JOINT TRANSPORTATION COMMITTEE

Assessment of City Transportation Funding Needs

DRAFT June 2019

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Executive Summary

STUDY PURPOSE AND PROCESS

In 2018, the Joint Transportation Committee of the Washington State Legislature commissioned this study to assess the transportation funding needs of Washington's 281 cities and towns. The study objectives were the following:

- Identify current city funding responsibilities and sources.
- Assess funding gaps and future needs.
- Make recommendations to address the existing gaps and future needs.

Washington's city transportation network accommodates 26 percent of statewide vehicle travel on over 25,000 lane miles of streets, including 740 bridges.

Most Washington cities and towns face maintenance and preservation backlogs and lack adequate transportation revenues to meet these needs. This study assesses, defines, and documents transportation funding challenges faced by Washington cities and towns using available data, case studies, and an examination of practices in other states. It then evaluates and recommends options to address existing gaps and future needs through more efficient use of existing resources as well potential new resources.

The study process relied on input from a Staff Workgroup that met six times over the course of the study and included a project check-in with the Joint Transportation Committee in December of 2018. The Staff Workgroup included legislative staff, agency staff [Office of Financial Management (OFM), Transportation Improvement Board (TIB), and Washington State Department of Transportation (WSDOT)], as well as representatives from Washington cities (Camas, Olympia, and Tacoma), the Association of Washington Cities, and the Metropolitan Planning Organization/Regional Transportation Planning Organization (MPO/RPTO) Coordination Committee.

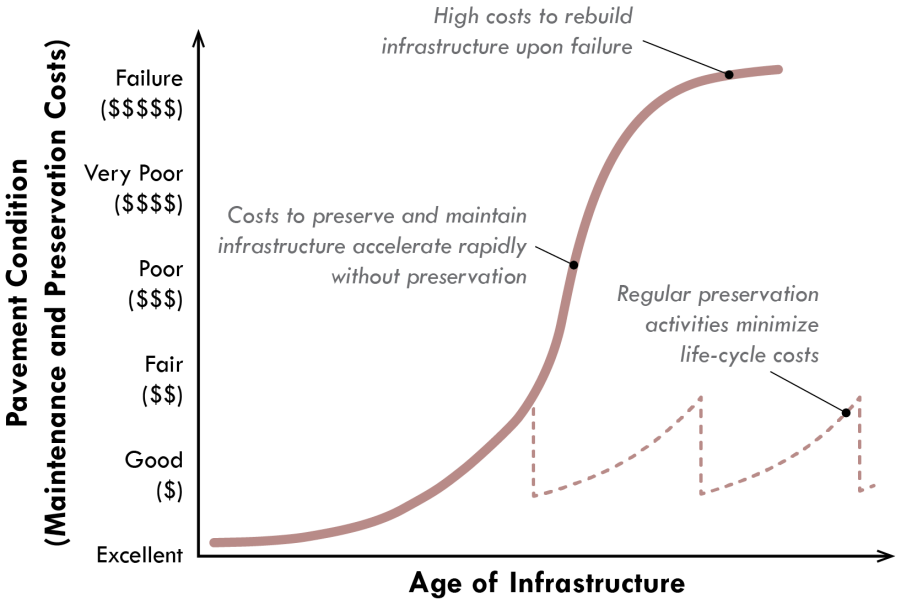
CITY TRANSPORTATION CONTEXT

City Responsibilities and Funding Challenges

Washington cities are diverse, ranging in population from less than 100 to more than 600,000, and with responsibilities for anywhere from 2 to 1,667 lane miles. Cities are responsible for multimodal transportation facilities that include the street, sidewalk, and bicycle infrastructure; certain aspects of state highways; and the interface between transportation infrastructure and utilities and the natural environment. In addition, cities must follow certain design, specification, construction, and maintenance guidelines set forth by the Americans with Disabilities Act (ADA), Federal Highways Administration (FHWA), WSDOT, and the City and County Design Standards Committees.

Construction and right of way acquisition costs continue to increase faster than revenues. In addition, transportation responsibilities are increasingly complex, including important social and environmental investments such as environmental mitigation and ADA access that come with benefits and additional costs. **With these increased costs, fewer miles can be rehabilitated with the same available dollars.**

This diminished investment in rehabilitation runs counter to **asset management**, which works to keep infrastructure at an optimal level of repair. As shown at right, while it may cost around $1 million to preserve a mile of pavement in a state of good repair, costs can balloon to $4-5 million if the pavement reaches a state of failure. Asset management seeks to keep streets in a state of good repair and optimize lifecycle costs. **However, when cities can't invest enough in preserving the existing system, lifecycle costs compound over time.**



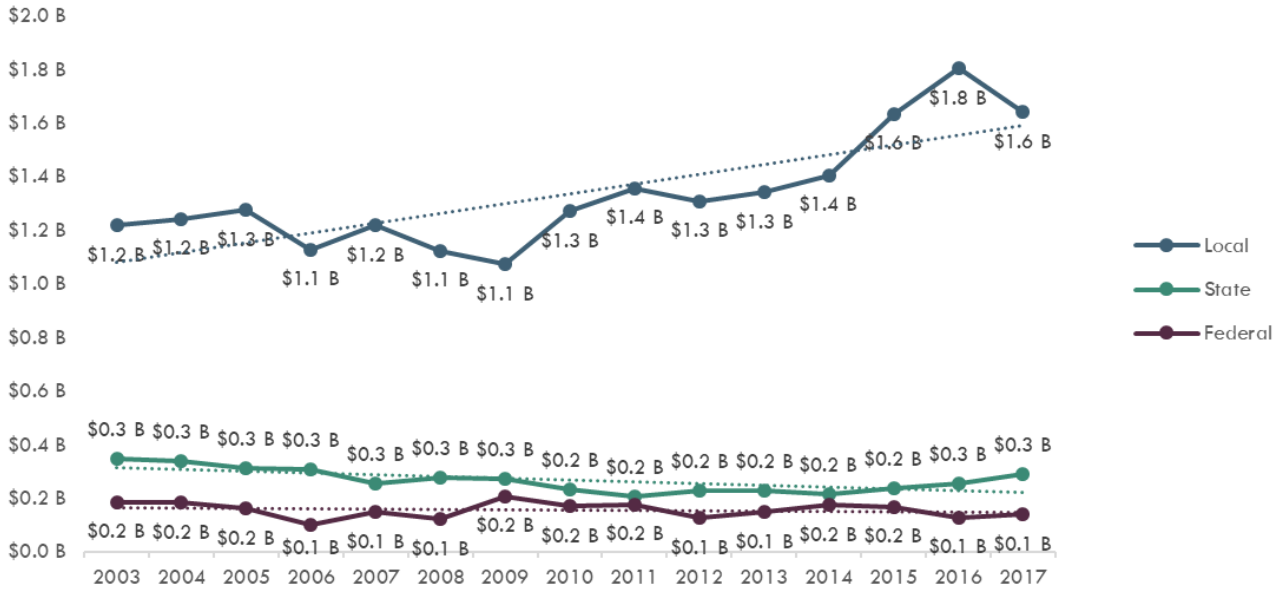
In addition to increasingly complex operating responsibilities, cities face common funding challenges:

- **Competition for scarce resources.** Cities provide a broad range of local services, of which transportation is one. Across all 281 cities, on average, transportation makes up about 11% of city expenditures, competing with public safety (40%), general government services (19%), parks (8%), environment and development (7%), miscellaneous and debt service (7%), education and libraries (4%), and health and human services (4%).[1]
- **Structural gap between increasing costs and ability to grow revenue.** Cities rely on unrestricted local funding sources, primarily property tax, sales and use tax, and business and occupation taxes (including utility taxes) to fund all city operations, including transportation. **79% of local transportation funding comes from local sources and 86% of that local revenue is from unrestricted sources.** Property tax revenue growth, a key income source for cities, is capped at 1% plus the value of new construction and cannot grow to meet the increasing cost of construction (typically increasing at 4% per year).
- **Misalignment of tax and wealth base and investment needs.** Many cities have transportation systems with significant infrastructure needs that are disproportionate to their underlying tax and/or wealth base. Infrastructure needs are affected by the size and age of a system, geographic location, level of use by local and pass-through users and other factors, while underlying tax and wealth base are affected by the population of the city, housing and land use patterns, and economic opportunity in the area. These factors often leave cities with investment needs that are far larger than their ability to generate revenue, even under ideal conditions.

[1] SAO LGFRS 2017, General Fund and Special Revenue Fund Expenditures

Transportation Funding

Despite the extensive responsibilities of cities and the challenges with funding transportation and other investments, **cities have stepped up to meet growing transportation needs and costs, while investment from the state and federal governments has declined slightly.**

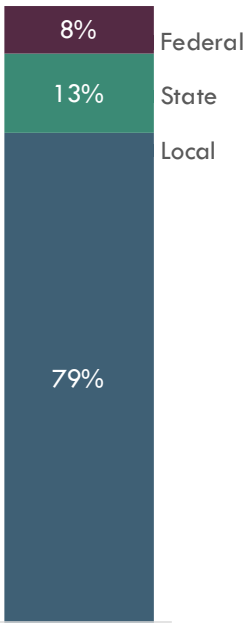


Note: Results shown in 2018 dollars. Adjusted using WSDOT March 2019 Cost Construction Index created by WSDOT from Global Insights Construction forecast.
Source: WSDOT CSCR Merged History, 2003 – 2017 and WSDOT Cost Construction Index, March 2019.

Cities draw on a variety of sources to fund their transportation investments as shown at right:

- **Nearly 80% of city transportation funding comes from local sources**, of which 86% are unrestricted and compete with other local government needs.
- **13% of city transportation funding comes from the state.** Cities receive about 8% of the State's overall transportation investment through the city share of gas tax and multimodal fund distributions; competitive grant programs administered by Commerce, FMSIB, TIB, and WSDOT Local Programs; and local project appropriations.
- **Less than 10% of total funding comes from federal sources.**

It is important to note that cities rely on state resources for basic maintenance and preservation. **In many cases, small cities receive 30-60% of their transportation funding from the State and would not be able to operate without that support. Larger cities rely on state and federal support for large projects, including bridges.**



Note: 2012 – 2017 Average
Source: WSDOT City Streets County Roads Data 2012 – 2017; BERK 2019.

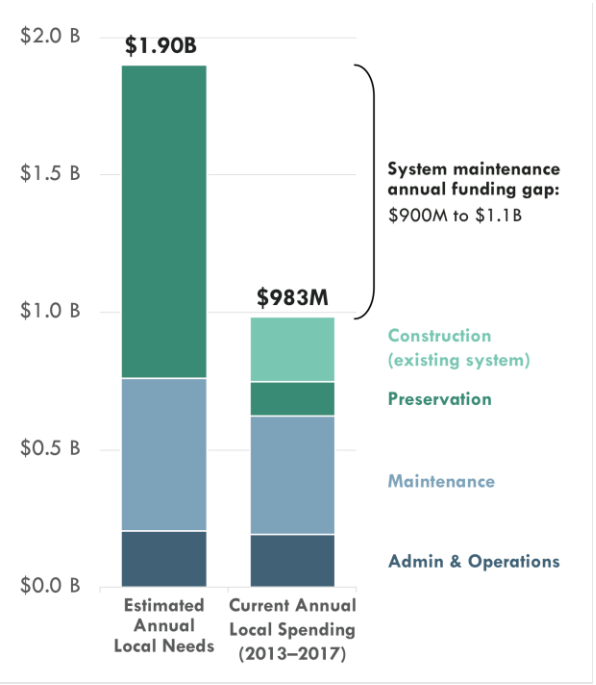
TRANSPORTATION FUNDING GAP

At a local level, many of the 281 cities have significant gaps between current transportation expenditures and the funding outlays necessary to support transportation systems over the long-term. These historic funding shortfalls have led to backlogs in required investments, which have had significant effects on lifecycle costs and system functionality.

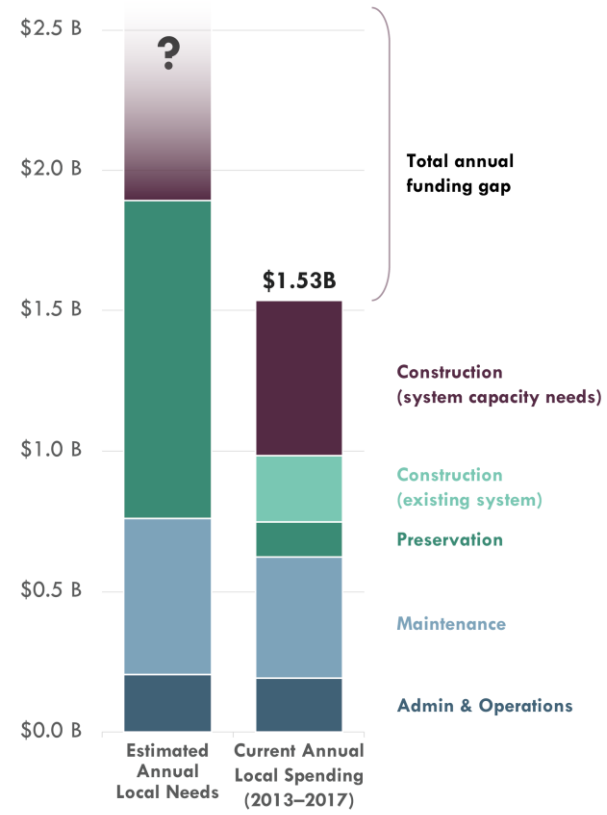
This study estimates the magnitude of these funding gaps by determining general street preservation costs based on cost-effective pavement management cycles, as well as estimating bridge maintenance, replacement, and deferred bridge replacement costs. By comparing estimated costs to actual local spending, a funding gap can be estimated. **The top chart at right shows how the estimated need for preservation funding is $900 million to $1.1 billion more per year than current spending.**

In addition to the base gap, there are additional costs that are difficult to assess statewide. Given these unknowns, it is safe to say we are investing about half of what we should, as illustrated in the bottom chart. For the base system, unknown costs include deferred roadway maintenance and preservation and system expansion needs. There are also additional expenditures related to ongoing obligations of cities, such as improvements to infrastructure for biking and walking, full implementation of local ADA Transition Plans, and full mitigation of environmental impacts, including addressing fish passage barriers.

Comparison of Estimated Annual Costs and Actual Annual Expenditures on Preservation



Unknown Additional Annual Costs Mean the Full Gap is Greater



Source: BERK, 2019; Perteet, 2019; WSDOT 2018.

RECOMMENDATIONS

Recommendations were developed using the following **Guiding Principles**:

- Maintain the whole system, with equitable consideration of potential misalignments between local investment needs and resources.
- Achieve high continuity of improvements to reduce unintended gaps in condition, nonmotorized systems, ADA accessibility, and environmental mitigation.
- Collaborate for efficiencies across levels of government and boundaries.
- Focus capital support at all levels on fully funding projects.
- Provide local flexibility and incentivize asset management.

The specific recommendations summarized in the table on the following pages revolve around two **Priority Recommendations**:

1. *Increase support for preservation through new or focused funding, incentives, and services to reduce lifecycle costs.*

Our analysis found a significant gap in funding for the efficient preservation of existing city transportation infrastructure. This is causing the asset condition of streets and sidewalks to deteriorate and calls for stronger focus on preservation to improve safety, service quality, and lifecycle cost. Deferred maintenance has worsened over time for a variety of reasons including, age of system, quality of original build, weather, and historical under-investment, often due to cities' inability to make desired investments. The investment required to catch up with deferred maintenance grows at an increasing rate, creating a spiral of increasing costs.

We recommend that investment in asset condition be prioritized to reduce overall lifecycle costs. As additional local options addressed under Recommendation A, below will not be sufficient to bridge the gap, this will require additional funding from both the state and local communities. Several options exist for new or focused state resources:

- **Fund other entities to preserve the street systems of Micros and some Small cities as defined for the purposes of this study at the lowest possible cost.** Washington has 66 cities classified here as Micro with street systems in the range of 10 miles and less. These small population cities have minimal budgets and almost no capacity to fund street preservation. Budget analysis shows they receive virtually all preservation and street & sidewalk construction funding from state or federal sources, the bulk of it from TIB. This also applies to some of the lower assessed value communities in the Small category as well. The theory of self-sufficiency fails in these cases as they have no capacity to maintain their streets.

  A long-term strategy should be developed to maintain these streets as a service provided by TIB or purchased directly from county road departments or another city. Many counties already seal coat these streets and are reimbursed by TIB.

- **Increase funding and eligibility threshold for TIB preservation programs.** The TIB uses performance-based budgeting and economy of scale principles in managing the Small City Preservation Program. Small city street condition stopped declining in 2008 and conditions have

improved collectively. Average street condition across all Small cities with population of 5,000 or less now exceeds 73 on a 100-point scale where industry asset management expectations generally target 70 as a performance goal. TIB's success with cities below 5,000 population can presumably be extended to additional cities with additional funding and minor amendments to eligibility statutes in RCW 47.26.345.

The population-based eligibility thresholds should also be changed to use cumulative assessed property value. Population is used by the state and federal government to establish grant and loan eligibility. However, population-based eligibility unintentionally includes low population/high property value communities while excluding higher population/low property value communities from programs like TIB preservation grants. The state can easily avoid this shortcoming by using cumulative assessed property value to set eligibility breakpoints. Assessed value (AV) provides a better surrogate for the fiscal capacity of cities and helps ensure social equity. AV is readily available from the state Department of Revenue and already used by TIB in cases where population thresholds are not stated in code.

- **Incentivize investments by Large cities with a sliding match scale.** Preservation grants should also be more available to large communities, but with high match requirements in the 40 to 50 percent range. High match grants provide a dual purpose: they advance the statewide goal of establishing good repair while also positively influencing the economics of local investment decisions.
- **Explore using small dollar amounts of distributed revenue to collectively fund larger paving initiatives or buy seal coat services from counties or other cities.** State distributed motor fuel tax in Connecting Washington resulted in many annual distributions of less than $1,000. Larger increases would be advisable. Future smaller revenue distributions could be rolled up into a paving initiative or to buy seal coat services from counties or other cities.

2. *Provide better paths to reach full funding of large-scale local projects that outstrip local and regional resources.*

Street projects are getting more and more expensive. The largest state and federal grant sources offer $4-5 million per grant, making it relatively easy, though competitive, to fund a $6-10 million project. Larger scale city projects of $20-30 million are now common, but few options exist to fund local mega-projects. Two options to address this gap include:

- **Increase grant program resources.** We recommend that funding for existing grant programs be enhanced to better support full funding for larger-scale projects.
- **Concentrate legislative appropriations.** Currently, large scale projects may receive funding support through legislative appropriations. If the practice of legislative appropriations is continued, we recommend that these investments be concentrated on high-cost projects that outstrip local and regional funding capacity. Projects should also be selected based on regional interest and assurances that full funding is achievable. Connecting Washington project appropriations to cities generally focused on partnerships to address high cost projects like Richland Duportail Bridge, a $40 million project in a medium-sized city.

Summary of Recommendations

The table below summarizes our recommendations, identifies whether new state resources or legislative action might be required for implementation, and assigns relative prioritization.

RECOMMENDATIONS	NEW STATE RESOURCES REQUIRED?	STATUTORY CHANGE REQUIRED?	RECOMMENDED PRIORITIZATION
Priority Recommendations			
1. **Increase support for preservation through new or focused funding, incentives, and services to reduce lifecycle costs.** ▪ Fund other entities to preserve the street systems of Micro cities and some Small cities at the lowest possible cost ▪ Increase funding and eligibility threshold for TIB preservation programs ▪ Incentivize investments by Large cities with a sliding scale match ▪ Explore using small dollar amounts of distributed revenue to collectively fund larger paving initiatives or buy seal coat services from counties or other cities	Highly desirable, though advances can be made through focusing existing funding	Yes	High *Investments in asset management reduce long-term costs*
2. **Provide better paths to reach full funding of large-scale local projects that outstrip local and regional resources.** ▪ Increase grant program resources ▪ Concentrate legislative appropriations	Yes	Yes	High *Funding for major projects is a critical gap*

RECOMMENDATIONS	NEW STATE RESOURCES REQUIRED?	STATUTORY CHANGE REQUIRED?	RECOMMENDED PRIORITIZATION
A. Local Funding Options: Enhance Existing Tools			
A1. Enhance existing Transportation Benefit District authority to increase non-voted vehicle license fees, remove the sales tax sunset, and create a new TBD utility tax option	No	Yes	High *Provides local flexibility; should be done concurrently*
A2. Increase flexibility and clarity of the local option Motor Vehicle and Special Fuel Tax	No	Yes	
A3. Create a local option Rental Car Sales Tax	No	Yes	
B. Efficiency: Work Together to Capture Greater Value			
B1. Rethink how to use federal funding most efficiently ▪ Collaborate before federal funds are allocated to be strategic in their use ▪ Establish a federal funding exchange program to allow local agencies to trade federal resources for state funds	Depends on approach taken. *Exchange option requires additional funding authority but is revenue neutral.*	Yes	High *Immediate efficiencies can be gained*
B2. Fine tune city responsibilities for state highways that function as main streets and streets that function as state highways ▪ Accelerate the population threshold or revisit the responsibilities for state highways as city streets ▪ Extend City Hardship Assistance Program to mitigate city street segments serving as state highways ▪ Reconsider how WSDOT recovers design review and approval costs from cities improving state highways to create a positive incentive	Yes	Yes	Medium

RECOMMENDATIONS	NEW STATE RESOURCES REQUIRED?	STATUTORY CHANGE REQUIRED?	RECOMMENDED PRIORITIZATION
B3. Collaborate across levels of government to achieve best systemwide outcomes ▪ Create a way to reimburse for and an expectation that local governments share equipment, commodities, and bidding to break down silos ▪ Foster policies, cultural expectations, and awareness of opportunities to enable small agencies to benefit from assistance and resources provided by the state or larger agencies ▪ Partner to develop a highly connected, safe and accessible nonmotorized system ▪ Encourage a coordinated watershed approach to addressing fish barriers	Yes	Depends	Medium
C. Programs: increase program support and collaboration			
C1. Facilitate access to pavement management systems to help cities make optimal investments	Yes	No	High *Asset management is cost effective*
C2. Incorporate measures in existing programs to encourage the full funding of projects	No	Yes	Medium

Contents

Exhibits

1.0 Introduction

1.1 STUDY PURPOSE

City streets are an essential and basic part of our transportation network, connecting Washington neighborhoods and communities, and supporting our economy. Altogether, cities are responsible for about 17,000 miles of streets and about 740 bridges, carrying some 26% of statewide traffic each day.

Washington cities spent $1.4 billion in construction, maintenance, and preservation projects in 2017, according to the Washington State Department of Transportation (WSDOT). Over the past five years, this has increased on average by over 5% per year adjusted for inflation. Most city transportation funding comes from local unrestricted sources, such as property and sales taxes, which compete with other local government needs. Cities also receive a distribution of the state's gas tax and multimodal fund revenues, may apply for competitive state grants, and receive a limited amount of federal funding.

Most Washington cities and towns face maintenance and preservation backlogs and lack adequate transportation revenues to meet these needs. The Washington State Legislature requested this assessment of transportation funding needs in Washington's 281 cities and towns. The purpose of this study is to understand city transportation funding sources and to assess and make recommendations for addressing funding gaps and future needs. The study was funded through an allocation of the city gas tax distribution.

Washington is not the only state looking at how to address local transportation needs

"Most of the 23 states which increased their own transportation funding sources since 2012 have failed to update the underlying policies governing the spending of those new funds. The distribution formulas for those funds are often relics of decades-old priorities that are out-of-touch with the new needs of increasingly diverse economies and demographics.

State legislators have a critical choice ahead of them: continue pumping scarce dollars into a complex and opaque system designed to spend funds based more on politics than needs, or… revise their policies to expand transparency and accountability, boost state and local economies, invest in innovation across the state, save the state money and improve safety for the traveling public."

Transportation for America, *Twelve Innovations in Transportation Policy States Should Consider in 2016*

1.2 STUDY PROCESS

A Staff Workgroup met six times over the course of the study to provide direction and feedback to the consultant team. This group included legislative staff, agency staff [Office of Financial Management (OFM), Transportation Improvement Board (TIB), and WSDOT], as well as representatives from Washington cities (Camas, Olympia, and Tacoma), the Association of Washington Cities, and the MPO/RPTO Coordination Committee.

The study team conducted RCW research to identify and describe **city funding responsibilities and sources**.

To **analyze revenues and expenditures** across all Washington cities, the study largely relies on city-reported aggregate level State Auditor's Office (SAO) and WSDOT data. These datasets have limitations due to differences in the number of cities reporting data in a given year and variation in the way that cities assign line item revenues or expenditures to the BARS system.

