not improve LOS deficiency or no LOS deficiency in project vicinity

3. **Offers complete and user friendly connections for walking and biking.** Fills gaps in the system to accommodate safe, enjoyable, and energy efficient travel by those choosing to walk or bike. Where possible, the City will look for ways to improve street and neighborhood connectivity.

Encourages pedestrian travel	3=New Pedestrian Facility (e.g. sidewalk, trail, shared use path, crosswalk, signalization)
	0=No pedestrian facility
Encourages bicycle travel	3=Exclusive facility (e.g. buffered bike lane, shared use path, trail)
	1.5=Shared facility (e.g. bicycle lane, sharrow, bike boulevard)
	0=No bike facility
Connects neighborhoods and other disconnected streets for pedestrians and bicyclists	2=Project creates an additional connection between neighborhoods
	0=No new connections

4. **Integrates transit into the citywide and regional transportation network.** The City will take an active role in ensuring that transit is a community asset, offering convenient routes, serving key destinations, and coordinating with other regional transit operators.

Encourages transit travel	3=Infrastructure or access to transit improvement within 1/4 mile proximity
	1.5=Infrastructure or access to transit improvement within 1/2 mile proximity
	0=No transit improvement
Coordination with regional transit	3=Coordinates with regional transportation
	0=Does not coordinate with regional transportation

5. **Reliably funds system maintenance and preservation.** Plan for a system that is financially viable, including consideration of full lifecycle costs in infrastructure investments and leveraging funds (including grants and private dollars) wherever possible to maximize community benefits.

Project's costs are aligned with City budget constraints	3=Low cost improvement (\$0-500,000)
	1.5=Moderate improvement cost (\$500,000-\$1,000,000)
	0=High cost (\$1,000,000+)
On-going maintenance costs	3=Project will reduce ongoing maintenance (e.g., replacement of signal with roundabout; reduction in paved surface)
	1.5=Project addresses near-term maintenance need (street overlay)
	0=Project will increase maintenance costs

6. **Facilitates active partnerships.** To provide for a seamless system, the City will actively coordinate with a broad range of groups (including Kittitas County, Central Washington University, the Washington Department of Transportation, Ellensburg School District, businesses, and the public) to develop and operate the transportation system.

Project is on-books for another agency or jurisdiction	3=Yes
	0=No partnerships
Project is a strong match for grant opportunities or outside funding sources	3=Yes
	0=No