BERK worked with Perteet to **estimate future needs** by determining general street preservation costs and optimal pavement management cycles, as well as estimating bridge maintenance, replacement, and deferred bridge replacement costs. BERK then compared these estimated costs to actual local spending to **assess the funding gap.**

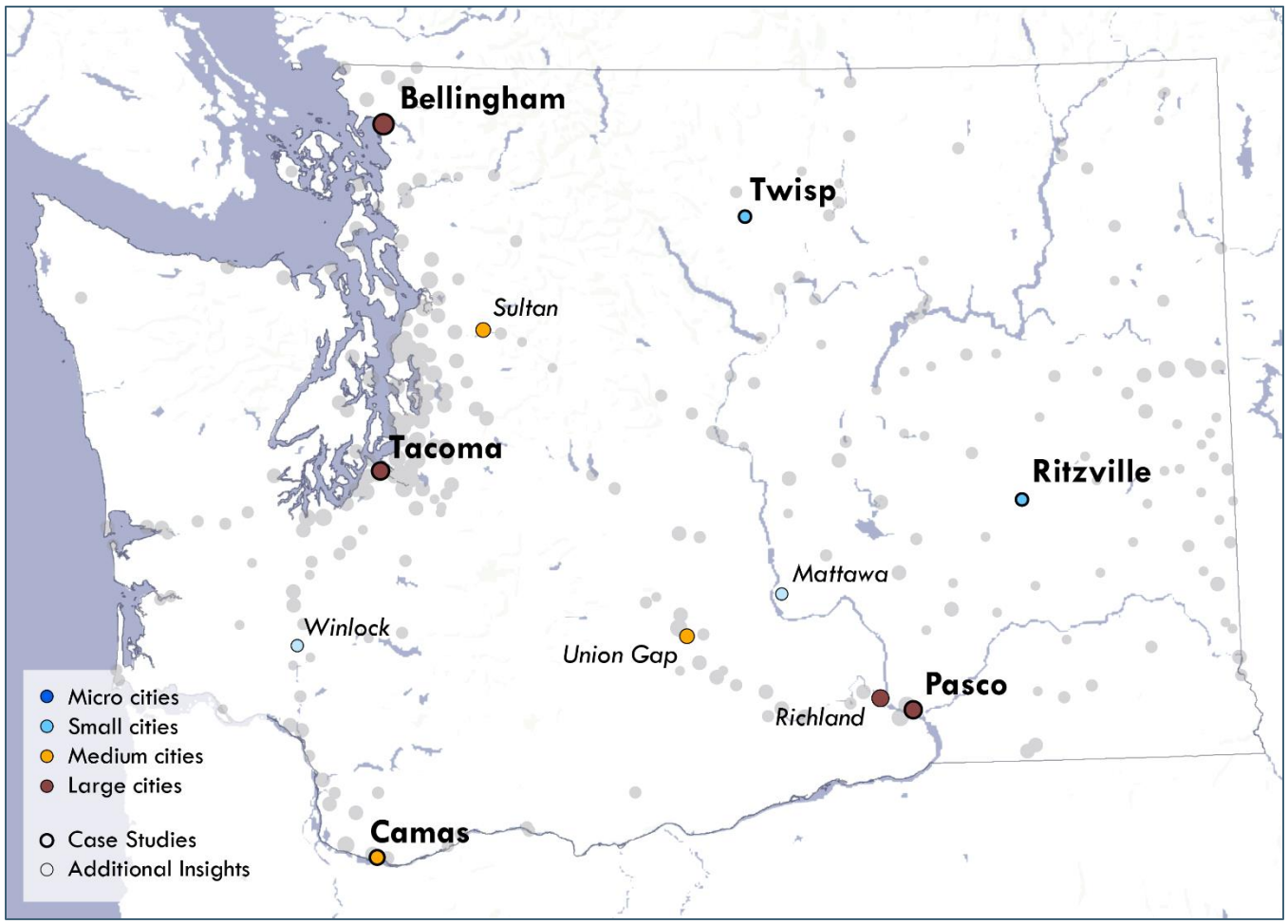
To supplement this data analysis, the study includes **six case studies** of cities across Washington (Bellingham, Camas, Pasco, Ritzville, Tacoma, and Twisp). The study team worked with the Staff Workgroup to identify cities that vary in characteristics and conditions and therefore reflect different responsibilities and challenges that any given city in Washington may face. The case studies inform this study's estimation of the funding gap and provide insight into costs of deferred maintenance and other city investments. Findings from these case studies are distributed throughout the report where appropriate, with full details in **Appendix C: Case Studies**. In addition to these in-depth case studies, we draw additional insights from the experiences or actions of other cities in a few places throughout the report. The location of these cities are shown in Exhibit 1.

The study team also researched practices of other states to inform recommendations.

Staff Workgroup Members

- Joint Transportation Committee
  - Dave Catterson and Paul Neal
- Association of Washington Cities
  - Logan Bahr and Brandon Anderson
- Washington State Department of Transportation, Local Programs Division
  - Kathleen Davis
- Washington State Office of Financial Management
  - Alyssa Ball
- Washington State Transportation Improvement Board
  - Ashley Probart
- Skagit County Council of Governments and MPO/RTPO Coordinating Committee
  - Kevin Murphy
- City of Camas
  - Steve Wall
- City of Olympia
  - Rich Hoey
- City of Tacoma
  - Josh Diekmann
- House Democratic Caucus
  - David Bremer
- House Republican Caucus
  - Dana Quam
- House Transportation Committee
  - Mark Matteson
- Senate Democratic Caucus
  - Hannah McCarty
- Senate Republican Caucus
  - Martin Presley
- Senate Transportation Committee
  - Bryon Moore

Exhibit 1. Locations of Case Studies and Additional Insights.



1.3 ORGANIZATION OF THIS REPORT

The remainder of this report is organized by the following chapters:

Chapter 2. **City Streets**. We first describe city street responsibilities within the context of the statewide transportation system.

Chapter 3. **Washington Cities**. We present a typology of Washington cities, which we use to analyze city transportation revenues and expenses.

Chapter 4. **City Transportation Revenues**. We describe how cities fund streets using federal, state, and local funds. We provide a general statewide framework for the distribution of state and federal transportation dollars to cities.

Chapter 5. **City Transportation Investments**. We describe city transportation investments, using aggregate-level data to summarize expenditure categories.

Chapter 6. **Funding Needs and Budget Gaps**. We estimate the total funding gap by 1) determining general street preservation costs and adapting ideal pavement management cycles, as well as estimating bridge maintenance, replacement, and deferred bridge replacement costs, and 2) comparing these estimated costs to actual spending.

Chapter 7. **Conclusions and Recommendations**. We provide recommendations to address the existing gaps and future needs. They include Guiding Principles, two Priority Recommendations, and three categories of additional recommendation. These are summarized in a table that identifies whether new state resources or legislative action might be required for implementation, as well as our recommended prioritization.

The following icons are used to designate insights gained from case studies and the experiences of other cities and states:

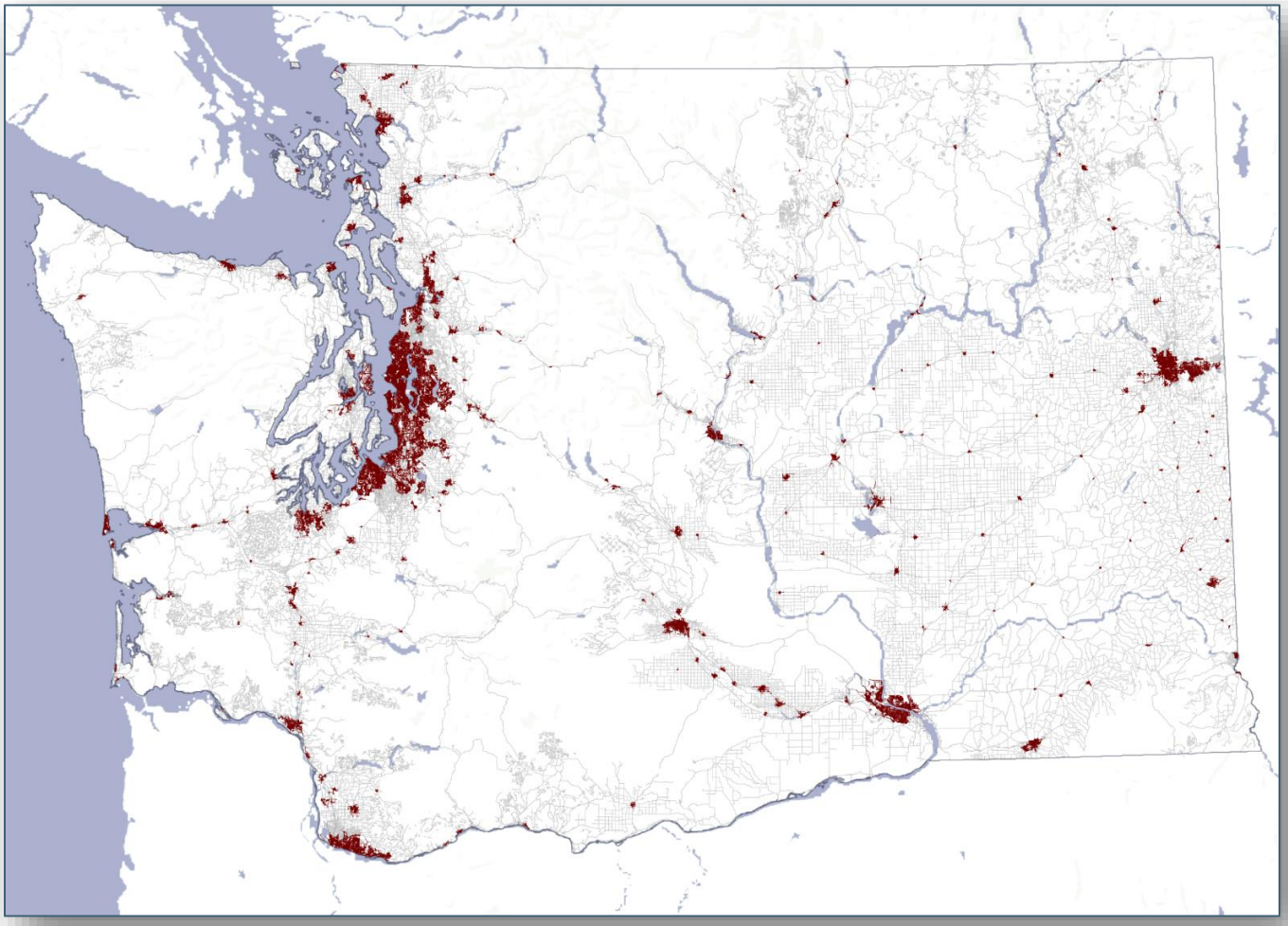
Case Study	
Additional Insight	
Other State	

2.0 City Streets

2.1 THE CITY SYSTEM

The roadway system of Washington serves a highly diverse area of 71,000 square miles from dense urban areas to rural farmland. The public highways, roads, and streets are owned respectively by the Washington State Department of Transportation (WSDOT), the 39 counties, and 281 cities and towns (hereafter referred to simply as "cities"). Generally, state statutes use "highway" or "state route" to refer to WSDOT owned facilities, "roads" to refer to the county road system, and "streets" to refer to city facilities. This report adheres to those definitions and uses "roadways" to refer to all three collectively.

Exhibit 2. City Streets



Source: AWC, BERK 2019.

Many of the urban cities are clustered around Seattle, the state's largest city, but nearly 60% are small cities with less than 5,000 population. Regardless of size, cities have a high degree of autonomy with their streets and, consequently, a high level of responsibility for ownership, liability, operations, maintenance, and improvement. The Highway Performance Monitoring System identifies just over 17,000

centerline miles of city streets with nearly 36,000 lane miles, about 27% of the system. (A mile of four-lane street accounts for one "centerline mile," but four "lane miles.")

Exhibit 3 summarizes the number of centerline and lane miles, vehicle miles traveled, and share of vehicle miles traveled by city streets, county roads, and state highways. Together, state highways, county roads, and city streets form a continuous system of more than 63,000 centerline miles of public roadways. There are also private roadways and other public roads serving special purposes like access to natural resource lands; these are not included in this study.

Exhibit 3. City Streets, County Roads, and State Highways in Washington

	CENTERLINE MILES	LANE MILES	SHARE OF SYSTEM	ANNUAL VEHICLE MILES TRAVELLED	SHARE OF VEHICLE MILES TRAVELED
City streets	17,100	35,800	27%	16,000	26%
County roads	39,200	78,700	59%	10,000	16%
State highways	7,100	18,700	14%	35,000	57%

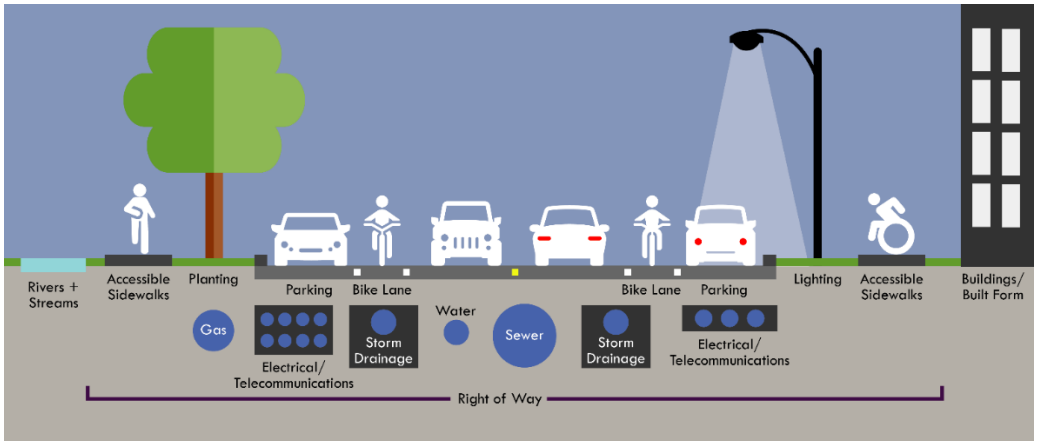
Source: WSDOT, HPMS 2017.

2.2 CITY RESPONSIBILITIES

The term "city streets" refers to something more complex than a simple section of striped pavement. City streets are increasingly multimodal, meaning they carry bikes and pedestrians, as well as cars, trucks, buses, and other modes of transportation. As discussed in **Section 6.4.1**, cities have long been responsible for making streets and sidewalks accessible under the Americans with Disabilities Act (ADA).

Additionally, city streets interface with both the built and natural environment. Interactions between streets and utility infrastructure, buildings with residential and commercial uses, and natural features such as trees and streams can create substantial management complexities.

Exhibit 4. A City Street



Source: AWC, BERK 2019.

The case study highlights below illustrate some of the complexities cities routinely face in managing their street systems. As described in the feature on Sultan on page 8, the interface between streets and utilities can create opportunities as well as challenges.

CASE STUDY HIGHLIGHTS: COMPLEXITY IN TRANSPORTATION INVESTMENTS

Multimodal goals.

Prioritizing multimodal goals without raising funding affects preservation work. In **Bellingham,** which prioritized mode-shifts to a highly connected pedestrian and bike network, street resurfacing is typically only completed when combined with a non-motorized project like adding a bike lane.

Environmental mitigation.

Cities incur additional costs to mitigate environmental impact. In **Twisp,** the town must hire an archaeologist to stand by during digging, which includes travel and accommodation costs. As part of environmental mitigation, cities may update fish passage barriers for new projects. They may also anticipate potential future requirements.

Right-of-way acquisition.

Some projects require cities to acquire land, which requires time and money. **Bellingham** is looking at signalized intersections and roundabouts. In **Camas,** the use of federal funds for right-of-way acquisition comes with many administrative requirements as discussed on page 77.

UTILITIES DRIVING STREET CONDITION: CITY OF SULTAN

Sultan has a strategy of using their utility replacement initiatives to leverage street preservation money from TIB to replace street surface following utility replacement. TIB grant criteria recognizes good utility condition, so the strategy is designed to increase successful grant pursuits. The pairing of utility repair/replacement with street resurfacing also reduces future pavement damage, creating lifecycle cost efficiencies. The connection with utility projects helped Sultan raise more than $6 million in TIB support since 2010 as shown below.

PROJECT NAME	PROJECT LIMITS	PROGRAM	FY	TIB FUNDS	TOTAL COST
Sultan Basin Road/ US 2	US 2 to Cascade View Drive	SCAP	2010	$592,407	$2,799,997
Sultan Basin Road	137th Pl SE to Hillcrest Baptist Church	SCAP	2014	$38,330	$302,149
High Avenue	1st Street to 4th Street	SCAP	2014	$547,910	$576,748
FY 2014 Overlay Project	Multiple Locations	SCPP	2014	$337,451	$355,213
Alder Avenue	5th St to 8th S	SCAP	2015	$71,925	$532,780
Date Avenue	4th Street to 150 feet east of 5th Place	SCAP	2016	$248,641	$277,240
4th Street and 5th Street	SR 2 to Alder Avenue	SCAP	2017	$471,578	$501,009
1st Street and 8th Street	High Ave/Willow Ave & High Ave	SCAP	2018	$867,610	$913,273
2017 Emergency Repair Project	Various Locations	SCPP	2018	$4,799	$5,052
3rd Street	US 2 to Cedar Avenue	SCAP	2019	$985,763	$1,037,645
				$6,660,537	**$12,239,550**

Note: SCAP = Small City Arterial Program. SCPP = Small City Preservation Program.

2.2.1 City Responsibilities for State Highways under RCW 47.24.

In addition to the maintenance, construction, and management of city streets and bridges, cities also have certain responsibilities for the operation and maintenance of surface state highways within their city limits. Cities are responsible for utilities and features outside the curb or travel lanes, including sidewalks.

The specific responsibilities for state highway maintenance are more complex than covered in statute, so WSDOT and the Association of Washington Cities maintain a Memorandum of Agreement to clarify each element of responsibility which was last dated April 2, 2013 and is slated for review in 2020. City responsibilities are greater for cities with population of more than 27,500 as shown in Exhibit 5. This responsibility threshold is scheduled to increase to 30,000 in 2023, 32,500 in 2028 and 35,000 in 2033. The State retains more maintenance and operating responsibilities for smaller cities.

Exhibit 5. City Responsibilities for State Highway Maintenance

CITY RESPONSIBILITY	STATE RESPONSIBILITY if population < 27,500 CITY RESPONSIBILITY if population > 27,500	STATE RESPONSIBILITY
▪ Street illumination ▪ Cleaning streets, catch basins, snow plowing, etc. ▪ Existing stormwater facilities ▪ Traffic and parking enforcement	▪ Slope stability ▪ Traffic control signals	▪ Roadway surface and shoulders ▪ Snow plowing authority when necessary ▪ Route markers, directional signs

Source: AWC, "Introduction to City Transportation Funding and Needs," January 2017.

CASE STUDY HIGHLIGHT: TWISP'S RESPONSIBILITIES FOR STATE ROUTE 20

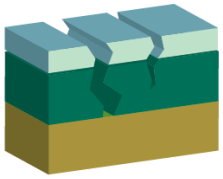
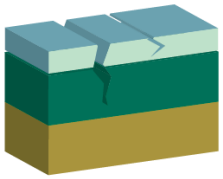
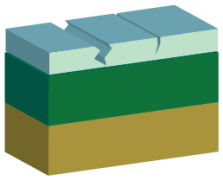
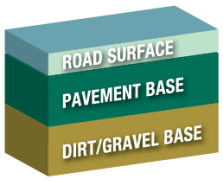
The Town of Twisp, population 975, maintains State Route 20 which runs through town and serves as its main street. Per RCW 47,24, as a community with fewer than 27,500 residents the town is responsible for street illumination; cleaning streets and catch basins; snow plowing; existing stormwater facilities; and traffic and parking enforcement. Twisp was funded by WSDOT's Pedestrian and Bicyclist Program to complete sidewalks on State Route 20. The Town is now working on three major projects trying to improve connectivity and it plans to complete the last segment in 2020.

2.3 ASSET MANAGEMENT

A foundational understanding of asset management is necessary to evaluate the best way to fund city investments in transportation infrastructure. Asset management is the practice of using a system-wide investment strategy to maintain and operate infrastructure. This practice adopts a long-term perspective that seeks to optimize investments over the full life of an asset. Asset management provides the data, planning, and performance targets necessary to maximize the value of individual projects, daily maintenance, and replacement, reducing the long-term costs of managing a category or portfolio of infrastructure. Holistic infrastructure planning provides a fact-basis for determining specific investments and ensuring lifecycle efficiency and continuous operational integrity. Failing to maintain the asset in a state of good repair often hides a passive acceptance of higher overall costs.

As a principle, asset management applies to many investments. For example, a roof needs to be maintained on a regular basis; without regular maintenance, it may eventually need replacement at a much higher cost. Similarly, for roads, failure to keep up with maintenance leads to increasing costs. **The cost of reconstructing a road is four or more times the cost of repairing it, and often higher.** Exhibit 6 illustrates the relative costs of pavement care at different points.

Exhibit 6. Descriptions of Pavement Lifecycle Conditions and Costs.

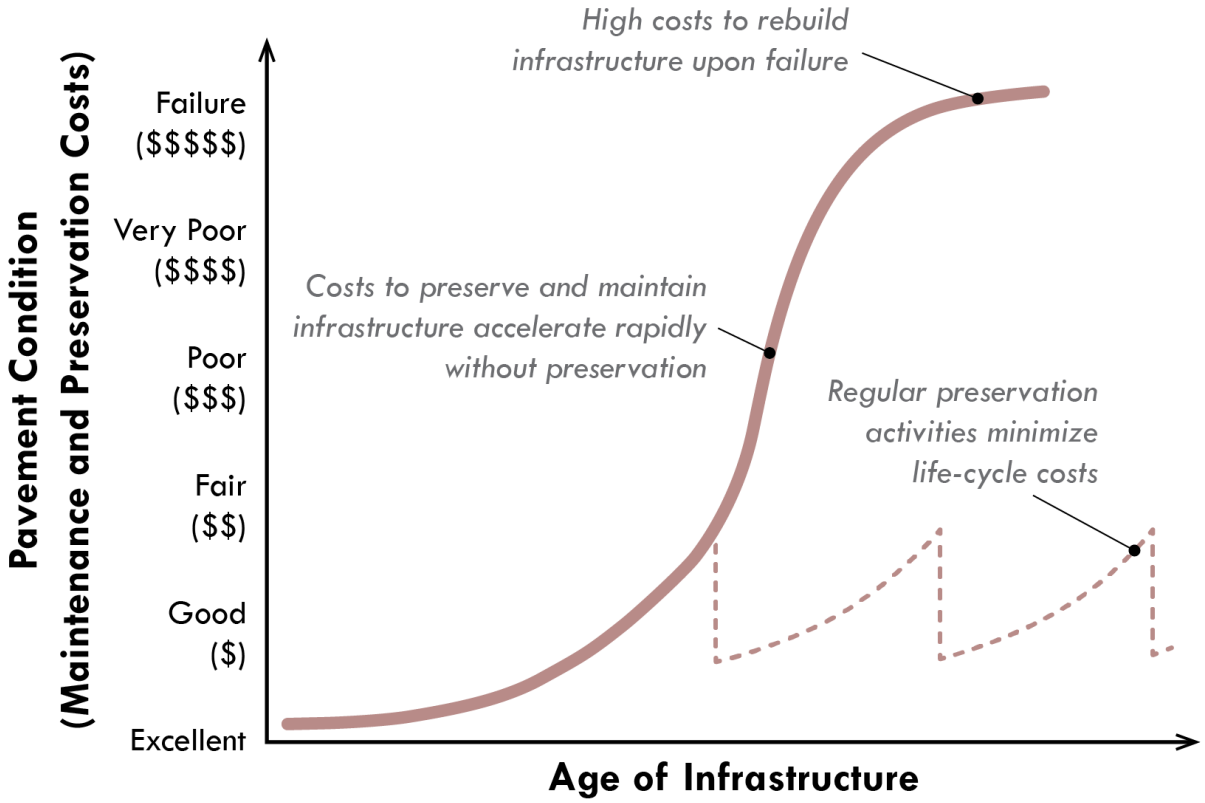
Pavement condition	
	**Failure** Deep pavement failure and expensive reconstruction required; reactive repairs necessary to remain functional **Cost: ~$4–5 million per mile**
	**Poor to Very Poor** Damage to underlying road structure; wear and tear on vehicles from road use
	**Good to Fair** Surface wear only; cost-effective to repair and preserve road surface before damage to the base **Cost: ~$1 million per mile**
	**Excellent** Minimal deterioration; road facilities in good repair

Sources: WSDOT Grey Notebook, December 2018; BERK, 2019.

Exhibit 7 illustrates this same concept over time, demonstrating that:

- Regular preservation activities minimize lifecycle costs.
- Costs to preserve and maintain infrastructure accelerate rapidly without preservation.
- Upon failure, cities face high costs to rebuild infrastructure.

Exhibit 7. Compounding Lifecycle Costs Over Time



Sources: O'Brien, "Evolution and Benefits of Preventive Maintenance Strategies," *NCHRP Synthesis 153,* 1989; as cited in from Federal Highway Administration, "Financial Planning for Transportation Asset Management: An Overview," February 2015; BERK, 2019.

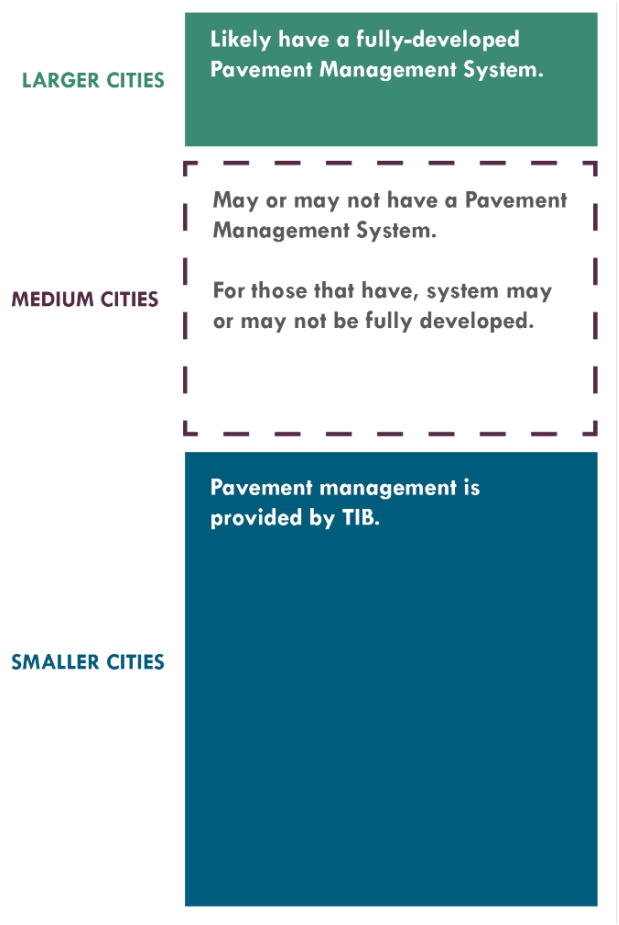
2.3.1 Asset Management Process and Current Practice in Cities

The asset management process collects data on infrastructure conditions and informs an action plan for consistent response to repair and replacement, preferably at optimal timing. Standards are set to define the desired condition, age, or operating efficiency of the infrastructure. Eliminating unplanned failure or higher than necessary restoration costs both maximizes level of service and limits costs.

Asset management requires trained staff, a robust data system, and sustained effort. Pavement rating, for example, must be updated on a regular two- to four-year basis. Pavement rating is one of the condition assessment methodologies of street system asset management. Pavement management assesses surface condition and plans for replacement and seal at the optimal lifecycle.

Currently, asset management practices vary widely by city, and many have no asset management practices. On one hand, most large and many medium-sized cities in Washington have pavement management systems; and on the other hand, TIB collects and uses pavement data for small cities with populations of 5,000 or less. Some cities above the TIB eligibility threshold do not have pavement management systems or the capacity to rate pavement as illustrated in Exhibit 8. This fundamental gap creates inefficiencies as cities lack the information they need to make smart investments in preserving their street network at the lowest possible lifecycle cost.

Exhibit 8. Gap in Cities Supported with a Pavement Management System



Source: BERK, 2019.

CASE STUDY HIGHLIGHT: TACOMA'S ASSET MANAGEMENT INITIATIVE

To reduce backlog of deferred maintenance, not just in streets but also in other areas, Tacoma staff are working on a new asset management initiative with two goals: 1) create a sustainable funding for maintenance, which will reduce the City's maintenance backlog, and 2) assist City Council in applying strategic thinking to investments in larger assets.

The initiative is in its early stages, and staff are researching best practices in other cities, as well as facilitating discussions with Councilmembers to examine funding options and develop a holistic approach to project investments. This involves viewing projects together, rather than in isolation, and acknowledging that investing in one area reduces the ability to make investments in other areas. This initiative currently focuses on public facilities, as this is a more visible asset class; it will then move onto other asset classes, including streets. The effort will include an annual report on the state of the City's assets to Council.

2.4 SUMMARY

City responsibilities for streets come with many considerations, including how to accommodate multimodal transportation goals, increase access for individuals with differing abilities, and smoothly manage the interface with the built and natural environments. As described in subsequent sections of this report, the combination of cost inflation and revenue constraints reduces the resources available for investment in asset management. When cities can't invest enough in preserving the existing system, lifecycle costs compound over time.

Proper asset management has many long-term benefits to cities, the state, and users of the transportation network:

- Asset management keeps infrastructure at an **optimal level of repair.** This benefits users and minimizes lifecycle costs.
- Streets without stable foundations must be upgraded beyond normal maintenance. With a more comprehensive picture of costs and needs, adopting an asset management practice makes asset investments more **cost-effective** in the long run.
- Asset management helps to **prioritize investments**, by allowing decision-makers to see the lifecycle of costs when deciding to invest in a project.
- The practice helps with **risk management** by enhancing the value of transportation assets and preparing for uncertainty, whether revenues, costs, or other contextual factors that may affect infrastructure or the ability to fund investments.

3.0 Washington Cities

When we consider responsibilities, funding, and strategies for investing in city streets, it is critical to recognize that this is a distributed system comprised of 281 separate and autonomous government entities, each with their own policies, strategies, practices, and systems. Not only is there no uniform funding structure or financial system, the underlying context for each is unique. Washington cities range in size and resources from Krupp, with a population of 50, to Seattle, with a population of 730,000.

This chapter first describes a typology to categorize and analyze Washington cities for this study. We then describe some of the common financial challenges faced by cities for as diverse as Washington cities are, many, if not all, struggle with some of the same constraints.

3.1 CITY TYPOLOGY

To support our initial aggregate data analysis, we created a simple typology to group Washington's 281 cities and towns. These groups do not capture the entire spectrum of variation in Washington cities and towns. The purpose of the typology is to create a framework to analyze the aggregate data, understand general trends in transportation revenues and expenses, and assess how potential areas of support might vary across city type. A detailed methodology and list of cities in each group is in **Appendix A: City Typology**. The typology is based on four characteristics:

- **Total length of the local road network**, defined as the total centerline length of all roads within a city that are under its jurisdiction; used as a proxy for the scale of the local transportation network.
- **Total assessed property value**, which is the sum of the total value of assessed real property in the city, including residential and non-residential land and improvements, used as a proxy for local community resources.
- **Total population**, with a focus on whether the population is over or under 5,000, which is used to indicate communities that may be managed differently under state policy.
- **Assessed property value per capita**, identifying communities with relatively lower or higher potential resources.

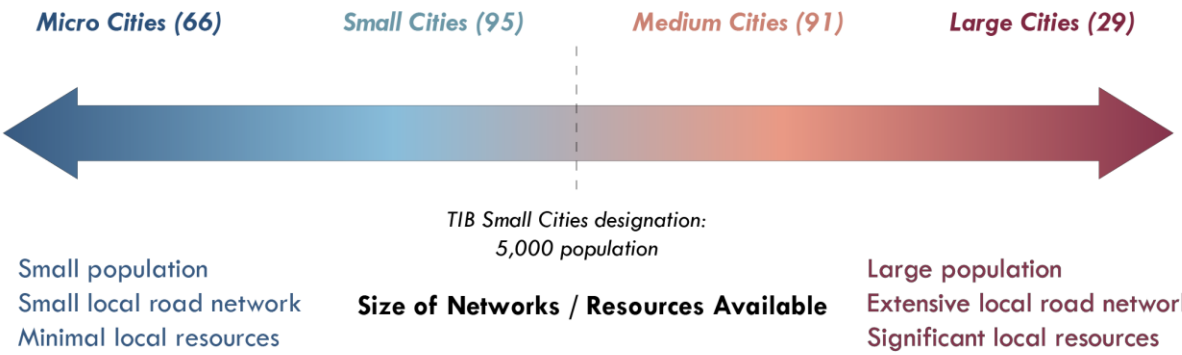
Based on these characteristics, the four groups are identified as follows:

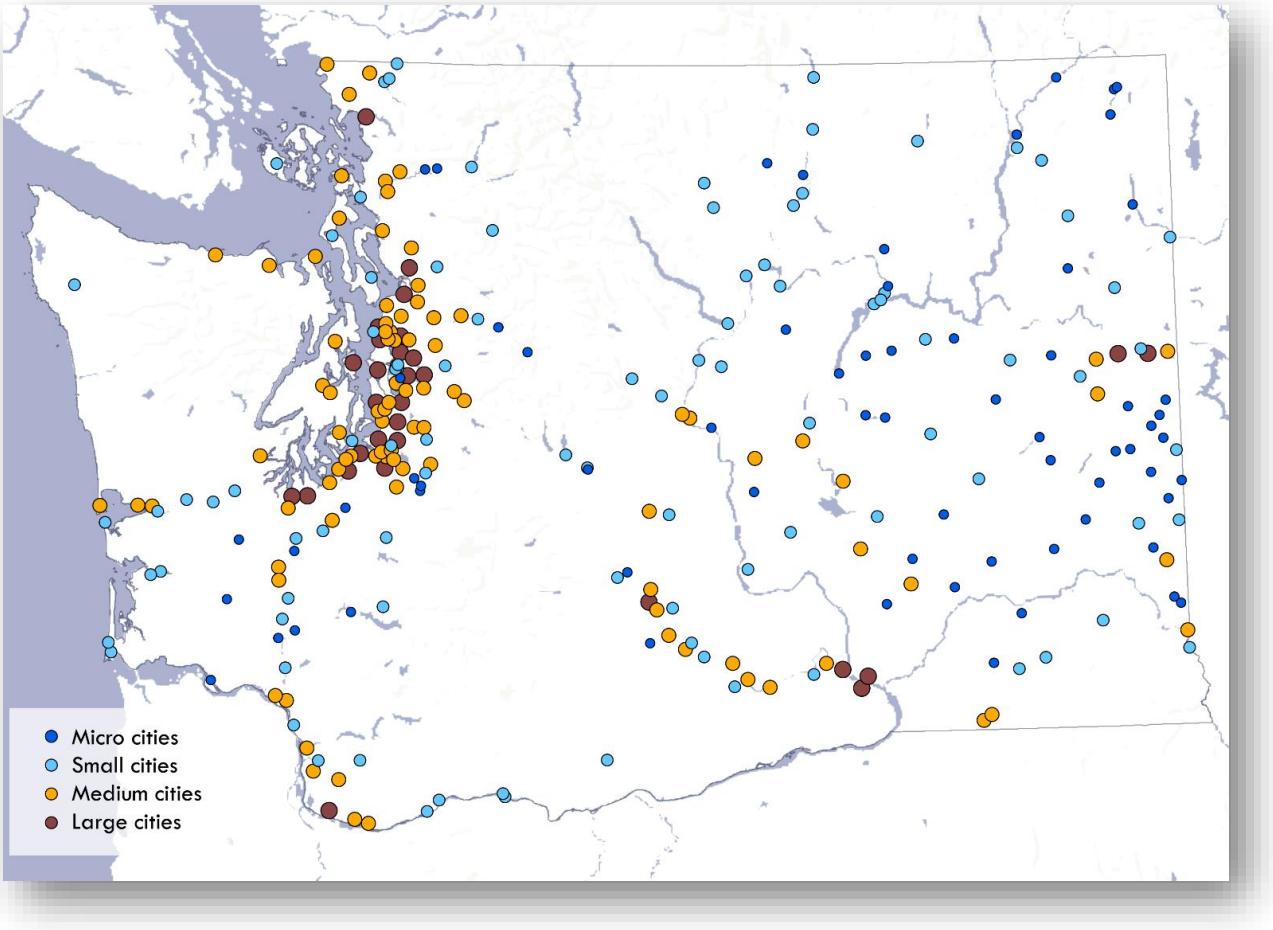
- **Micro cities**: Micro cities in the typology represent communities with the smallest street networks and local resources among cities in the state. These communities likely need support not only to maintain the integrity of their local road system, but also for administrative and organizational capacity.
- **Small cities**: Small cities include jurisdictions between groups 1 (micro) and 4 (large) that had populations of less than 5,000 in 2018. These communities are eligible for support from state programs such as TIB Small City programs but may have sufficient local resources to support minor maintenance and system integrity activities.
- **Medium cities**: Medium cities include those jurisdictions between these groups that have populations greater than 5,000. These communities generally have more resources and capacity available versus their smaller counterparts to support maintenance, preservation, and limited capital investment. However, they may not have access to the types of funding support available to smaller cities.

- **Large cities**: Large cities are communities with considerable resources and capacity, and extensive local street networks and other transportation facilities. They can support local maintenance, presentation, and capital investment, although larger capital projects may require additional external support.

Exhibit 9 provides a conceptual illustration of the typology, as well as a map showing the distribution of cities by type across Washington.

Exhibit 9. Typology of Washington Cities for this Study





Source: BERK, 2019

Cities vary by other community characteristics, such as high-growth communities, rural centers, or eastern versus western Washington communities. They also vary by local responsibilities, including communities with state highways as main streets, communities with significant bridge responsibilities, and those that are major regional corridors. We further explore how these characteristics may affect a city's transportation capacity and needs as part of our in-depth case studies. The experience of another city – Union Gap – presented at right provides one example.

The Impact of a Commute Corridor and Swells in Daytime Population: Union Gap

The City of Union Gap is a freight corridor and shipping corridor for West Yakima County. Union Gap does not have any surface state highways or right of ways through town. All the streets are the City's responsibility to build and maintain.

Union Gap is a job provider in Yakima County, and in 2017, issued building permits for $75 million valuation of new development and created 600 new jobs. The City has a nighttime population of 6,200 but experiences a daytime population 30,000. This means that the city experiences a significant amount of regional traffic on roads, including around 2,000 trucks passing through each day.

The high daytime population impacts City resources including emergency services costs and parks costs. The regional park in Union Gap serves the state, and the city holds three large soccer tournaments a year in its 17 soccer fields.

With limited resources, trying to invest in arterials as well as getting local access is a challenge. State gas tax distributions are allocated per capita based on the nighttime population; they do not directly support the daytime traffic. The City already dedicates 10% of its property tax and 10% of retail sales and use tax revenues to street operations and maintenance, as well as 10% of its retail sales and use tax to transportation capital. Still, completing capital projects depends largely on TIB and state and federal grants.

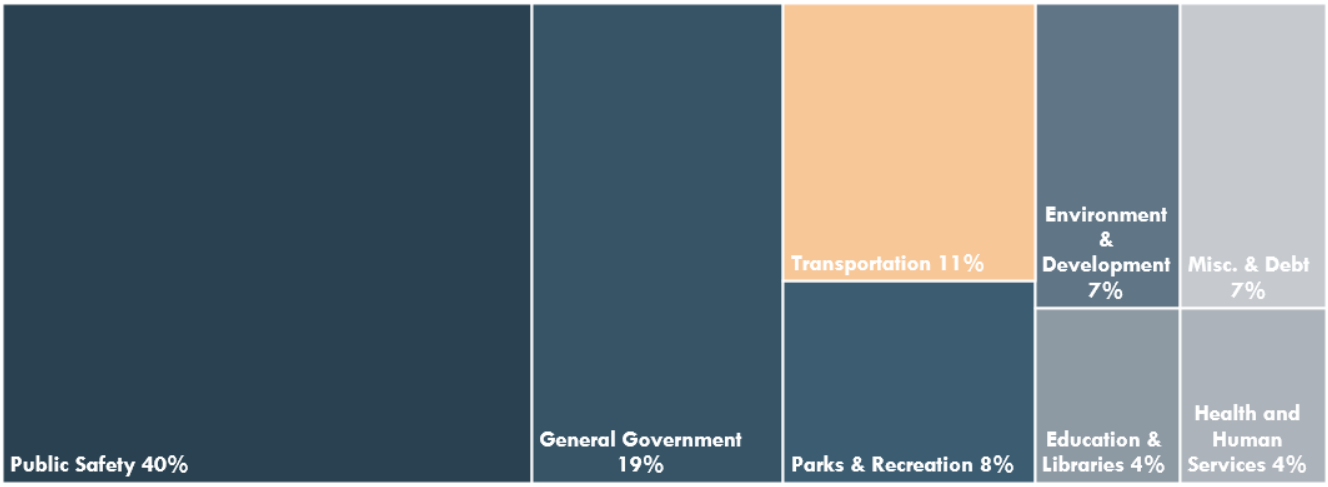
Policymakers tend to view the city's population as the nighttime population of 6,200, rather than the daytime population of 30,000. Following many conversations between City Council and transportation staff, members are starting to view the community as larger than the nighttime population. Union Gap's City Council holds four meetings per month: two study sessions and two Council meetings. During the study sessions, transportation staff discuss funding and prioritization with Council members, and this has generated ongoing conversation about needs in the community.

3.2 CITY FINANCIAL CHALLENGES

Governments exist to provide a system of order in a country, state, or local community and to provide goods and services that the market cannot or will not provide.[2] Washington cities and towns are political subdivisions in Washington, organized under Washington law. Cities derive their powers from Article XI of the Washington State Constitution, concerning County, City, and Township Organization. The general state law governing cities and towns is set out in title 35 RCW and with limited exceptions applies equally to all cities and town.

Transportation is just one of many services provided by cities. Cities provide a broad range of local services and allocate resources based on community needs and demands. Examples of local services include public safety service like fire, police, and emergency services as well as municipal court systems; local parks and recreation services; land use planning, zoning, and development services; transportation; health and human services; and libraries. The largest share of local costs is related to public safety (Exhibit 10).

Exhibit 10. City Expenditures in Washington, 2017



Note: Restricting analysis to the General Fund and Special Revenue Fund Expenditures removes debt service, capital projects, enterprise, and permanent funds.
Source: SAO LGFRS 2017, General Fund and Special Revenue Fund Expenditures; BERK 2019.

The primary local revenues that cover cities' operating costs are property tax, sales tax, and business and occupation taxes – including utility taxes. These revenue sources are *unrestricted*, and many city services compete for funding from these resources.

Growth of property tax, a key revenue source for cities in Washington, is capped. Pursuant to state law, enacted through voter initiative and later passed by the legislature, a city's property tax levy can grow by no more than 1% plus the value of new development each year. The result is that growth in revenue from cities' most important and stable tax source has generally lagged the rate of inflation. This creates a structural gap between the cost of providing services, which grows at inflation (typically ~3%/year),

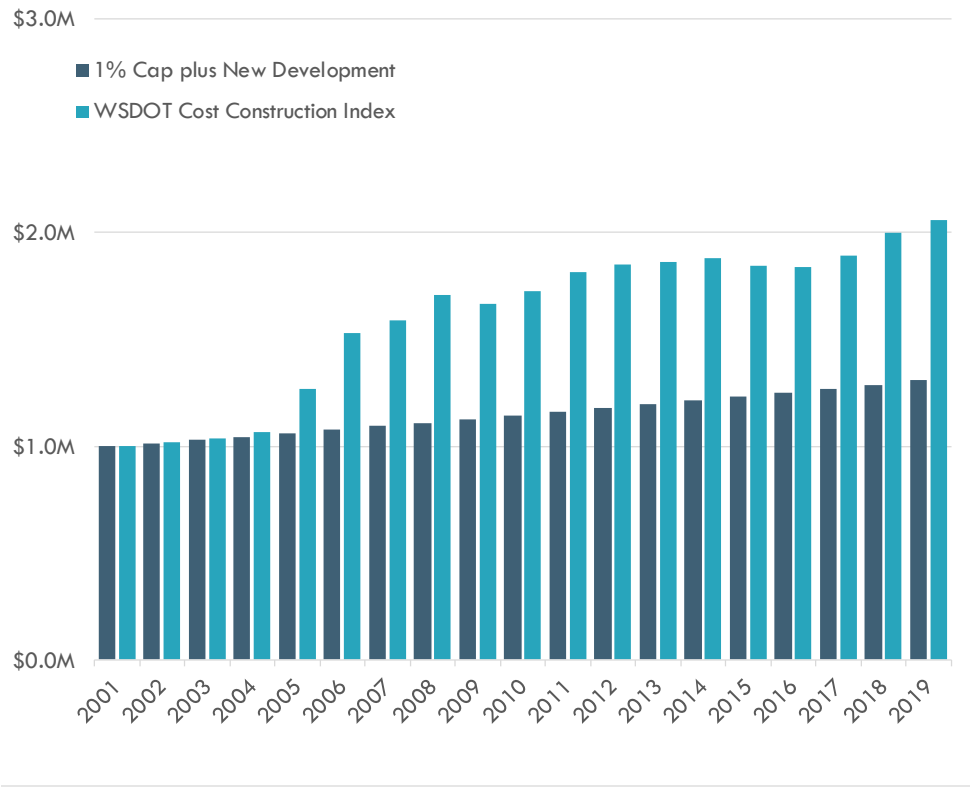
[2] Among many others, see Paul A. Samuelson, "The Pure Theory of Public Expenditure," *Review of Economics and Statistics* 36.4 (1954)): 387-389.

and the revenue available to pay for those services which typically grows at 1.5% each year.

Transportation costs often grow at a faster pace than the Consumer Price Index. As a result, each year, cities have less purchasing power for transportation related projects.

Exhibit 11 illustrates how property tax revenue has grown compared to transportation construction costs. The example uses a city with $1 million in property tax revenue and construction costs in 2001. By 2019, the city's construction costs have grown to $2.1 million, while their revenues have been restricted to $1.3 million, creating a gap that must be funded through other sources.

Exhibit 11. Comparison of 1% Property Tax Levy Cap to Construction Cost Index



Note: Chart is for illustrative purposes only. Property Tax increases are limited to 1% plus the value of new development. This chart assumes a 1.5% growth rate to account for this. WSDOT Cost Construction Index is provided by WSDOT and is based on Global Insight's forecast.
Source: WSDOT Cost Construction Index, 1st quarter 2019 March 2019; BERK 2019.

In addition to this structural gap between revenues and demands on cities, there is a potential misalignment of local resources and investment needs. In other words, the underlying tax base and wealth base oftentimes don't match the transportation infrastructure needs. An illustration is provided from our **Twisp case study** featured on the following page.

CASE STUDY HIGHLIGHT: LOCAL FUNDING IN TWISP

Local funding tools have limited fund-raising capacity in small communities.

The Town of Twisp has nine road miles and a population of 975 people. Its annual transportation budget is around $190,000. The town receives around $22,000 annually from state direct distributions (the Motor Vehicle Fuel Tax and Multimodal Fund distributions).

In 2017, the town passed a voted Transportation Benefit District 0.2% sales tax with a 72% pass rate. This was a huge statement, indicating that community members see transportation as a priority and are willing to pay for it. But local funding tools have limited fund-raising capacity in small communities: the TBD sales tax generates around $50,000 a year.

Because the state direct distribution and TBD do not generate enough revenue to support transportation needs, the town also dedicates 35% of its property tax to transportation (around $67,000 a year). Still, despite both political will and community support, the town relies on state and federal resources to bring transportation projects across the finish line.

4.0 City Transportation Revenues

On average, between 2011 and 2017, total city transportation revenues were around $1.9 billion per year in 2018 dollars. These revenues come from a variety of federal, state, and local sources. This chapter analyzes this mix at an aggregate level (**Section 4.1**), and then describes state, federal, and local funds in more detail (**Sections 4.2, 4.3, and 4.4**). **Appendix B: City Transportation Funding Sources** provides additional information on funding sources from each level of government.

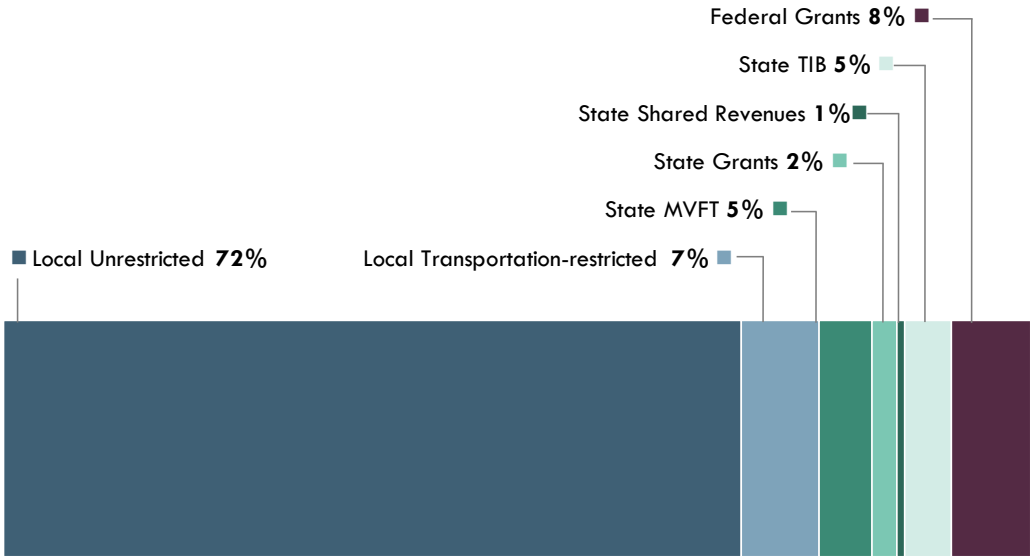
State, federal, and local resources can be either restricted or unrestricted, depending on whether they come with stipulations about what they may be spent on. The city street fund is a required element of municipal budgets,[3] which isolates street funds in a restricted account and ensures they are used according to statute.

Certain revenues are restricted to specific purposes by state law or program requirements. For example, State constitution limits the use of motor vehicle fuel tax (MVFT) to highway purposes.[4] Other specific funds used to assemble the city street fund are also restricted to transportation purposes, with purposes varying depending upon authorizing language. Others may only be used for capital improvements, in some cases restricted to a specific project.

4.1 CITY TRANSPORTATION FUNDING ANALYSIS: OVERALL MIX

Exhibit 12 shows the breakdown of city transportation funding across these general revenue categories. The chart shows an average from 2012 through 2017 of aggregated WSDOT data across all 281 Washington cities and towns. **Local transportation sources make up 79%** of all city transportation funding, while **state transportation sources provide 13%**, and **federal sources provide 8%.**

Exhibit 12. City Transportation Funding, 2012-2017 Average

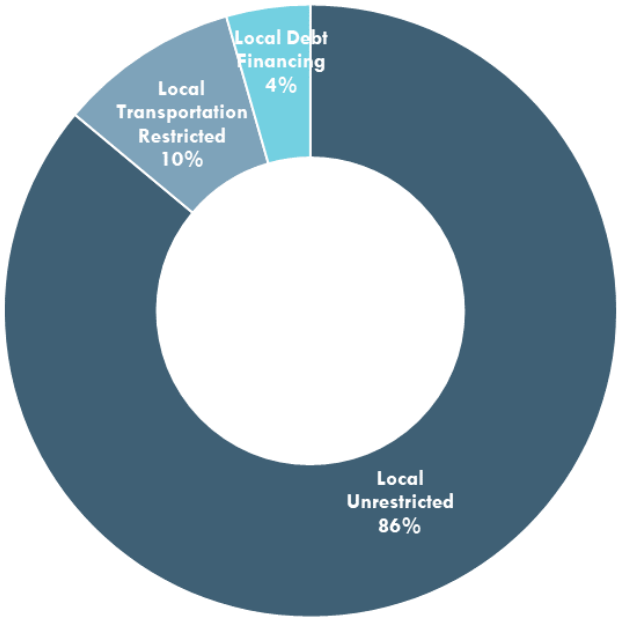


Note: Data presents a six-year average for 2012-2017.
Sources: WSDOT City Streets and County Roads Dataset, 2012-2017; BERK, 2019.

[3] 47.24.040 RCW
[4] Art. II, Section 40, 18th Amendment, Highway Funds

Of the 79% of funding that comes from local resources, **86% is unrestricted**, as shown in Exhibit 13. Unrestricted funds are not restricted to transportation, which means that this funding competes with other local needs and may vary based on city priorities or context in a given year.

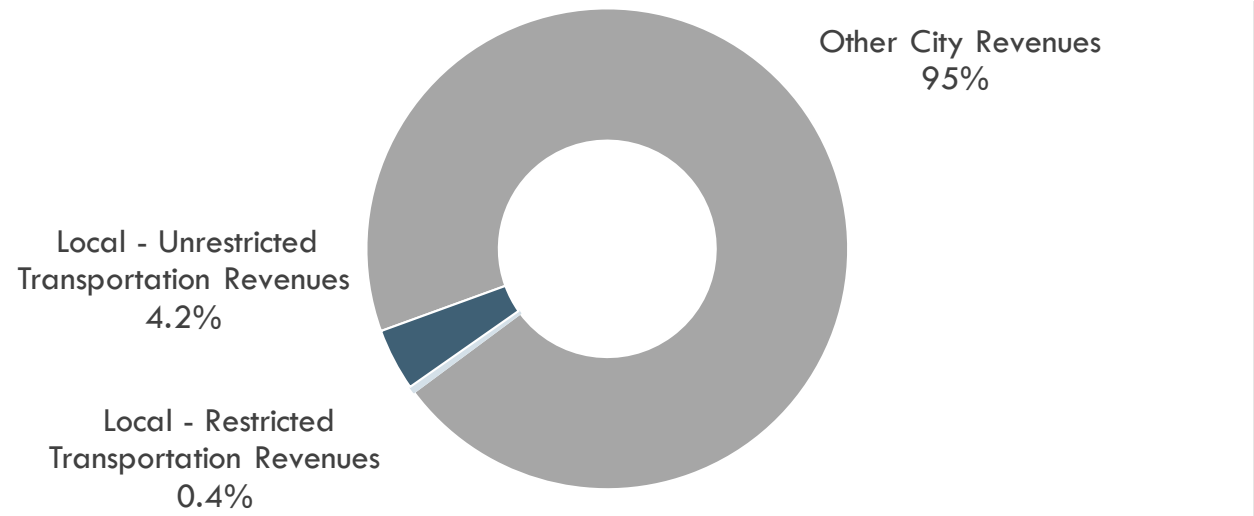
Exhibit 13. City Investment in City Transportation Funding



Note: Data presents a six-year average for 2012-2017.
Sources: WSDOT City Streets and County Roads Dataset, 2012-2017; BERK, 2019.

In the context of all city revenues, local transportation funds make up about **5%** of all city revenues, with around 4.2% coming from unrestricted revenues and just 0.4% coming from restricted transportation revenues. This is shown in Exhibit 14 below.

Exhibit 14. City Transportation Funding and All City Revenues, 2012-2017 Average

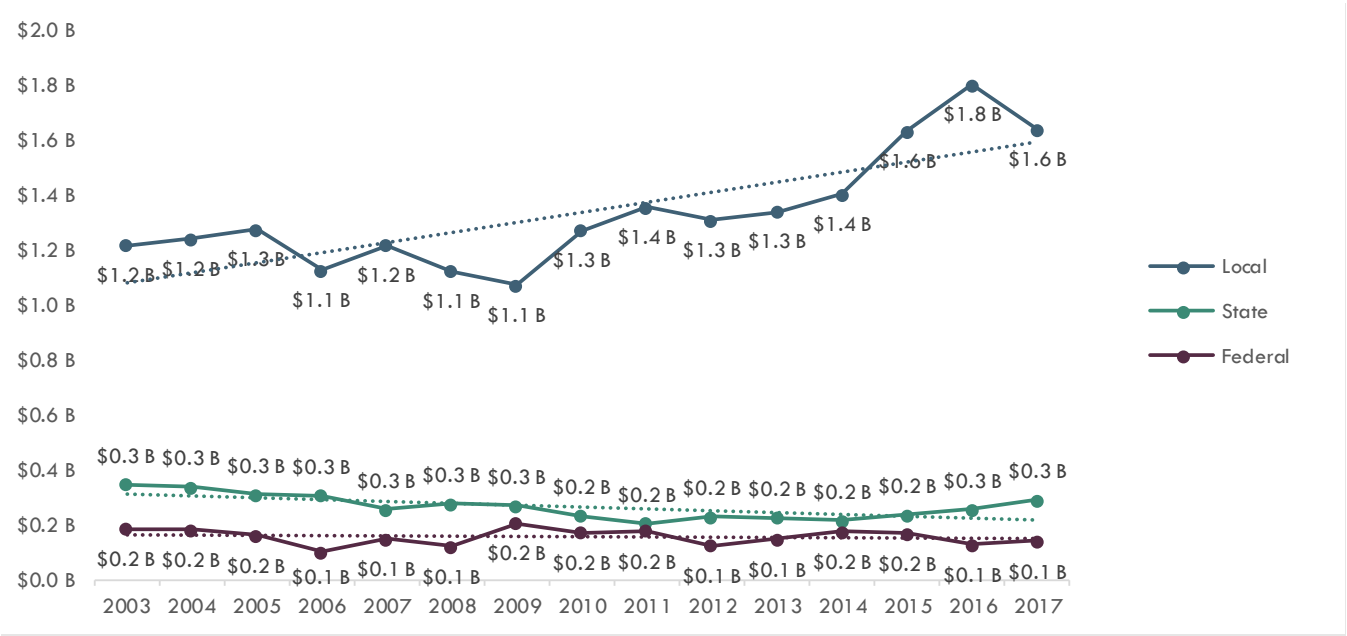


Note: Data presents a six-year average for 2012-2017.
Sources: SAO Local Government Financial Reporting System, 2011-2016; WSDOT City Streets and County Roads Dataset, 2012-2017; BERK, 2019.

Overall city transportation expenditures have increased over the last 15 years, but locals are carrying most of that additional burden. While local investment has increased, state and federal funds have remained relatively constant, and cities have relied on local funds to fill increasing needs.

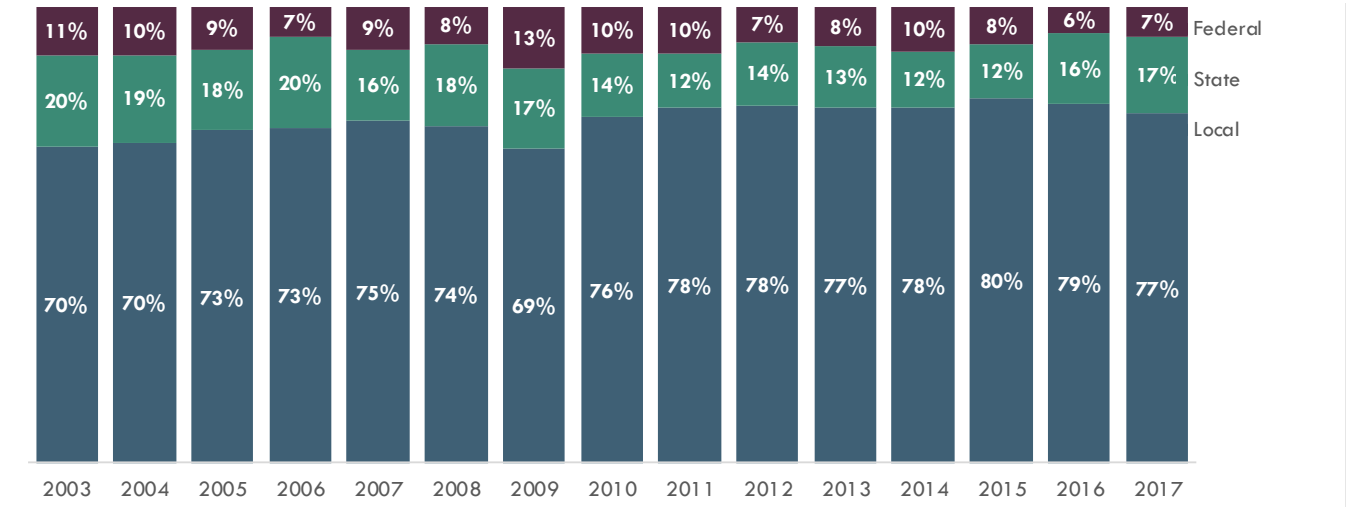
Exhibit 15 shows the changes in actual federal, state, and local city transportation revenues over the last 15 years in construction-adjusted 2018 dollars. Exhibit 16 shows the relative distribution of federal, state, and local funding over this time period.

Exhibit 15. Federal, State, and Local Transportation Revenues Adjusted for Construction Inflation (2003-2017)



Note: Adjusted using WSDOT March 2019 Cost Construction Index, created by WSDOT from Global Insights Construction forecast.
Sources: WSDOT City Streets County Roads Merged History, 2003 – 2017; WSDOT Cost Construction Index, March 2019; BERK, 2019.

Exhibit 16. Federal, State, and Local City Transportation Revenues as a share of total (2003 – 2017)



Sources: WSDOT City Streets County Roads Merged History, 2003 – 2017; BERK, 2019.

Transportation revenue sources vary by city type. Exhibit 17 shows the breakdown of revenue sources by the four city types. This shows an average from 2012 through 2017 of aggregated WSDOT data across each typology of Washington cities and towns.

Exhibit 17. City Transportation Revenues by City Type, 2018 dollars, 2012 –2017 Average

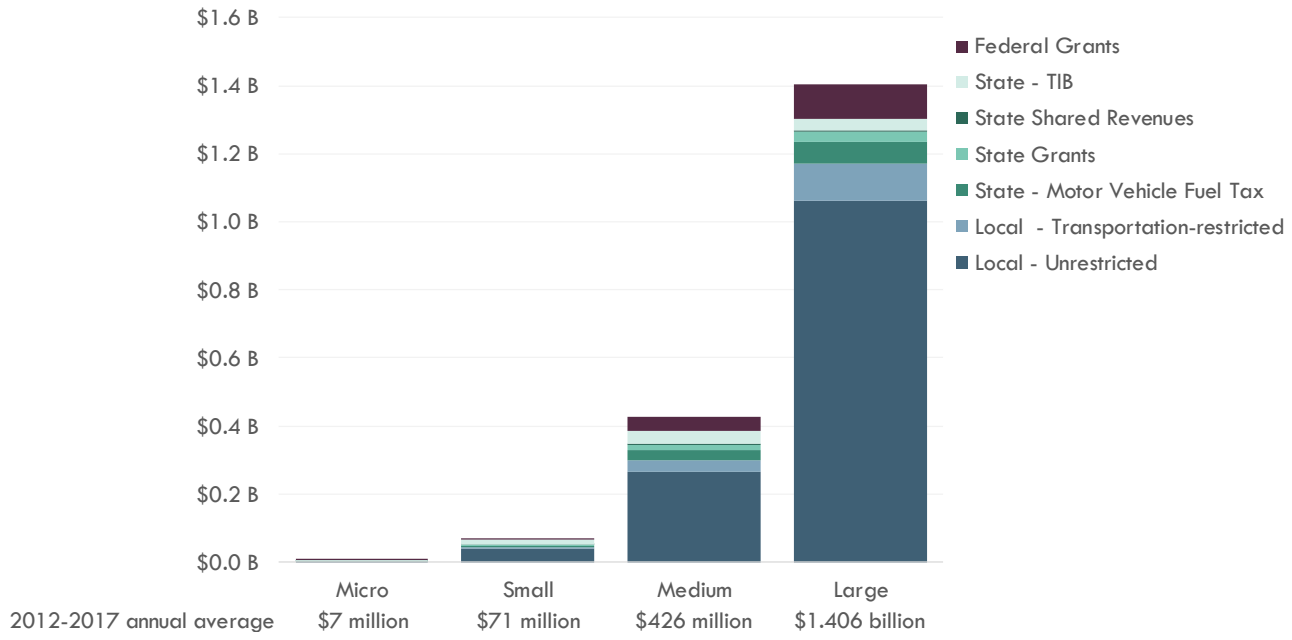
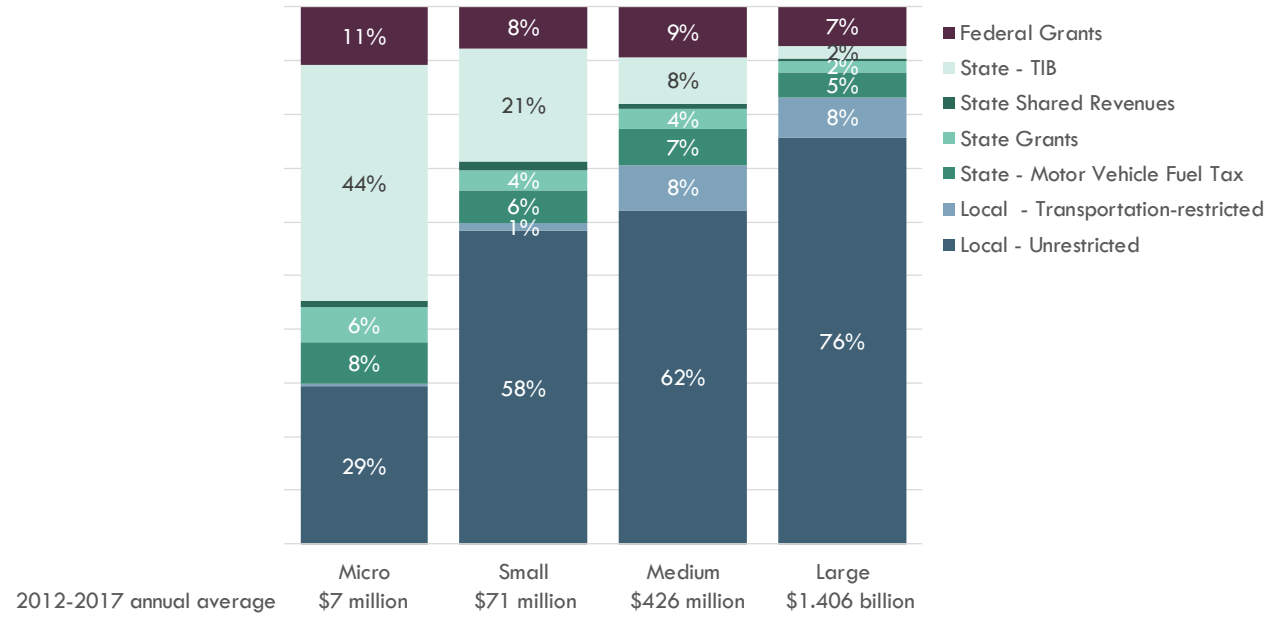


Exhibit 18. City Transportation Revenues by City Type, 2018 dollars, 2012-2017 Average



Notes: All numbers rounded. Data presents a six-year average in 2018 dollars for 2012-2017.
Sources: WSDOT City Streets and County Roads Dataset, 2012-2017; BERK, 2019.

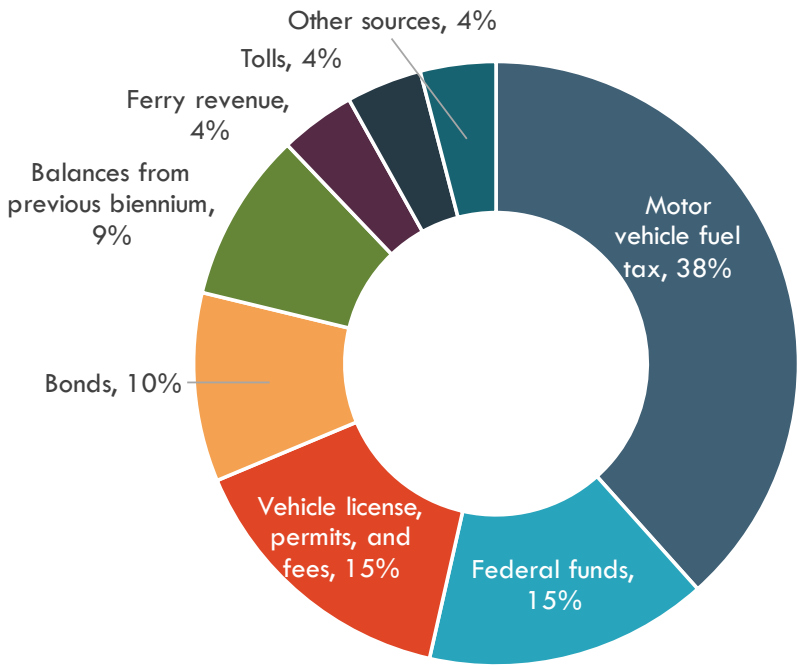
These exhibits point to some trends:

- **Micro cities have a larger share of revenues coming from State TIB grants.** These cities rely heavily on these grants to support transportation funding.
- **As cities grow in size, a larger share of their revenue comes from local unrestricted sources.** These unrestricted sources compete with other city priorities.
- **Micro and small cities may also have limited unrestricted sources available.** This could be due to population, geography, economic opportunities, and/or their ability to collect these revenues.

4.2 STATE FUNDS

In the 2017-19 biennium, the State received **$9.6 billion** in transportation revenue. Revenue sources that fund the State transportation budget are shown in Exhibit 19. **38%** of revenue came from the gas tax and **15%** came from federal funds. This is followed by vehicle licenses, permits, and fees; bonds; balances from the previous biennium; ferry revenue; tolls; and other sources (which includes car tax, vehicle sales tax, and local funds).

Exhibit 19. State Transportation Budget Revenue Sources, 2017-2019

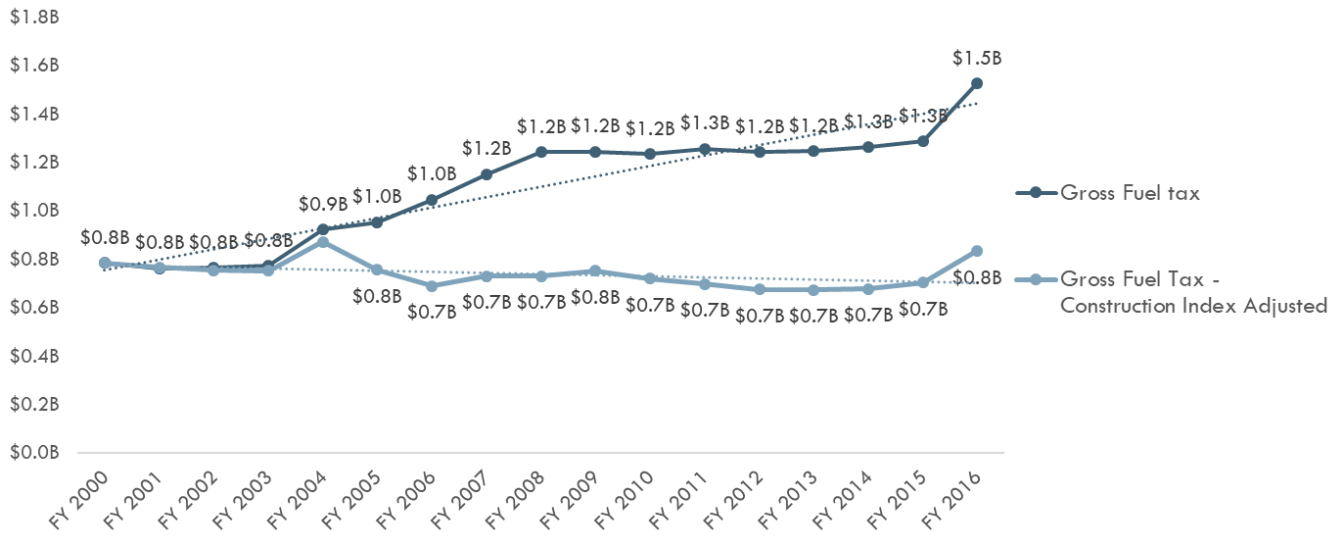


Note: "Other" refers to rental car tax, vehicle sales tax, and local funds.
Sources: JTC Transportation Resource Manual, 2019; BERK, 2019.

Not all revenue generated in 2017-19 is appropriated in the same budget biennium. The 2017-19 State transportation budget, including the 2018 Supplemental, appropriates a total of **$9.34 billion**, 52% for capital and 48% for operating purposes. This funding is distributed to state agencies, with WSDOT receiving **$6.46 billion** and the rest distributed to Department of Licensing, Washington State Patrol, JTC, House, Senate, and other state agencies. This does not include direct distributions per statute (MVFT and Multimodal Funds).

Like cities, **the State also faces many competing priorities.** The gas tax is a key revenue source, as seen in Exhibit 19. Gas tax collections have been challenged to keep up with construction inflation as shown in Exhibit 20.

Exhibit 20. Gas Tax Collections, Gross and Construction Index Adjusted, 2000-2016



Note: Gross Fuel Tax - Construction Index adjusted using WSDOT March 2019 Cost Construction Index created by WSDOT from Global Insights Construction forecast.
Source: WSDOT CSCR Merged History, 2003 – 2017 and WSDOT Cost Construction Index, March 2019.

According to the Transportation Revenue Forecast Council's March 2019 Summary, gas tax collections are below forecasts due to lower fuel consumption. The State has been looking into potential alternatives to the gas tax and completed a one-year road usage charge pilot project in early 2019.

Exhibit 21 summarizes the flow of state and federal transportation dollars to cities in Washington.

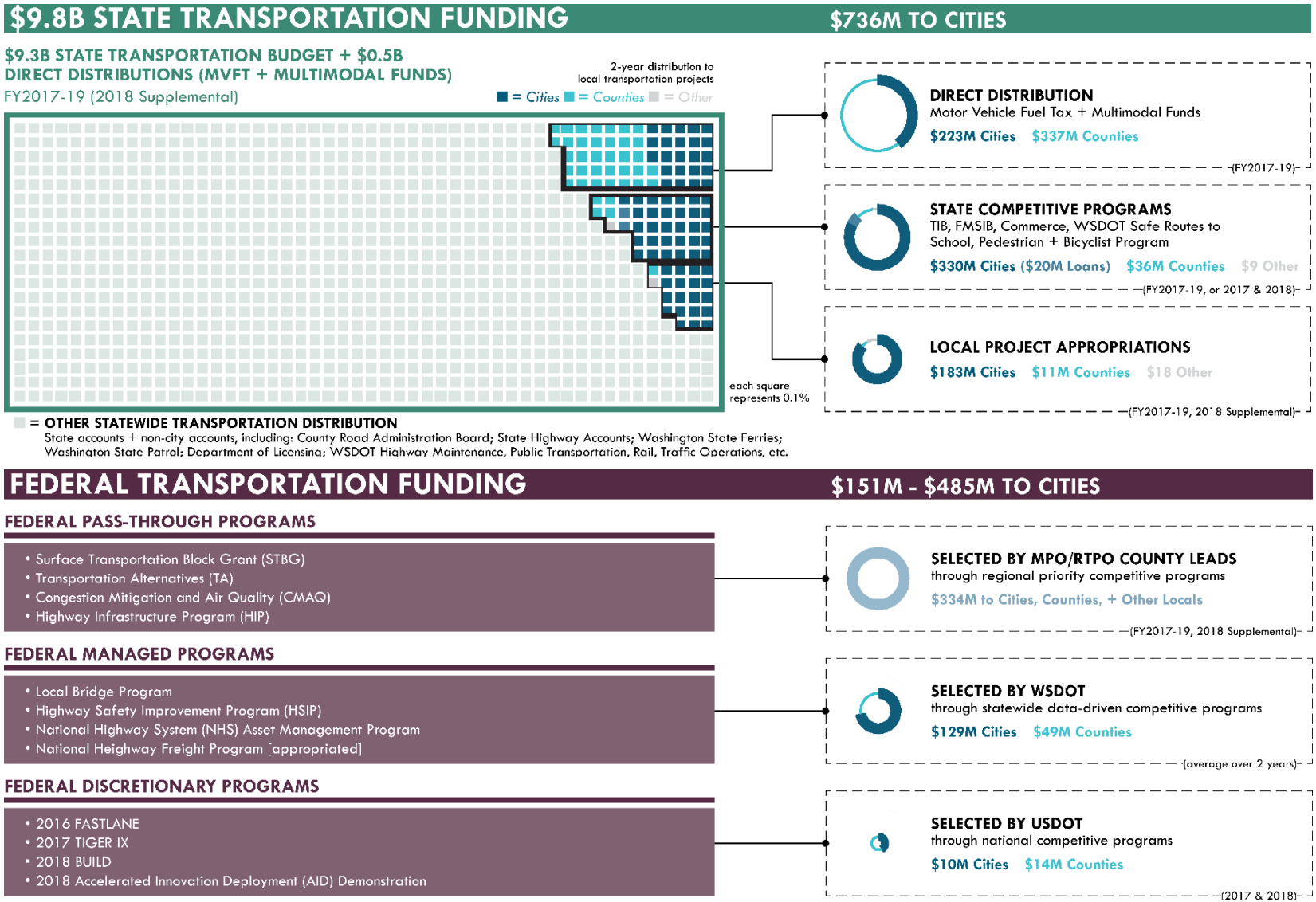
National Context: Looking for New Transportation Funding

Across the country, states are looking for new ways to fund transportation. According to the American Road and Transportation Builders Association, over 30 states have enacted increases in transportation funding since 2012.[5] In 2017 alone, states approved over $69 billion in new transportation funding. Below are some of the actions that states took in 2017 to raise transportation funding:[6]

- Seven states raised gas taxes (California, Indiana, Montana, Oregon, South Carolina, Tennessee, West Virginia).
- Ten states approved new fees for electric and/or hybrid vehicles.
- Colorado, Idaho, New Hampshire, Utah, and Wisconsin approved one-time transportation funding.
- Utah modified its gas tax formula to allow for more robust growth.
- Wyoming increased vehicle registration and other feeds.
- California, Oregon, and Washington are exploring potential mileage-based user fees.

[5] Council of State Governments, January 2018, http://knowledgecenter.csg.org/kc/content/top-5-issues-2018-transportation-infrastructure-states-seeking-transportation-funding.
[6] Council of State Governments, January 2018, http://knowledgecenter.csg.org/kc/content/top-5-issues-2018-transportation-infrastructure-states-seeking-transportation-funding.

Exhibit 21. Flow of State and Federal Transportation Dollars to Cities



Notes: Direct distribution and local project appropriations include Connecting Washington. TIB, FMSIB, Commerce grants/loans are based on projects awarded in 2017 and 2018. Direct distributions, local project appropriations, and WSDOT grants are based on FY2017-19 biennium. Safe Routes to School is funded by approximately 60% federal, 40% state funds. Pedestrian and Bicyclist Program is funded by state funds. Does not include funding through WSDOT Public Transportation or Rail programs. B = billion, M = million. Federal and state contribution appears higher than in Exhibit 17 and Exhibit 18 because WSDOT data does not include data from cities that do not report and may overlook local project appropriations.
Sources: DOR, 2018; WSDOT Local Programs, 2018; TIB, 2018; FMSIB, 2018; DOC Public Works Board, 2018; DOC CERB, 2018; BERK, 2019.

4.2.1 Flow of State Transportation Dollars to Cities

State dollars reach cities through three channels, each of which is described in more detail below.

- **Direct distributions** are direct allocations through the Motor Vehicle Fuel Tax (gas tax) and additional Connecting Washington Act transfers from the Motor Vehicle and Multimodal Accounts.
- **Local project appropriations** are direct budget appropriations (earmarks) to specific projects.
- **State competitive programs** are competitively awarded state grant and loans programs, which includes both state money and federal money that is managed and distributed by TIB, Freight Mobility Strategic Investment Board (FMSIB), WSDOT, and other agencies.

Direct Distributions

The State provides a base level of street funding to all cities through distributions of state-collected revenues and grants for specific agencies, parts of the system, or to implement policy initiatives.

All cities receive a share of state-collected MVFT distributed based on population.[7] The MVFT has been levied in Washington State since 1939. In 1999, the legislature rolled up all prior MVFT acts into a single 23-cent rate.[8] At that time, all previous distributions of state distributed MVFT were converted to percentages of funds collected instead of cents per gallon. Subsequent rate increases followed and the method of determining revenues to be distributed to cities also changed over time.

Exhibit 22. City Distributions of the State Motor Vehicle Fuel Tax (MVFT)

ENACTED	RATE/GALLON	
1999 (rolled up rate since 1939)	23 cents	Roll up of all prior MVFT acts. Revenue from 2.46 cents distributed to cities. The roll up superseded the previous "Y Chart" allocation, which depicted the cents per gallon distributed to the several recipients, including cities.
2003	5 cents	Nickel Package. No local distribution.
2005	9.5 cents	Transportation Partnership Program, rate phased in 2005-2008. Revenue from 0.5 cent distributed to cities.
2015	11.9 cents	Connecting Washington Act. MVFT phased in 2015-2016, specific amounts distributed to cities. Some non-fuel tax amounts distributed.

[7] 82.38.030 RCW, distributed per 46.68 RCW
[8] 82.38.030 RCW

MVFT forms a base deposit into the city street fund, with cities supplementing with local funding sources. MVFT may be combined with real estate excise (REET) or business and occupation (B&O) taxes to fund daily operations and match grants. Larger cities may have sufficient revenue to fund some capital projects without assistance, but many medium-sized cities require state and federal grants to fund capital projects. Small cities tend to largely or entirely depend on grants for major maintenance or construction projects.

Washington State Constitution, Article 2, Section 40. 18th Amendment Highway Funds

SECTION 40 HIGHWAY FUNDS. All fees collected by the State of Washington as license fees for motor vehicles and all excise taxes collected by the State of Washington on the sale, distribution or use of motor vehicle fuel and all other state revenue intended to be used for highway purposes, shall be paid into the state treasury and placed in a special fund to be used exclusively for highway purposes. Such highway purposes shall be construed to include the following:

(a) The necessary operating, engineering and legal expenses connected with the administration of public highways, county roads and city streets;

(b) The construction, reconstruction, maintenance, repair, and betterment of public highways, county roads, bridges and city streets; including the cost and expense of (1) acquisition of rights-of-way, (2) installing, maintaining and operating traffic signs and signal lights, (3) policing by the state of public highways, (4) operation of movable span bridges, (5) operation of ferries which are a part of any public highway, county road, or city street;

(c) The payment or refunding of any obligation of the State of Washington, or any political subdivision thereof, for which any of the revenues described in section 1 may have been legally pledged prior to the effective date of this act;

(d) Refunds authorized by law for taxes paid on motor vehicle fuels;

(e) The cost of collection of any revenues described in this section:

Provided, That this section shall not be construed to include revenue from general or special taxes or excises not levied primarily for highway purposes, or apply to vehicle operator's license fees or any excise tax imposed on motor vehicles or the use thereof in lieu of a property tax thereon, or fees for certificates of ownership of motor vehicles. [AMENDMENT 18, 1943 House Joint Resolution No. 4, p 938. Approved November, 1944.]

Motor Vehicle Fuel Tax (gas tax). The State collects a state gas tax of 49.4 cents per gallon, and the city portion is distributed on a per capita basis. Cities, together, receive **2.96 cents per gallon.**

- The state gas tax also supports State highways, Rural Arterial Programs, TIB funded programs, County Arterial Programs, counties, and ferry operations. As drivers adopt more fuel-efficient vehicles and vehicles that do not use traditional motor fuels, gas tax revenues have been decreasing and are expected to decline.
- Under the 18th Amendment to the Washington Constitution, gas tax revenues are restricted exclusively to "highway purposes." The gas tax was established in 1921 at 1 cent per gallon and has increased every few years. Over the last ten years, it has increased from 37.5 cents to its current

AN ALTERNATIVE DISTRIBUTION FORMULA

Massachusetts provides some roadway funding to cities and towns through Chapter 90 funding, which uses a distribution formula that considers road miles, population, and employment to determine apportionments.

Source: Massachusetts DOT, https://www.mass.gov/chapter-90-program.

rate of 49.4 cents (most recently raised in 2016). Gas tax revenues are currently bonded with the state, with a portion of the revenue designated for debt payments.

Connecting Washington Act. Starting in 2015, under the Connecting Washington Act, the State transfers a portion from the State Motor Vehicle Account and the State Multimodal Account to cities. This amount is set by RCW 46.68.126 and is proportioned evenly between cities and counties.

In the 2017-19 budget, cities receive **$197.8 million** from MVFT direct distributions and **$25.1 million** from additional Connecting Washington Act transfers from the Motor Vehicle and Multimodal Accounts. Together, direct distributions to cities are **$222 million** in the 2017-19 biennium, **2.4%** of the total transportation budget (**$111 million** in one fiscal year).

Local Project Appropriations

The legislature may make direct appropriations to specific transportation projects in the State Transportation Budget. These appear in the budget under WSDOT Local Programs: Program Z.

State Competitive Programs

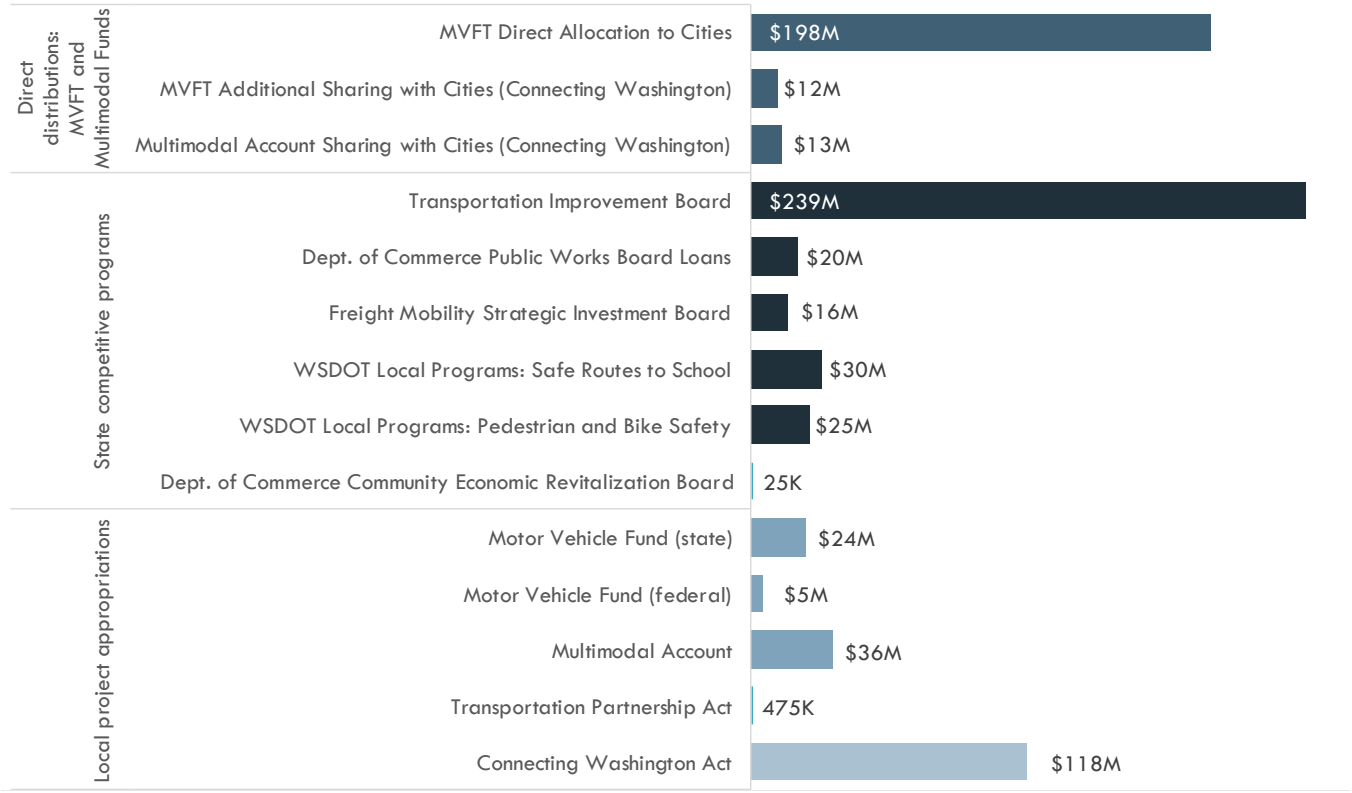
Cities may apply for transportation-related competitive state grants and loans from a number of state agencies and boards, including:

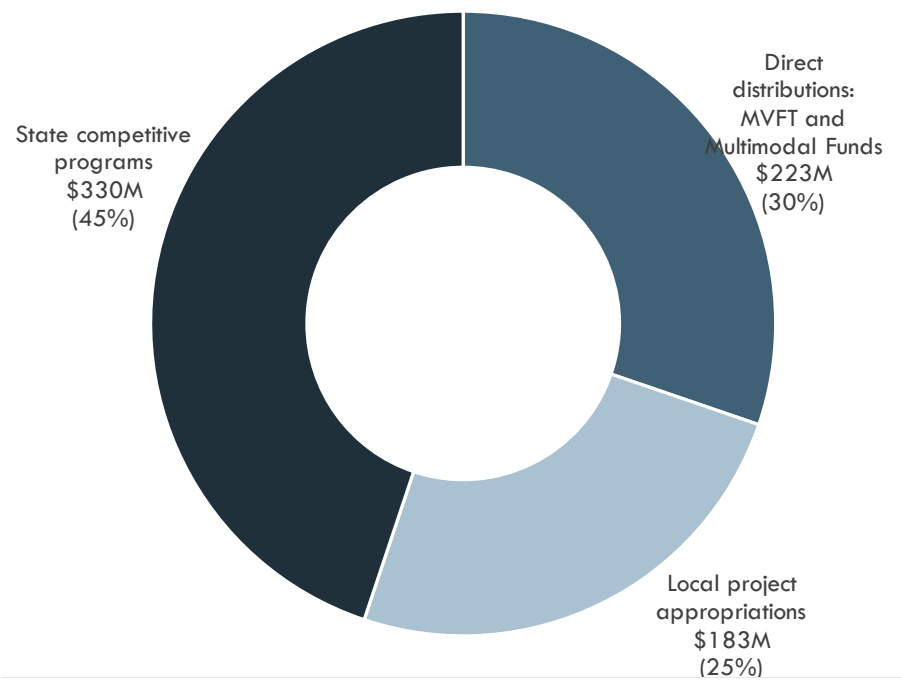
- Department of Commerce Public Works Board Loans.
- Department of Commerce Community Economic Revitalization Board (CERB).
- Freight Mobility Strategic Improvement Board (FMSIB).
- Transportation Improvement Board (TIB).
- WSDOT Local Programs: Safe Routes to Schools, Pedestrian and Bicyclist Program.

Exhibit 23 summarizes the allocation of state transportation dollars to cities through these three channels.

- Of all the state money that cities received in two years, around **45%** comes through state competitive programs, **30%** comes through direct distributions of gas tax and multimodal funds, and **25%** comes through local project appropriations.
- Of the state competitive programs, most of this ($239 million out of $330 million) is from TIB.
- Of the local project appropriations, most of this ($118 million out of $183 million) came from the Connecting Washington Act.

Exhibit 23. Allocation of State Transportation Dollars to Cities, FY2017-2019





Notes: TIB, FMSIB, Commerce, and WSDOT Safe Routes to School and Pedestrian and Bicyclist Program are based on projects awarded in 2017 and 2018 and only show agency funds (not matching funds). Direct distribution and local project appropriations are based on FY201719.
Sources: MVFT Direct Distribution and Multimodal Account sharing with cities: DOR, FY2018; TIB project list, 2018; DOC Public Works Board, 2018; FMSIB project list, 2018; Commerce CERB project awards, 2018; WSDOT Local Programs Safe Routes to School and Pedestrian and Bike Safety, 2017-19; BERK, 2019.

4.3 FEDERAL FUNDS

Federal transportation funding primarily comes from two legislative channels:

- Authorization bills that authorize policy, programs, and funding ceilings over years, such as the Fixing America's Surface Transportation (FAST) Act. The FAST Act was passed on December 4, 2005 and expires on September 30, 2020.
- Annual appropriation bills that set annual spending levels for transportation programs.

The State receives federal allocations from Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) programs. In Washington, the FAST Act Advisory Group (legislators, local government entities, and transportation system users) reviews and recommends distributions of federal highway funds between the state and local jurisdictions. [9]

Federal aid programs include:

- National Highway Performance Program
- Surface Transportation Block Grant Program
- Highway Safety Improvement Program
- Congestion Mitigation and Air Quality Improvement Program
- National Freight Program

4.3.1 Flow of Federal Transportation Dollars to Cities

Federal funds are passed along to cities through several channels:[10]

- **Federal pass through programs**: selected by MPO/RTPO/County Leads through regional priority competitive programs.
- **Federally managed programs**: selected by WSDOT through data-driven statewide competitive programs.
- **Federal discretionary programs**: selected federally through national competitive programs.

WSDOT Local Programs serves as the steward of FHWA funding for public agencies.

[9] WSDOT, https://www.wsdot.wa.gov/sites/default/files/2009/01/14/LP_FAST-Memo-Governor-2016.pdf
[10] WSDOT, https://www.wsdot.wa.gov/LocalPrograms/ProgramMgmt/funding.htm

4.4 LOCAL FUNDS

Cities fund transportation through federal, state, and local sources. Most city transportation funding comes from local sources. Local funds include both unrestricted general funds and transportation-restricted funds.

A detailed summary of transportation revenue sources and restrictions on uses, along with statute references, is found in ***City Transportation Funding Sources.***

4.4.1 Local Unrestricted Funds

Local unrestricted funds include general city revenues that may be used for any city expense:

- Property tax
- Local business and occupation tax
- Local retail and sales tax
- Local utility tax
- Real Estate Excise Tax (REET) I
- Additional REET 3 – *restricted to cities that do not levy the 0.5% sales tax; five Washington cities are eligible.*

These funds are not specific to transportation, which means that transportation **competes with other city priorities** (such as public safety, libraries, parks, economic development, or others).

4.4.2 Local Transportation Restricted Funds

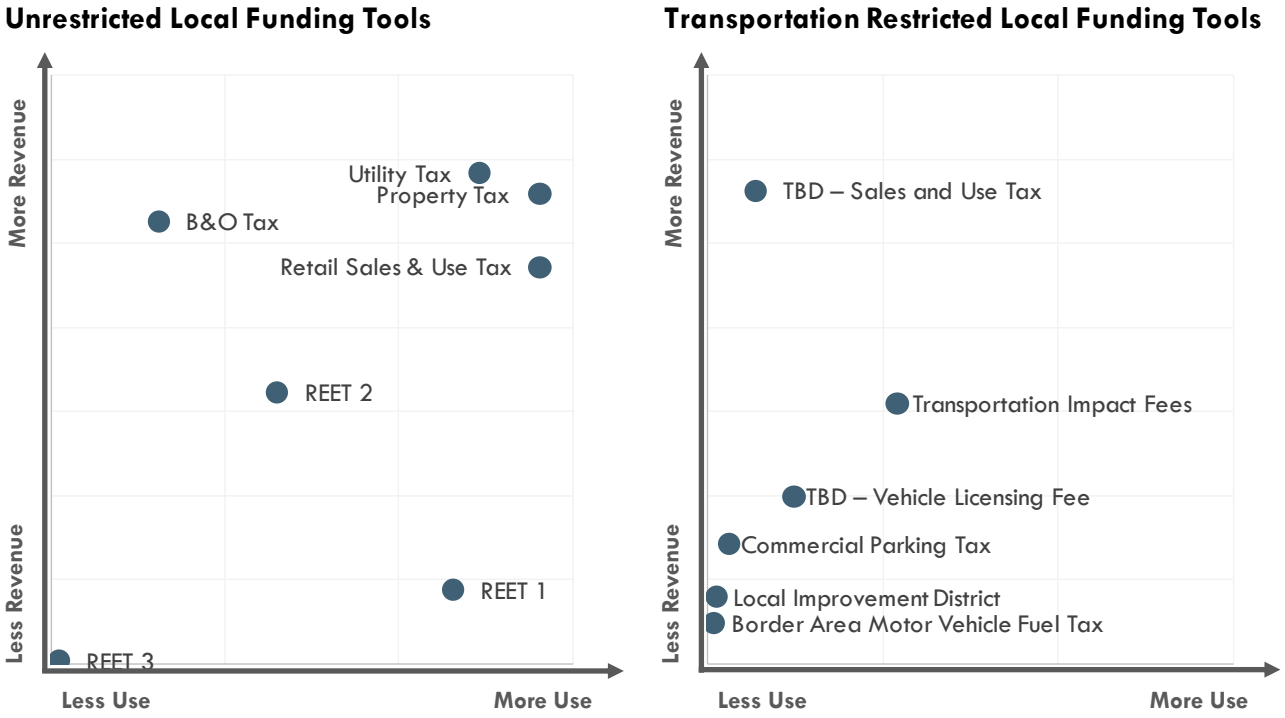
Local transportation specific funding options are those that may only be used for transportation purposes:

- Commercial Parking Tax
- Local Improvement Districts
- REET 2
- Transportation Benefit Districts (Sales and Use Tax and/or Vehicle Licensing Fee)
- Transportation Impact Fees
- Border Area Motor Vehicle Fuel Tax – *restricted to cities by international border; three Washington cities are eligible.*

Many of these options are subject to **voter approval**, so the ability to use them is not entirely in city control. Enacting one of these tools requires **political will and political capital**, reducing political capital available for other purposes. Additionally, these funding tools may **overlap with other taxing authorities**. For example, Sound Transit imposes high capacity transportation taxes through vehicle licensing fees (car tabs); this makes it difficult for cities within that same jurisdiction to also enact TBD vehicle licensing fees (car tabs) as voters would face both sets of fees. Finally, some revenue tools **only raise money in certain types of cities**; for example, the commercial parking tax may only be viable in cities with fee parking lots.

Exhibit 24 shows the 2017 use and median revenue generated by both unrestricted and transportation-restricted funding tools across all 281 cities.

Exhibit 24. Use and Revenue Generation of Local Funding Tools



Note: Y-axis denotes median revenue generated by all cities. X-axis denotes number of cities collecting revenue from this source in 2017.
Source: SAO LGFRS 2017; BERK 2019.

The availability of transportation-specific tools has evolved over time. In 1990, the State Legislature established new local option revenue sources, recognizing that the state shared revenue from the gas tax was not sufficient. Two of these options are no longer available.

- The street utility was found unconstitutional in 1995.
- The local option vehicle license fee was repealed by Initiative 776 in 2002 (the fee had been levied by King, Pierce, Snohomish, and Douglas counties, and was shared with cities).

Per *RCW 82.80.070(1)*, commercial parking taxes and local option motor vehicle and special fuel tax for counties must be used for "transportation purposes." No counties have levied the local option motor vehicle and special fuel tax for counties. 12 cities have levied a commercial parking tax, as of 2018.

Facing transportation needs and limited funds, cities are increasingly raising their own transportation funds. Almost 100 Washington cities have now created Transportation Benefit Districts, and the cities are increasingly raising local revenues to support transportation needs. The four largest Washington cities have all passed local transportation funding packages.[11]

[11] "Pavement Management in Medium and Large Cities," Presentation to the Washington Transportation Commission, December 14, 2016, Association of Washington Cities,

- **Seattle** voters passed the Move Seattle levy in 2015 (a replacement of the Bridging the Gap levy), a nine-year property tax levy that will cost the median Seattle household $275 per year and bring in a projected $930 million;[12] it included funding to repave up to 180 lane miles of arterial streets on 35% of Seattle's busiest streets.
- **Spokane** voters passed the Spokane Streets levy in 2014, which will support $25 million in street improvements and allow Spokane to upgrade all 266 miles of arterials to good condition and maintain them for 20 years.
- **Tacoma** voters approved the Tacoma Streets Initiative in 2014, which is a 10-year increase in property tax, utility tax, and sales tax (Transportation Benefit District sales tax). It is projected to generate $175 million of new revenue and leverage $120 million in grants and matching funds; the City will commit an additional $325 million. See the case study feature below for more information.
- **Vancouver**'s City Council adopted the Vancouver Street Funding Strategy in 2015, which creates a $20 vehicle license fee (increased to $40 in 2018), $10 increase in business license fee (increased to $20 in 2018), and a 1.5% increase of utility tax. It will generate $7.6 million per year by 2019 and improve pavement conditions from Fair to Good citywide.

CASE STUDY HIGHLIGHT: TACOMA'S STREETS INITIATIVE

Dedicated transportation funding is essential to addressing transportation needs. But passing voted initiatives requires a combination of factors that may not exist in all communities.

The City of Tacoma was facing a growing backlog of streets that needed reconstruction. Faced with immediate needs and competing city priorities, it has been difficult for the City to make asset management investments in streets. In 2014, the City passed a Voted Streets Initiative, which has allowed the City to make a dent in its backlog. Several factors helped to pass the Streets Initiative:

- The previous City Manager followed through on a commitment by dedicating a portion of the gross earnings tax to transportation, even though the initial initiative failed in 2013-2014.
- Transportation needs came to the forefront of public consciousness as the impacts of decades of deferred maintenance became visible to voters. The City had no more bonding capacity and had exhausted all other funding options.
- Support from the business community and chamber was critical. Previously, the initiative did not have the support of the business community, so there was a conscious effort to include them in the process and have them on board the second time.
- This was a long process, and it was important to be methodical and not rush the process.
- Still, because a voted sales tax through a TBD is limited to ten years, there is concern about how Tacoma will maintain transportation investments after the initiative sunsets.

http://wstc.wa.gov/Meetings/AgendasMinutes/agendas/2016/December13/documents/2016_1214_BP7_PavementManagement.pdf.

[12] City of Seattle, https://www.seattle.gov/transportation/about-sdot/funding/levy-to-move-seattle

4.4.3 Evaluation of Local Funding

Existing local funding tools were evaluated based on their tax burden, voting requirements, magnitude of revenue generated for cities (median revenue generated in 2017), requirements for implementation, and participation by cities (defined as number of cities collecting revenue in 2017) in Exhibit 25.

Key takeaways from the evaluation include:

- **Unrestricted funding sources** are widely used by cities, produce significant amounts of revenue, but can be used for other city purposes.
- **Transportation-restricted funding sources** are less widely used and produce less revenue, but are protected from other city uses.
- Many transportation-restricted sources are not available to all cities due to the requirements. For example:
  - The border area motor vehicle fuel tax only applies to three cities located near the Canadian border.
  - Impact fees can only be implemented in high growth areas with new development and oftentimes create a disincentive for growth that may be beneficial to cities for other reasons.
  - A commercial parking tax is only applicable in cities with commercial parking lots, typically larger cities that with sufficient demand to charge for parking.
  - Transportation Benefit Districts using the vehicle license fee option must have enough drivers to benefit from implementing a fee. Oftentimes, for cities with populations less than 5,000, the expense associated with setting up a TBD and the small amount of revenue expected from a vehicle licensing fee make it infeasible.

Exhibit 25. Evaluation of Existing Local Funding Tools

Revenue Sources	Burden	Voted	Magnitude	Applicability	
				Requirements	Participation*
Local Sources: Transportation-Restricted					
Border Area Motor Vehicle Fuel Tax	Individuals purchasing motor fuel	Yes, simple majority.	$	Must be located on the Canadian border	3 cities
Commercial Parking Tax	Individuals parking in a commercial parking lot	No	$$	Must have commercial parking lots	12 cities
Local Improvement District	Property owners benefiting from improvement	No.	$	Must have capital improvement proejct with benefitting properties	5 cities
Transportation Benefit District – Sales and Use Tax	Individuals purchasing goods within the taxing district	Yes	$$$	Must have retail transactions	27 cities
Transportation Benefit District – Vehicle Licensing Fee	Individuals or businesses with a vehicle under 6,000 lbs registered in the district	No, up to $50. Yes, above $50 up to $100.	$$	Must have individuals or businesses with vehicles registered in district	49 cities
Transportation Impact Fees (GMA)	Property owners benefiting from improvement	No	$$$	Must have new development requiring transportation system improvements	83 cities
Transportation Impact Fees (LTA)	Property owners benefiting from improvement	No	$$	Must have new development requiring transportation system improvements	25 cities
Local Sources: Non-Restricted					
Property Tax	Property Owners	No. Yes, for levy lid lift.	$$$$	Must have properties with Assessed Values	281 cities
Business and Occupation Tax (local)	Businesses with gross earnings in city limits	No, up to 0.2% of gross receipts.	$$$	Mut have businesses with gross receipts	62 cities
Retail Sales & Use Tax	Individuals purchasing goods within the city	No, up to 1%. Yes, simple majority above 1%.	$$$	Must have retail transactions	281 cities
Utility Tax (local)	Utility users	No, up to 6%. Yes, above 6%**	$$$$	Must have utility providers	246 cities
Real Estate Excise Tax 1 (REET 1)	Property Owners/ Purchasers	No	$	Must have property sales	231 cities
Real Estate Excise Tax 2 (REET 2)	Property Owners/ Purchasers	No, if required to plan under GMA. Yes, if voluntarily planning under GMA.	$$	Must have property sales	130 cities
Additional REET 3	Property Owners/ Purchasers	No, but subject to referendum.	$	Must have property sales, and city must not implement 0.5% sales tax	5 cities
Local Debt Financing					
Limited Tax General Obligation (LTGO) Bonds	Taxpayers	No, cannot exceed 1.5% of Assessed Value	$$$$	Must have properties with Assessed Values	22 ciites
Unlimited Tax General Obligation (UTGO) Bonds		Yes			

* # of cities collecting revenue in 2017 according to SAO data

** There is no limit on sewer, solid waste, stormwater, and water. The 6% limit applies to telephone, steam, natural gas, and electricity.

Legend		
Magnitude		
Magnitude ranking based on median revenue collected by cities in 2017.	**$**	<$130k
	$$	>$130k, <$370k
	$$$	>$370k, < $540k
	$$$$	>$540k

Source: SAO LGFRS 2017; BERK 2019.

5.0 City Transportation Investments

This chapter describes categories of transportation expenses (**Section 5.1**) and then analyzes the distribution of expenditures across these categories (**Section 5.2**).

5.1 TYPES OF CITY TRANSPORTATION EXPENSES

Overall, city transportation expenses involve strategic asset management to maintain and expand transportation facilities as necessary to meet capacity needs as determined by the community. Broadly, these expenditures can be considered under two major categories: **capital expenditures**, related to long-term construction and management of transportation networks, and **programmatic expenditures**, which relate to the day-to-day management and operations of local transportation departments.

The public budgeting information compiled by WSDOT typically classifies city transportation expenditures in more detailed ways, using the following classifications for regular state-level reporting of local spending.

5.1.1 Capital Expenditures

Capital expenditures are concerned with the construction and long-term investment in transportation facilities. These expenditures are usually associated with larger, less frequent projects, and external financing support and borrowing are usually related to these activities. Major budget items that would typically involve capital spending of some kind include:

- **Construction.** Construction expenditures are typically related to projects to expand capacity and/or structural value with facilities in the transportation network. This could involve, for example, the development of a new bridge, the expansion of an existing roadway, or the full-depth replacement of a road after failure.
- **Preservation.** Preservation work is coordinated to maintain the condition of a transportation facility in a state of good repair and ensure the utility of these assets. These activities do not typically add capacity or structural value but are intended to maintain the overall conditions of facilities over the long-term. Preservation programs are ideally managed to minimize the lifecycle costs of maintaining the system according to the principles of asset management covered in **Section 2.3**.
- **Maintenance and construction of facilities.** In addition to the transportation facilities in a city such as roadways and sidewalks, municipal transportation departments also maintain buildings and other facilities related to operations, such as offices or garages. While these costs are not directly related to maintaining the transportation network, they comprise part of the costs necessary for a city to support these operations.
- **Debt service.** Debt service payments are related to debt taken out by a city to fund larger municipal transportation projects. Borrowing is usually linked to larger capital projects that cannot be financed through other means.

5.1.2 Programmatic Expenditures

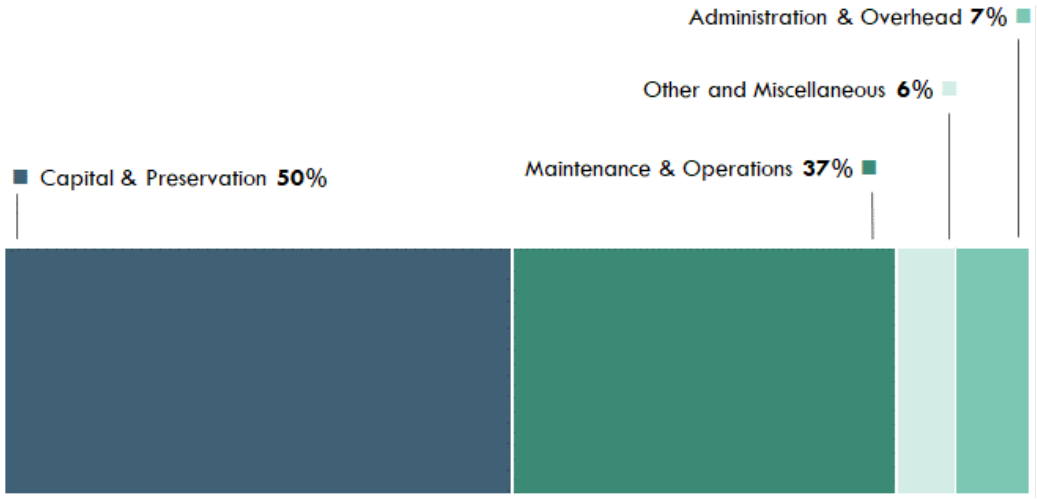
Programmatic expenditures relate to the day-to-day operations of a transportation or public works department managing the system. As opposed to large-scale projects that involve capital investment, these activities are related to regular road repair, street cleaning, snow removal, and comparable activities. This also includes administrative overhead, as well as other miscellaneous work related to these regular activities. The programmatic expenditures drawn from city transportation budgets typically include the following outlays:

- **Administration.** Administration costs are related to the general operations of municipal transportation departments, such as office management. While these expenses are not directly related to individual transportation projects, they are part of the overhead necessary to manage a city's transportation system.
- **Maintenance and operations.** Maintenance activities are intended to sustain the condition of the transportation system or respond to specific situations to restore the function of the system by filling potholes and patching cracks. Ongoing asset management requires both routine and preventative maintenance to take care of issues that could compromise the function and quality of transportation facilities. These activities may become more expensive as the condition of the facilities declines due to a lack of maintenance and preservation.
- **Traffic policing.** Traffic policing includes regular activities by local police departments such as traffic control and speed limit enforcement related to maintaining public safety on city streets. These activities are not usually related to expenditures to build and maintain the transportation network and may be incorporated separately into some public safety budgets. Given this, these expenditures are not considered in this report as part of the operation of the transportation system.

5.2 CITY TRANSPORTATION EXPENDITURE ANALYSIS

Exhibit 26 shows city transportation expenditures by expense categories, based on WSDOT categorizations. The chart shows an average of aggregated WSDOT data across all 281 Washington cities and towns from 2012 through 2017.

Exhibit 26. City Transportation Expenditures



Notes: Data presents a six-year average for 2012-2017. Not all cities report data in every year.
Source: WSDOT City Streets and County Roads Dataset, 2012-2017; BERK, 2019.

Capital and preservation expenditures comprise **50%** of city transportation expenses according to compiled budget data, while programmatic (maintenance and operations, administration and overhead, other) comprise **50%**.

LIMITATIONS OF WSDOT CITY STREETS AND COUNTY ROADS DATASET

Based on our data analysis and interviews with cities, we understand that WSDOT has adjusted its categorization of transportation expenditures over time. Previously, WSDOT assigned BARS code 541.00.000 (and its sub-codes) to "preservation" and 542.00.000 (and its sub-codes) to "maintenance." After the change, some cities reported preservation under 542.00.000 while other cities continued to use 541.00.000.

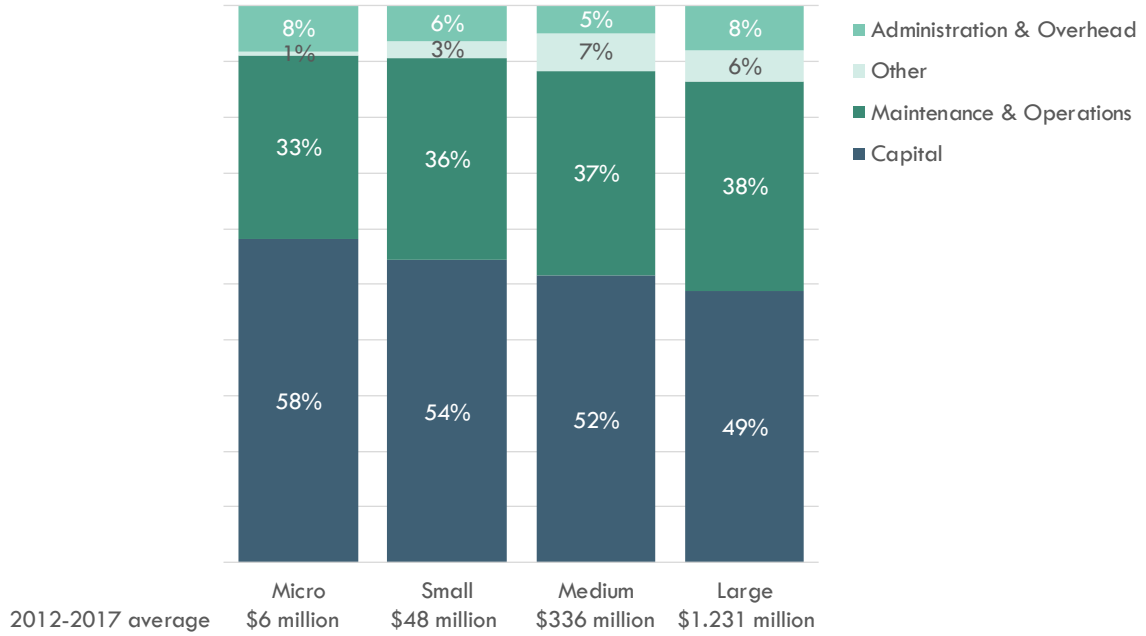
Similarly, some preservation activities have been related to capital expenditures in budget reporting. From BARS Manual 541.00.000 (Preservation):

> *"This account should be used ONLY by the GAAP local governments which implemented the modified approach to infrastructure (GASBS 34). The GAAP governments using depreciation method should account for the ordinary maintenance in account 54200P0and account 595PPP0 for expenditures which would meet the below definition of preservation. For purposes of accounting and reporting under BARS, the costs of performing those activities involved in extending the originally estimated life of each type of roadway, roadway structure, and facility, but do not increase its traffic flow capacity or efficiency. This account should not include maintenance activities or new or improvement construction projects. Regardless which method of accounting and reporting the government uses (i.e., depreciation or modified approach) the costs of preservation project activities should be included in calculating the statutory limitations for use of the government's own work forces in public works projects."*

Exhibit 27 shows the breakdown of expenditures across each typology of Washington cities and towns. This shows an average from 2012 through 2017 of aggregated WSDOT data. These figures highlight the following:

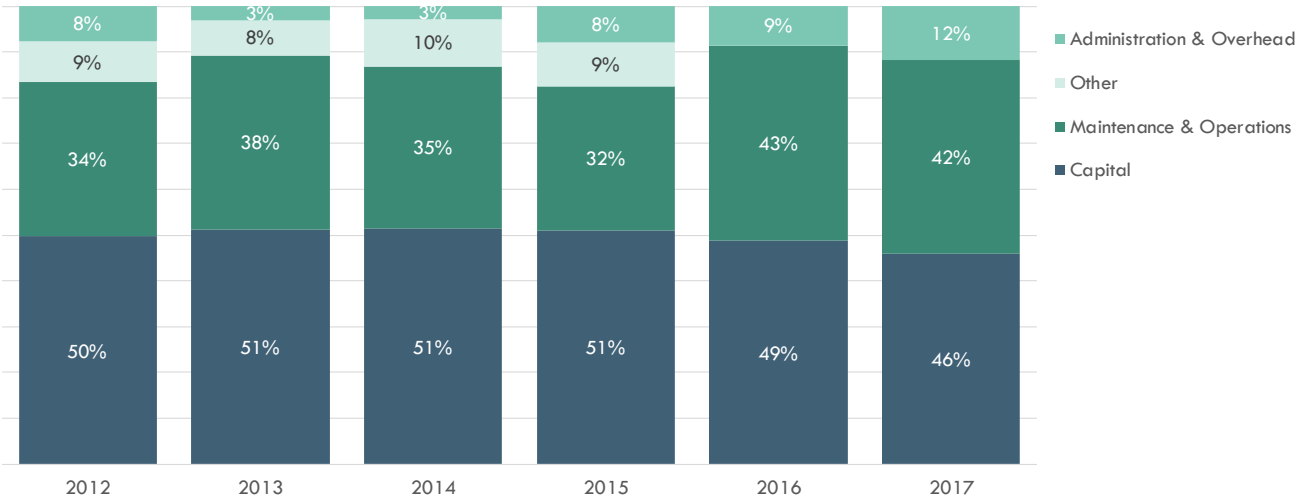
- About half of city street expenditures have been spent on capital across all city types. This share is slightly smaller for larger cities (49% of spending on capital for large cities, compared to 58% of spending on capital in micro cities).
- Maintenance and operations comprise about 33-38% of city street expenditures.

Exhibit 27. City Street Expenditures by City Type



Notes: Data presents a six-year average for 2012-2017. Not all cities report data in every year.
Source: WSDOT City Streets County Roads Data, 2012-2017; BERK, 2019.

Exhibit 28. City Transportation Expenditures Over Time, 2012-2017



Notes: Data presents a six-year average for 2012-2017. Not all cities report data in every year.
Source: WSDOT CSCR Merged History 2012 – 2017; BERK, 2019.

6.0 Funding Needs and Budget Gaps

Each of Washington's 281 cities and towns independently establishes policies and adopts budgets that allocate transportation funding for identified needs, typically making trade-offs due to competing priorities and budget constraints. Understanding today's funding needs and the potential for change in the future can highlight areas where support may be needed. This is essential as cities work to maintain the functions of their road network, meet additional needs for transportation capacity, minimize costs, and address other municipal responsibilities.

This chapter estimates the statewide impact of resource constraints and tradeoffs made by cities. By estimating what investment is needed to maintain city streets statewide in a state of good repair and comparing that to current spending, we illustrate a base maintenance and preservation funding gap:

- **Gaps in programmatic and preservation funding.** Calculating the gaps in city funding state-wide depends on an understanding of current levels of investment and estimates of the costs needed to support a functional system that provides required capacity while minimizing lifecycle costs. High-level estimates are developed in **Section 6.1** to present an assessment of the magnitude of this shortfall and the associated needs for additional local funding.

In the remainder of the chapter, we describe additional underfunded needs that add to this base gap:

- **Deferred roadway maintenance.** With respect to local transportation systems, city budgets may have shortfalls that delay schedules to preserve and maintain local roadways as a result. For these cases, total lifecycle costs are expected to increase overall, and the resulting backlog of activities may be difficult to resolve even over the long-term.
- **Capital investment needs.** In addition to the costs to maintain current systems, ongoing capital investment will be needed to improve transportation facilities and provide additional capacity to support growth in local areas. Shortfalls in capital investment will lead to declining levels of service within an area, with increases in congestion and travel times resulting from a lack of additional capacity.
- **Additional city obligations and costs.** While the other assessments here focus on the costs faced by cities in building and maintaining basic elements of their transportation network, there are also costs of other goals, policies, and initiatives that may impact the cost of managing these facilities. These cover a range of topics, from accessibility of transportation to people with disabilities to environmental mitigation.

6.1 PROGRAMMATIC AND PRESERVATION GAP ESTIMATES

Substantial portions of local transportation budgets are devoted to sustaining existing transportation systems, with costs related to managing transportation departments and coordinating the regular maintenance and preservation activities to keep streets in good condition. Existing and expected gaps between optimal and actual budget allocations to sustaining the system can degrade the capacity and function of systems and increase overall lifecycle maintenance costs. Understanding the nature and magnitude of these gaps is essential in determining the scope of local funding issues to address.

This analysis considers the costs according to three general categories:

- **Programmatic costs,** which are related to regular maintenance and administrative overhead associated with managing a transportation system (**Section 6.1.1**).
- **Preservation costs,** which include scheduled activities necessary to maintain facilities in good repair, prevent major depreciation, and minimize lifecycle costs (**Section 6.1.2**).
- **Deferred costs,** incorporating expenditures from the other categories that have been delayed or rescheduled due to shortfalls in funding. Our gap analysis provides an assessment of the costs of deferred *bridge replacement* (**Section 6.1.3**) but does not consider the total value of deferred *road maintenance* statewide in a quantitative way given the lack of data on deferred expenditures and transportation projects. The impacts of deferred road maintenance are explored in **Section 6.2**.

Estimates for the needs in these categories are provided and compared with actual investments made by city governments to evaluate the current gap in city funding statewide in **Section 6.1.4**.

6.1.1 Programmatic Costs

Programmatic costs include the general costs of running city transportation departments and providing base functions in the community. These costs typically relate to:

- Administration and operations, including personnel management.
- Street maintenance, including day-to-day patching and pothole repair.
- Facilities management, including buildings and equipment.

For this analysis, estimated values for these costs are calculated as fixed percentages of the capital and preservation budgets for each class in the typology based on historic trends. Based on historic trends, costs for maintenance were assumed to be about 54% of the total construction and preservation budget, while administration and operations combined with facilities management were assumed to be about 29% of construction and preservation expenditures. Specific values used in the analysis were calculated for each group in the city typology.

6.1.2 Roadway Preservation

The costs of roadway preservation can range significantly based on the composition of the street, traffic volume, local climate, additional facilities (e.g., sidewalks), deferred maintenance and preservation activities, and other factors. While many cities have comprehensive pavement management systems that help to determine and focus necessary levels of investment, there is a lack of comprehensive information about all local roadways at a statewide level that can help to determine the expenditures that every city should be making in preservation over time.

Two statewide data sources were used for this broad analysis of expected roadway preservation costs:

- **TIB Street Inventory.** TIB maintains a comprehensive street inventory for cities with populations under 5,000 as part of its Small City Street Preservation Program. This information includes the pavement type, dimensions of the roadway, and pavement condition ratings.
- **State HPMS data.** At the state level, WSDOT compiles information about public roadways for the federal Highway Performance Monitoring System (HPMS). This dataset is intended to provide information about the condition and safety of the highways in the state, but also presents an inventory of other roadways as well. It includes data on the location and length of roadways, along with a general functional classification for roadway segments and limited pavement condition information.

In our estimate, preservation programs were assumed to vary according to the functional class of the roadway or size of the roadway, and geography by WSDOT region. Costs were generally calculated based on varying treatments:

- **Chip seal treatment** for arterials and collectors in the Eastern, North Central, and South Central regions, calculated by centerline-mile.
- **Grind and asphalt overlay treatment** for arterials and collectors in the Olympic, Southwest, and Northwest regions, calculated by centerline-mile.
- **Seal coating** for local roads and roads in communities with less than 5,000 residents, calculated by area.

Costs assumptions include the following:

- Curb ramps to fulfill design requirements under ADA (but not full ADA Transition Plan implementation).
- Standard environmental mitigation (but not addressing fish passage barriers).

Costs for preservation per centerline-mile per year for roads in communities larger than 5,000 residents are estimated annually, using ideal maintenance cycles for each treatment.

Exhibit 29 provides these estimates, which are multiplied by the total length in centerline miles of roadways in communities to determine expected average yearly preservation costs. (These annualized figures align with the project per-mile cost shown in Exhibit 6.)

Exhibit 29. Annualized Preservation Costs per Centerline-mile, by Region and Functional Class.

	ANNUALIZED PRESERVATION COSTS PER CENTERLINE-MILE		
REGION	ARTERIAL	COLLECTOR	LOCAL
North Central	$126,202	$57,144	$30,803
Olympic	$147,030	$64,217	$33,096
South Central	$130,154	$58,599	$31,983
Southwest	$139,265	$60,472	$31,769
Northwest	$149,065	$65,397	$32,297
Eastern	$124,016	$56,574	$30,374

Source: Perteet, 2019; BERK, 2019.

For communities of less than 5,000 residents, estimates are based on general pavement management cycles and the square footage of pavement calculated by street segments included in the TIB street inventory. Exhibit 30 provides these estimates of preservation costs, which are used with information from the inventory to calculate expected yearly preservation costs by community.

Exhibit 30. Preservation Costs per Square Foot, by Region.

REGION	PRESERVATION COSTS PER SF
North Central	$0.113
Olympic	$0.122
South Central	$0.118
Southwest	$0.117
Northwest	$0.119
Eastern	$0.112

Source: Perteet, 2019.

Based on interviews with staff from different cities and examination of individual city budgets, approximately 30% of expenditures recorded as construction appear to be related to maintaining the quality of existing capacity in the transportation system. Therefore, for the gap estimates these shares of the construction budgets were assumed to be related to preservation. The remaining 70% is assumed to be devoted to system expansion and new facilities.

6.1.3 Bridge Preservation

The long-term management and preservation of bridges is more complex than for roads. Aside from regular maintenance of the roadway surface, bridges require regular maintenance and preservation for the structure to remain in good repair. Bridges that are not maintained can experience structural issues that will limit the weight that the structure can bear, which can restrict the function and utility of the bridge in the transportation network.

The primary source of information on local bridges is the National Bridge Inventory (NBI). This data is compiled by the National Highway Administration from state agencies (including WSDOT) and includes information about all bridges with a span of 20 feet or more, including the type and specifications of the bridge, age and condition, and other data relevant to current function and capacity.

Data from the NBI highlights major statistics about the present stock of bridges in Washington state.

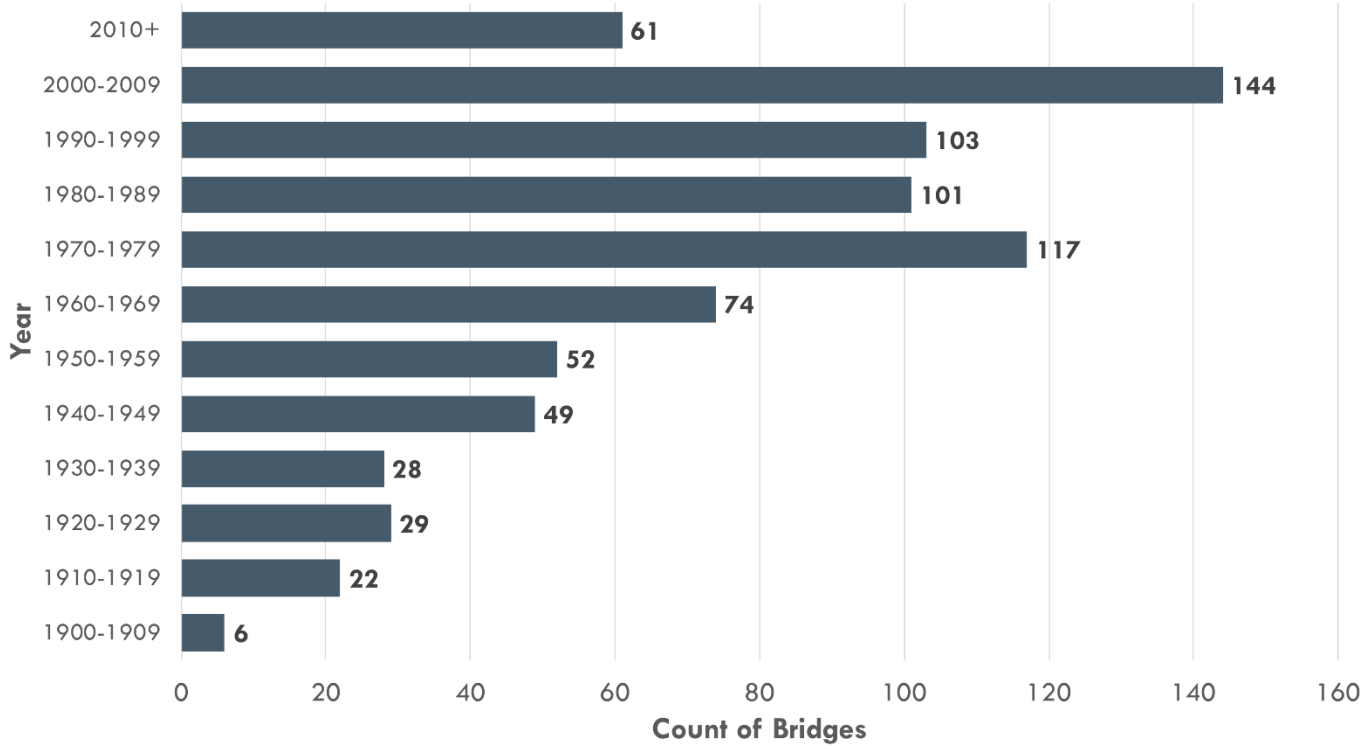
- Exhibits 31 and 32 show the number and total size (by area of bridge deck) of bridges by decade.
- Exhibits 33 and 34 provide bridge conditions in the state by number and total size, and compares these figures to bridges in the continental US.
- Exhibit 35 shows the estimates costs of addressing identified issues with Fair and Poor condition bridges in the state, by category of project.

One important conclusion from the data in the inventory is that current conditions of bridges in Washington are better than national averages. Today's bridges are in reasonable repair, and only 46 bridges (less than 8% of the current bridge stock by size) are rated as "Poor". The costs reflected in addressing these bridges as noted in Exhibit 35 suggests that while these bridges would take some investment to complete (such as the $42 million Fairview Ave N Bridge Replacement project in Seattle), these bridges could be addressed with local, state, and federal resources.

In the future, however, there are looming challenges. As bridges can last for about 50–75 years prior to significant reconstruction, the distribution of bridge age suggests that there may be a backlog in replacement of older bridges built in the 1950s and earlier (see Exhibits 31 and 32). Over time, as bridges in the state age and depreciate further, there are concerns that the need to address bridge replacement and reconstruction will increase over time.

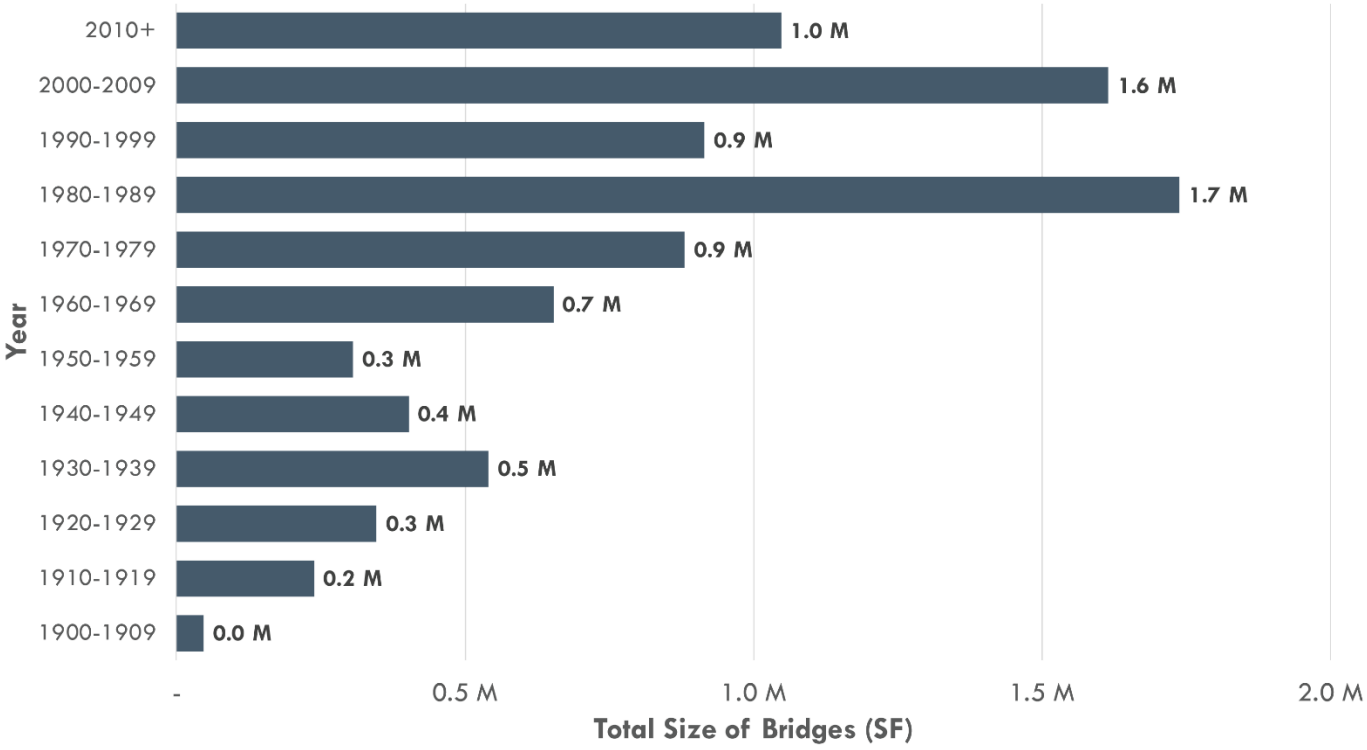
While advancements may extend the useful lifetime of bridges further, and programmatic solutions such as weight limits can address other structural concerns with a bridge, the limitations of bridge geometry in accommodating increased traffic flows are also problematic. Bridges that cannot accommodate traffic volumes can serve as constraints to the overall network and reduce levels of service in a community. As bridges are a capital-intensive investment, addressing bridges as chokepoints in traffic flow can be expensive, and often out of the reach of communities with limited resources.

Exhibit 31. Decade of Bridge Construction/Reconstruction in Washington State, by Count of Bridges, 2017.



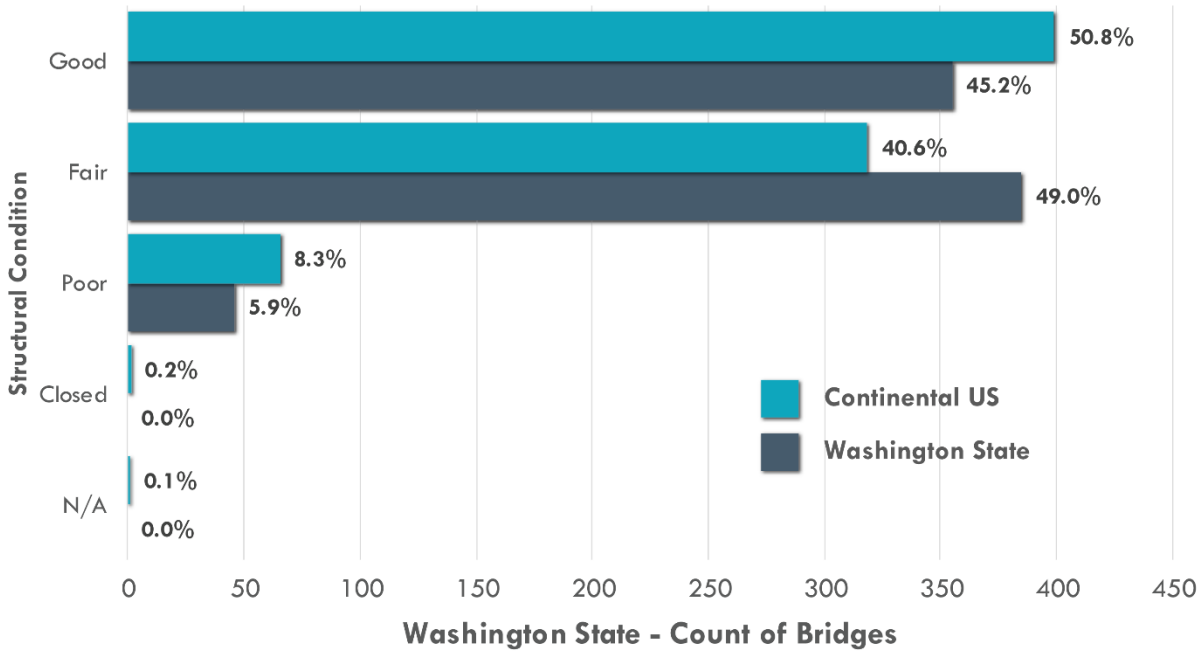
Source: Federal Department of Transportation, 2019; BERK, 2019.

Exhibit 32. Decade of Bridge Construction/Reconstruction in Washington State, by Total Size of Bridges, 2017.



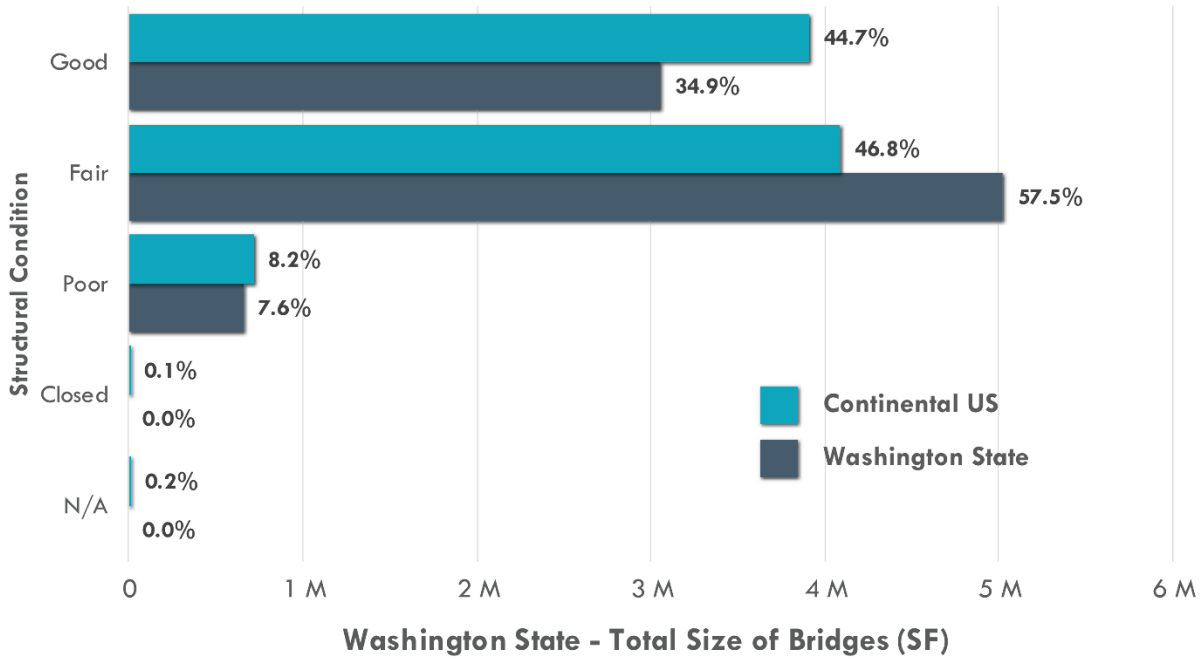
Source: Federal Department of Transportation, 2019; BERK, 2019.

Exhibit 33. Bridge Condition, by Count of Bridges, 2017.



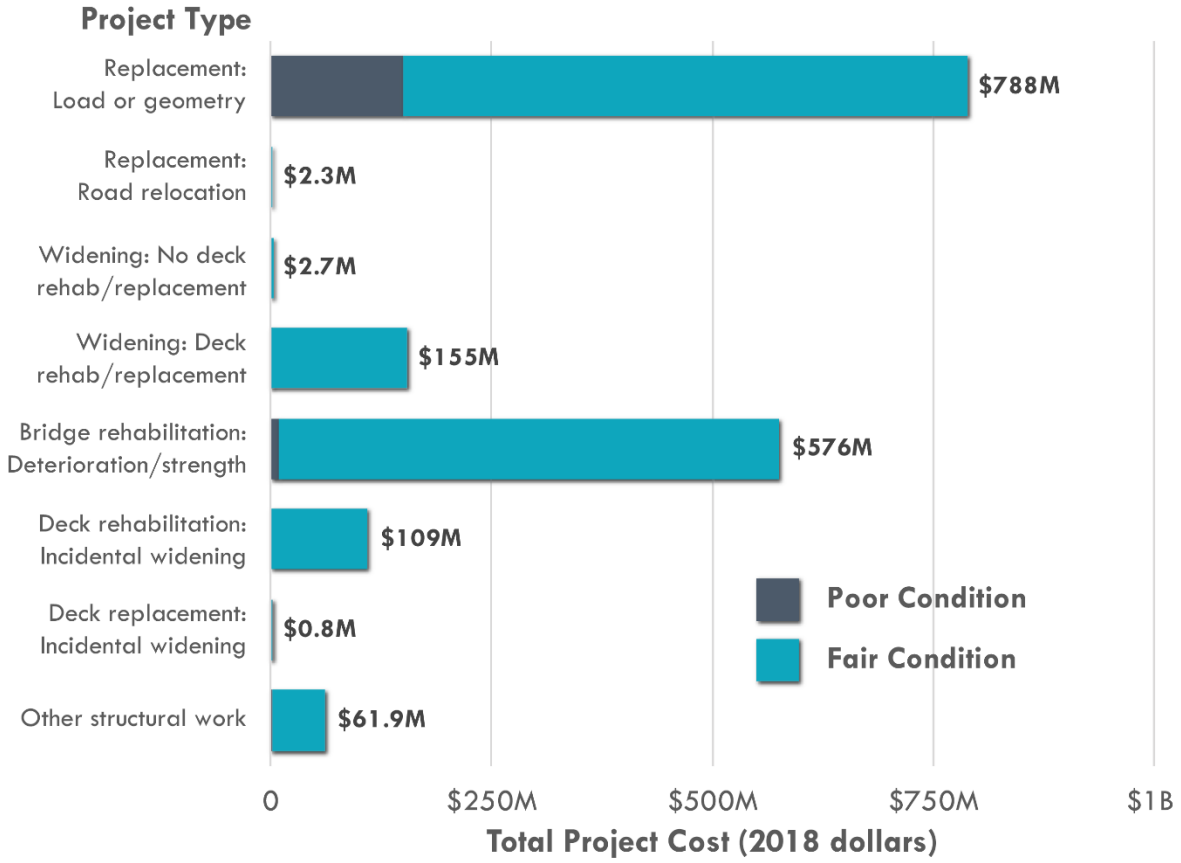
Source: Federal Department of Transportation, 2019; BERK, 2019.

Exhibit 34. Bridge Condition, by Total Size of Bridges, 2017.



Source: Federal Department of Transportation, 2019; BERK, 2019.

Exhibit 35. Total Project Costs for Restoration of Fair and Poor Condition Bridges, by Project Type, 2017.



Source: Federal Department of Transportation, 2019; BERK, 2019.

For the purposes of the gap analysis, the focus of the analysis is on major elements of the life cycle of bridges, including:

- **Bridge maintenance.** Regular maintenance activities, including deck replacement and painting and structural maintenance, are assumed to take place at regular cycles during the lifetime of the bridge. Lifetime maintenance costs are calculated per square foot of the bridge deck, with the distribution of costs over time based on the material of the bridge.
- **Future bridge replacement.** Bridge replacements are assumed to take place at the end of the bridge design life, which is assumed to be 50 years for bridges built before 1990, and 75 years for bridges built in 1990 or later. The costs of bridge replacements are calculated as a price per square foot of the area of the bridge deck, based on the bridge materials.
- **Deferred bridge replacement.** Additional costs are calculated for bridges built in 1969 or earlier and are due for replacement today. As above, the replacement costs for bridges are based on the construction materials and the size of the bridge deck. To estimate funding gaps, it is assumed that this backlog would be addressed over a 20-year time period.

The parameters used in the analysis are provided in Exhibit 36:

Exhibit 36. Parameters for Bridge Preservation Cost Estimates.

PARAMETER	BRIDGE MATERIAL TYPE	
	STEEL	CONCRETE
Lifetime Maintenance Cost	$698 / SF	$562 / SF
Replacement Cost	$871 / SF	$806 / SF
Expected Maintenance Cycles	5	3

Source: Perteet, 2019

There are limitations to this approach to calculate expected preservation and maintenance costs for bridges. First, the National Bridge Inventory dataset only includes bridges with a span of 20 feet or more, which may not consider some local bridges that may require consideration in local budgeting. Other bridges with more complicated structures (such as bascule bridges) may also have higher costs per square foot than other bridges in the inventory.

Additionally, a 50- to 75-year lifetime for bridges is used here as it is a general recommendation under current technology and practices. However, it has been possible to lengthen the operational lifetime of some bridges, sometimes with weight restrictions to accommodate lower loadings on bridges with structural limitations.

Finally, bridge replacements are often not built with the same specifications as the older span, as they are frequently expanded to accommodate growth in traffic over time. Because of this, actual project costs for building replacement bridges would likely be higher than those outlined here.

The Challenges of Bridge Repair and Replacement: Town of Winlock

Bridge repair and replacement projects are often out of scale with city budgets. In the Town of Winlock (population 1,300), Olequa Creek splits the community in two, and bridges are essential transportation connections. The Fir Street Bridge closed in 2014 as it was unsafe, and the Walnut Street Bridge also needed repairs. Estimated project costs were almost $4 million.

The Federal Bridge Program supports most major bridge repairs and replacements across the state, and the town received $3.2 million for these projects. However, to receive federal funding, the City needed to contribute $600,000 in matching funds. With limited local resources, there was a significant funding gap even with outside funding. Support came from the Washington State Transportation Improvement Board (TIB) Small City Program With this funding, the Town coordinated a major repair of Walnut Street Bridge in 2017 and replacement of the Fir Street Bridge in 2018.

6.1.4 Estimate of Statewide Maintenance and Preservation Investment Needs and Funding Gap

Based on the estimates for roadway and bridge maintenance and preservation described above, a general evaluation of the current needs versus current spending can be provided. Exhibit 37 provides a summary of the average expenditures across cities in the state from 2013 to 2017, as well as the total estimates of need by category. Exhibit 38 presents a graphical comparison of these figures.

It is important to note with the figures in Exhibits 37 and 38 that the divisions of costs into these categories is based on assumptions about current expenditures. Actual projects and costs may extend across multiple categories, however. This can be seen in part in Exhibit 37 where construction activities that typically involve the development of new capital projects may in fact replace existing capacity or serve as preservation projects.

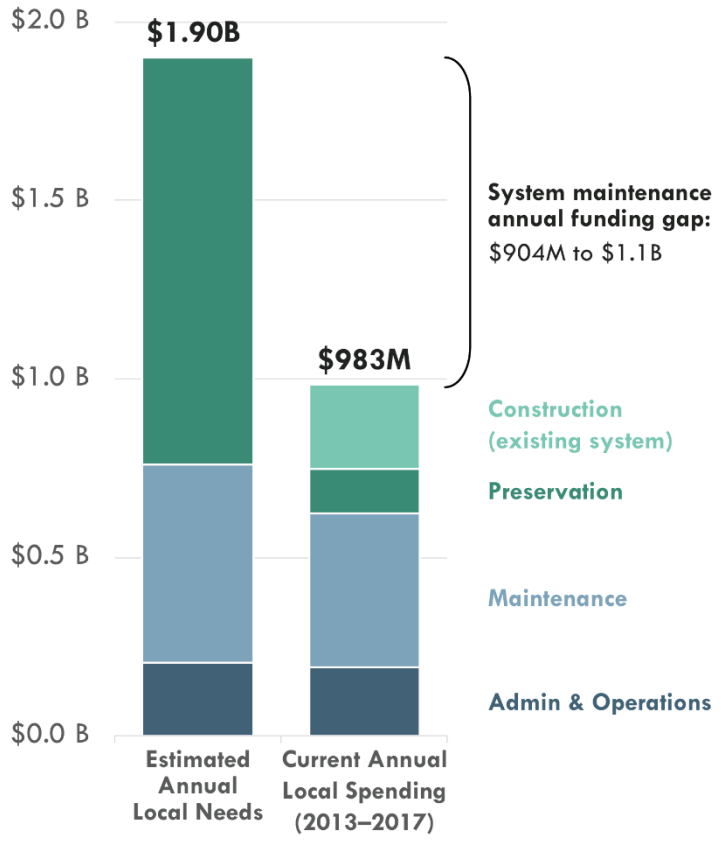
Exhibit 37. City Funding Gap Estimate

EXPENDITURE	ESTIMATED ANNUAL NEED	AVERAGE ANNUAL EXPENDITURE, 2013–2017	ESTIMATED ANNUAL GAP
Administration & Operations	**$205M**	**$192M**	
Maintenance	**$556M**	**$432M**	
Preservation	**$1.1B[a]**	**$359M[b]**	
Preservation		$123M	
Construction (existing capacity)		$236M *($158M–315M)*[c]	
Bridges - Preservation	$89M	Bridge investments are included in the above figures.	
Bridges - Replacement	$106M		
Bridges – Deferred[d]	$103M		
Roadway Preservation	$839M		
TOTAL	**$1.90B**	**$983M**	**$915M**

a Estimated annual needs exclude deferred roadway maintenance (but include deferred bridge maintenance).
b Average annual expenditures includes all current preservation activities for bridges and roadways.
c Range of construction values are due to high-low estimates from the case studies about the percent of construction expenditures that can be considered as preservation.
d Deferred bridge maintenance is assumed to be distributed across a 20-year timeframe.

Source: WSDOT, 2019; BERK, 2019

Exhibit 38. Comparison of Estimated Annual Costs and Actual Average Annual Expenditures.



Source: WSDOT, 2019; BERK, 2019

From the estimates provided in Exhibit 38, **the final estimated gap in funding the preservation and maintenance of the existing roadways and bridges in the transportation system is about $900 million to $1.1 billion dollars per year.** The range is primarily attributable to the assumption that 20% to 40% of total construction budgets are expended for preservation of the existing system.

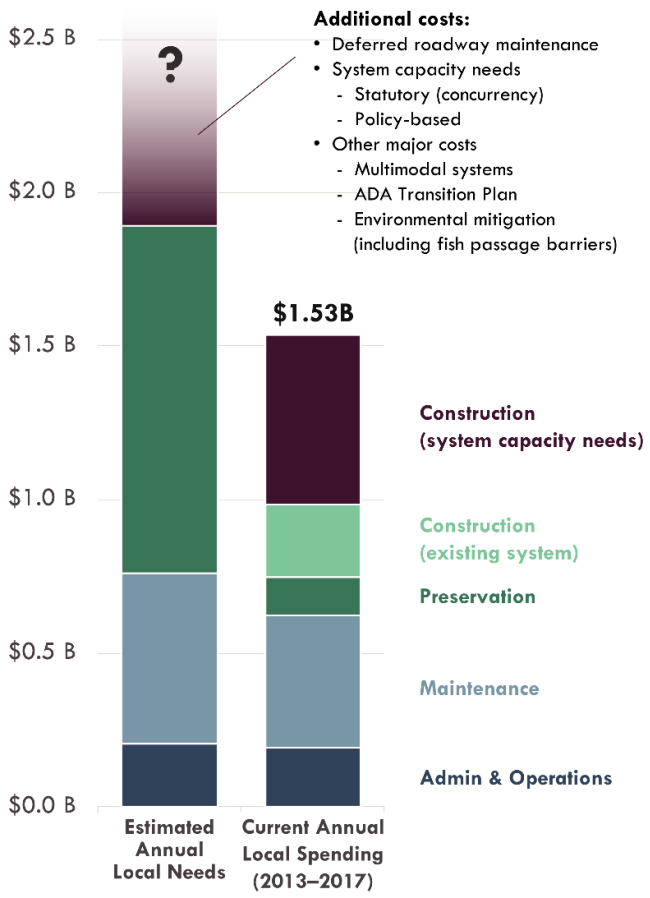
This $1 billion annual preservation and maintenance gap does not tell the whole story, however. As illustrated in Exhibit 39, there are a number of additional costs faced by cities that are challenging to define at a statewide level. Estimates of the funding gap are affected as follows:

- **The calculated gap does not include investments required to address growth.** There are significant limitations in determining what additional facilities would be needed on a city-by-city basis to address population and economic growth while maintaining current levels of service. Therefore, a full assessment of local projects needed to maintain current levels of service considering growth in the population and economy would be challenging. This includes both statutory requirements for infrastructure concurrency, as well as local policy needs to maintain levels of service in the community.
- While the estimate considers deferred replacement of existing *bridges* outside of their functional lifetime, **the gap does not include deferred maintenance and preservation of *roadways***, nor does it include the increased costs associated with preserving roadways that are not in optimal condition as a result of this deferred maintenance. Outside of the cities covered under the TIB Small Cities

program, information on pavement condition is inconsistent among cities, and in some cases not collected.

- The assessment of gaps also **does not include maintenance and preservation costs for other types of transportation facilities managed by cities** which may be included in expenditures data. This would include elements such as non-motorized pathways outside of a roadway right-of-way.
- Although these estimates include general costs for curb ramps and accessible elements in preservation activities, **other costs of implementing ADA Transition Plans and other efforts to address accessibility are not included in the gap.** This is difficult to estimate due to a lack of specific requirements about the timing and scope of Transition Plan implementation, as well as slow adoption of ADA barrier removal provisions.
- **Costs to mitigate current fish barriers are not included in the calculated gap.** The scope of the need to address culverts and fish barriers is currently unclear and may involve coordinated efforts with the State and other agencies. Final costs are uncertain, but this may impact many cities in western Washington in the future.

Exhibit 39. Comparison of Estimated Annual Costs and Actual Average Annual Expenditures, including Construction



Source: WSDOT, 2019; BERK, 2019

While not quantifiable on a statewide basis, the above additional investments are described in more detail in the next section.

6.2 THE ADDITIONAL IMPACT OF DEFERRED MAINTENANCE

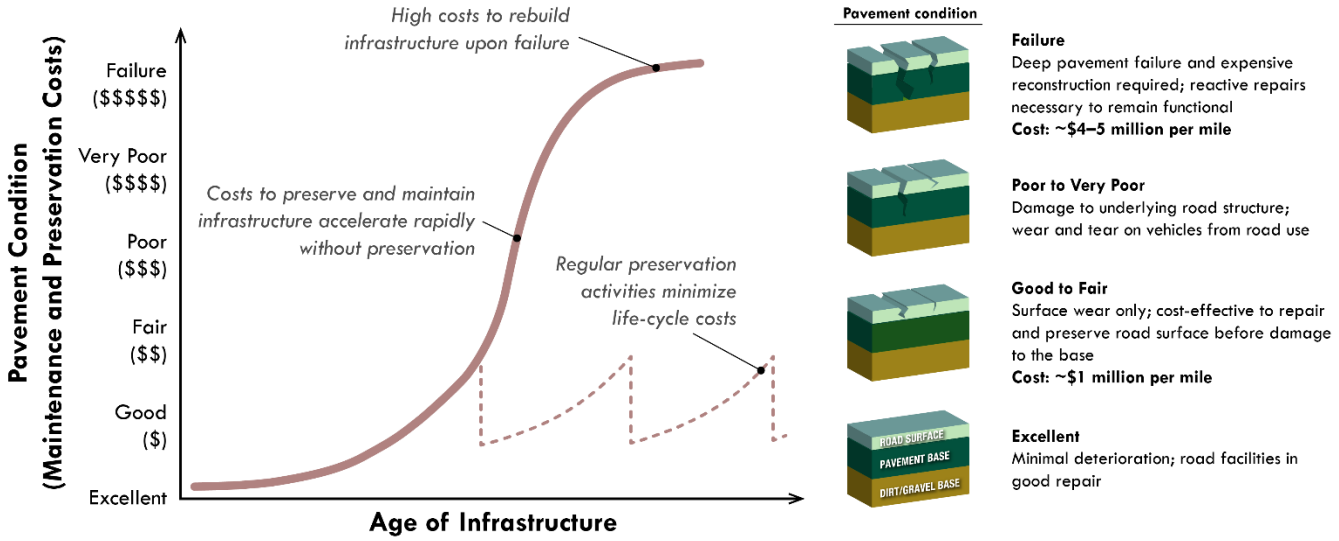
6.2.1 Overview

As noted in **Section 2.3**, good practices in asset management are essential to maintaining local transportation facilities efficiently over their lifetimes. Timely maintenance and preservation activities are essential for two reasons:

- Coordinating regular maintenance and preservation ensures costs are minimized over the lifecycle of the facility by extending the lifetime of the asset.
- Keeping the facility in good repair maintains functionality of the system and reduces damage to vehicles (and injury to pedestrians) with fewer potholes, ruts, and cracks.

The need for extending the useful life of roadways is highlighted by Exhibit 40. The graph on the left shows that as the effective age of the facility increases over time, its expected condition goes down. The graphics on the right show the expected damage to the roadway generally corresponding to these characteristics. As roadway infrastructure ages and is used, depreciation is first reflected in surface wear which is easily repaired. However, as the effective age increases and no maintenance occurs, there begins to be more extensive damage to the underlying structure, which requires more involved repairs. This continues over time with more damage to the underlying structure, and the condition of the roadway worsens. As the roadway approaches failure, damage becomes more extensive, resulting increased wear and tear on vehicles and requiring stopgap repairs even to maintain the roadway in a usable condition.

Exhibit 40. Pavement Maintenance and Preservation Costs versus Road Condition



This exhibit also highlights the importance of managing deferred maintenance over time. Ideally, all communities would maintain their facilities to keep them in at least a good to fair condition to reduce lifecycle costs and provide the most effective and efficient management of these assets over time. However, as the budget gaps noted in **Section 6.1** result in delays in preservation and maintenance cycles, this pushes the costs for future maintenance and preservation higher. The results can be costs that are four to five or more times as expensive than the more incremental investment that would have been necessary to maintain the infrastructure in a state of good repair.

These delays can be even more challenging for communities experiencing downturns in the local economy. If communities experience sustained revenue shortfalls during these periods, the overall costs to maintain their systems continue to increase over time. This adds to the challenge of keeping these facilities in working condition in the long term and maintaining functionality for future growth.

6.2.2 City Experiences with Deferred Maintenance

As demonstrated in the case studies, different communities have various levels of deferred maintenance and are deploying different strategies to manage these costs over time. The levels of deferred maintenance are substantively different from city to city, and often require context-sensitive strategies for addressing projects in these cities.

- **Bellingham.** To maintain current pavement condition ratings, and using data from the city's pavement management system, staff estimate that the City needs to spend around $4 million each year. This is a **$1 to 1.5 million** average annual cost of deferred maintenance. To fully catch up, there would need to be a **$10 million per year infusion over six years ($60 million).**

  *Bellingham's total backlog is approximately **three times** the size of its annual transportation budget of around $22 million.*

- **Tacoma.** Using data from the City's pavement management system, which tracks projects that are planned but not implemented, the average annual cost of deferred maintenance is **$99 million.** The pavement management system considers "deferred maintenance" to be work that cannot be completed in a given year due to lack of funding. When a street reaches a PCI rating of 35 on residential streets and 40 on arterial streets, it goes into the "backlog" for reconstruction and is weighted so that a minimum number of these are selected for improvements. The average backlog is **$249 million**. Adding the annual deferred maintenance costs to the average backlog yields a total shortfall of around **$348 million**. This only covers roadways, not bridges.

  *Tacoma's total backlog is approximately **four time**s the size of its annual transportation budget of around $90 million.*

- **Ritzville.** City staff estimated that deferred maintenance costs are around $4.8 million for 12 blocks of reconstruction and $3.5 million for chip seal, crack seal, and slurry seal. This equates to a total backlog of around **$8.3 million**.

  *Ritzville's total backlog is approximately **ten times** the size of its annual transportation budget of around $770,000.*

- **Twisp**. City staff estimate that the cost of an overlay will increase **3.5 times** if the investment is delayed five years. When preservation projects are delayed too long, streets eventually require Full Depth Reclamation (FDR). For a street that has completely fallen apart and requires FDR, the cost five years later is around **10 times** the initial cost. Staff estimated that the backlog of deferred maintenance is around **$2.1 million** for projects not completed over the past five years. This represents 20 street segments that were on a preservation list and are now scheduled for FDR. These same segments had an estimated cost of $358,000 when they were initially on the preservation list.

  *Twisp's total backlog is around **ten times** the size of its annual transportation budget of approximately $190,000.*

6.3 THE ADDITIONAL IMPACT OF CAPITAL INVESTMENTS IN NEW CAPACITY

6.3.1 Overview

Although many of the transportation expenditures to date have involved maintaining the current system, there is also the need to provide for new capacity. Washington overall is experiencing growth, with rapid growth occurring in many locations across the state. The new population and economic activity resulting from this expansion will generate additional demands on local transportation systems, and new facilities will be necessary.

Understanding the broader needs for additional local capacity statewide is challenging for different reasons. Communities across the state use different measures for levels of service for planning and different approaches to address shortfalls in these levels. Regional and local planning initiatives may present priorities for transportation investment, but these are typically identified for major streets only, determined with resource limitations in mind and not considering other investment needs. Finally, the projected demand considered in new transportation investment is linked to growth and the distribution of new development, which may be speculative.

6.3.2 Concurrency Obligations

It is important to reinforce that cities have strong obligations to support new transportation investments linked to growth, sometimes even where they do not have the resources to fund a comprehensive preservation and maintenance program. Under the *Growth Management Act* (RCW 36.70A.070(6)), Comprehensive Plans are required to incorporate standards to enforce transportation concurrency with development. These concurrency requirements ensure that any transportation impacts from new development in the city are accommodated with available capacity at the time of development.

The process of developing concurrency requirements as part of a Comprehensive Plan includes implementing, among other required elements:

- Level of service standards for all arterials and transit routes (which should be coordinated on a regional basis).
- Forecasts for traffic over the next ten years based on the future land uses in the adopted Plan.
- Inventories of state and local system needs to meet future traffic demands as projected.
- Financing plans to meet these needs, which would be incorporated into six-year Transportation Improvement Programs as required by RCW 35.77.010.
- Ordinances to prohibit development that would exceed level of service standards under this framework.

Under the concurrency framework of GMA, the review of new developments must incorporate an analysis of the impacts on traffic and transportation flow on city streets. Projects that would generate additional traffic in excess of established levels of service within a given area may not be approved unless there is a financial commitment to provide additional capacity within six years.

Shortfalls identified in future levels of service due to new development can be addressed in different ways:

- Redesign development projects to meet available capacity restrictions.

- Phase development to account for shorter-term capacity limitations.
- Increase available transportation capacity through developer investment.
- Review and revise land use planning to address capacity limitations (including a moratorium on growth).
- Reevaluate level of service standards in use.

Overall, this reflects a tension in accommodating growth with additional capacity. Under concurrency requirements, shortfalls in capacity due to lower levels of investment will lead to either constraints in the amount of development that a city can accommodate or policy revisions that permit lower levels of service in the community that would impose additional costs on existing residents. For many communities, the need to address these two considerations will drive local pressure in invest in additional transportation facilities.

6.3.3 City Experiences with Addressing Transportation Investment Needs for Growth

Cities are required by GMA to respond to growth through system expansion with adequate transportation improvements. The nature and reasons for this growth may differ by city, and in many cases are community-specific. Some examples from our case studies are provided below.

High Population Growth

Cities with high growth face pressures to increase transportation system capacity. For cities that are adding significant population or employment, increases in associated traffic volumes will require additional capacity across the street network.

- **Camas** is a medium-sized community of over 23,000 at the southern border of Washington. Staff describe the City's biggest transportation challenge as keeping up with growth. Camas has experienced rapid growth in residents and employment over the last five years, with a 17% average five-year population growth rate.

  Due to this growth, Camas has many system enhancement projects that need attention. The City's current 6-year Transportation Improvement Plan highlights 59 priority street projects totaling almost $95 million. The **38th Ave/20th Street project** is a main arterial that serves as a primary gateway between Camas and Vancouver. The project is a typical system enhancement and preservation project that includes widening the road from two lanes to three and adding multimodal capacity in the form of bike lanes. The project started in 2011 and has three phases. Over the course of the last eight years, Camas has been challenged to assemble the $11.5 million needed to complete the first two phases of the project. Funding has been cobbled together using a variety of local, state, and federal funds.

  Another growth-related challenge for Camas stems from annexation as the City now has to bring what were formerly county roads up to City standards. This entails funding one-time capital investments and ongoing maintenance and preservation of the now larger system.

- **Pasco** is the easternmost of the Tri-Cities in Franklin County. It is a large city of almost 74,000 people located at the confluence of the Columbia and Snake rivers. The community has a long history as a river and rail transportation hub and continues to move agricultural goods, dry goods,

technology, and other products to other parts of the world through all modes of transportation, including on trucks over city streets. The City has experienced rapid growth in recent years, with a 12% average five-year population growth rate, adding over 40,000 people since 2000. With growing population and employment, the city faces congested corridors from new residential and commercial development. Transportation investment has not kept pace, and the City is at an inflection point for preservation investment.

Increased Port Activity

Ports generate economic development as well as additional demands on transportation capacity and connectivity. The role of ports is to spur economic development, generating jobs and strengthening the tax base for the benefit of the region. While this benefits local jurisdictions, our conversations with city staff highlight that there are also challenges.

The **Port of Bellingham** generates additional demands on transportation capacity and connectivity through Bellingham International Airport (BIA). The Port has several areas within Bellingham or the Urban Growth Area with significant transportation needs. The freight route from I-5 to the Port's waterfront properties, including the shipping terminal and the industrial lands, has several trucking heavy operations.

BIA generates unique demands on the I-5/Bakerview interchange, along with hotels and surrounding development that rely on the transportation network. The City serves the airport through utilities but cannot charge impact fees outside city limits. BIA has been a funding partner on improvements in the past, through a settlement agreement between the City and BIA where the City collects a Traffic Effect Fee. The Port has also been involved in SEPA offsite mitigation, helping with environmental cleanup, and the City and Port are working together on waterfront redevelopment.

6.4 THE ADDITIONAL IMPACT OF OTHER CITY OBLIGATIONS

6.4.1 ADA Transition Plan Implementation

Overview

Federal civil rights statutes require state and local government agencies to reduce discrimination. Laws related to discrimination on the basis of disability generally prohibit denying people with disabilities equal access to a city's facilities, services, and activities, including those related to transportation.

The Americans with Disabilities Act (ADA) of 1990 provides the widest ranging set of requirements for local governments. This builds upon the Prohibition Act of 1973 which prevented government agencies that received federal funding from discriminating against people with disabilities. The ADA extends these requirements to all government agencies under the federal government regardless of their status. The intent of the legislation is to provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities. In the State of Washington, the ADA is supported and expanded by the Washington Law Against Discrimination (WLAD, RCW 49.60), which broadens definitions of disabilities and includes other protections.

Within the ADA, Title II specifically covers the services, facilities, and programs managed by state and local agencies. This includes roadways and pedestrian infrastructure as well as public buildings, parks, and other facilities where accessibility may be a concern.

Since 1992, requirements ensuring that construction of new facilities and renovation of existing facilities comply with ADA, including most recently the 2010 ADA Standards for Accessible Design. Facilities built prior to 1992 may not have been built to meet specifications for accessibility by disabled individuals; under ADA regulations, these barriers to access would have to be addressed.

Self-Evaluations

Requirements under Part II of the ADA address significant barriers to access programs, activities, and services across an agency. Across all public agencies regardless of size, a **Self-Evaluation** is required under the ADA to identify, inventory, and evaluate current access deficiencies. Implemented under 28 Code of Federal Regulations (CFR) 35.105, this assessment involves an inventory of all programs, activities, and services to highlight barriers with physical access as well as with communication. In cases where barriers exist, policies and practices must be modified unless necessary for operation or an undue financial or administrative burden would exist. The process must also provide opportunities for public comment from individuals with disabilities and organizations representing individuals with disabilities.

These Self-Evaluations present basic information to highlight barriers to access and obligate the agency to pursue remedial action on these items. For city governments, roadways, sidewalks, and other transportation infrastructure are typically the most extensive facilities covered and are often the major focus (though they are not required to be the only focus of the Self-Evaluation). Agencies with over 50 employees are also required to retain their Self-Evaluations for three years to ensure compliance.

Transition Plans and Other Requirements

The obligations of agencies with fewer than 50 employees are more general. For larger agencies with more employees, however, there are additional requirements to ensure that barriers to access are

addressed in a complete and timely way.

A major requirement is the development of a **Transition Plan.** This Plan, also called a "Program Access Plan" and detailed under 28 CFR 35.150(d), sets out the steps to address barriers to access. Minimum requirements under regulations include:

- Identifying physical obstacles in facilities that limit the accessibility of its programs or activities to individuals with disabilities;
- Detailing methods that will be used to make the facilities accessible;
- Specifying the schedule to achieve compliance with this section and steps that will be taken during each year of the transition period;
- Indicating the official responsible for implementation of the plan; and
- Providing opportunities for the public, including individuals with disabilities and organizations representing individuals with disabilities, to submit comments for the plan.

With respect to transportation systems, Transition Plans are expected to include a schedule for incorporating curb ramps or other sloped areas where pedestrians walk cross-curb. Priorities for these improvements are with state and local government facilities, transportation, places of public accommodation, and employment uses. The strategies to achieve accessibility under a Transition Plan are intended to be completed as expeditiously as possible. Although the timelines for such plans are not strictly defined, there is an expectation that barriers will be addressed in a timely and meaningful way.

Other requirements for agencies with more than 50 employees include the following:

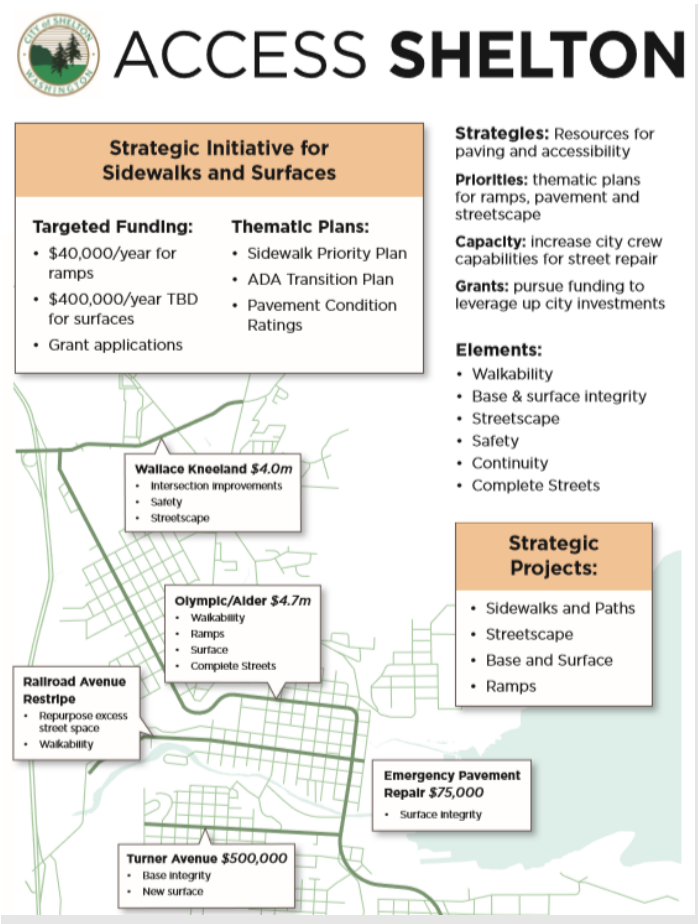
- The public agency must designate an ADA Coordinator to manage the administrative process for compliance who is noted as the responsible authority for the Transition Plan.
- The agency must also develop a grievance procedure that allows for the resolution of any complaints.

Impacts to cities

There are several aspects of compliance with ADA that affect costs to cities and the availability of resources:

- **Costs of evaluation.** Although the Self-Evaluation is intended to present a simple inventory of barriers, the costs of completing the evaluation may be considerable, especially for larger communities. Many evaluations require field surveys to assess access barriers in-person, requiring significant labor. As an example, Bremerton's 2016 ADA Transition Plan notes that in addition to a high-level inventory, an "Inventory Plan" will provide more detailed assessments of infrastructure, focusing first on areas where pedestrian traffic is highest.
- **Increase in construction and preservation costs.** Given ADA requirements for design, accessible features are required on new transportation facilities, as well as those facilities that have been significantly modified or renovated. Providing new pedestrian ramps, wider sidewalks, and compliant driveways, as well as removing physical barriers as part of projects will increase costs. Information gathered in our case studies suggests that this can amount to 30–40% of preservation project costs (see **Bellingham** and **Camas** write-ups in **Appendix C**).

- **Additional construction costs.** Aside from the expanded costs for construction and preservation, addressing barriers to accessibility must also be performed in a timely manner, which may in fact be before construction and preservation activities are required on streets. In these cases, additional costs may be faced by cities to remove barriers in areas that would not otherwise have projects scheduled, which would add costs even beyond the increased project costs noted above.
- **Liability for noncompliance.** Cities face legal risks of noncompliance with the ADA. Noncompliance can result from failure to meet the appropriate requirements for a Self-Evaluation, Transition Plan, and other conditions. It can also result from a lack of progress in addressing barriers identified through ADA-related processes. A recent notable case in Washington was *Reynoldson et al v. City of Seattle*, filed by Disability Rights Washington on behalf of three mobility-limited individuals due to a lack of appropriate curb ramps. The settlement agreement reached in 2017 included an agreement to spend nearly $300 million over the next 18 years to fix over 22,500 curb ramps in the city.
- **Eligibility for federal and state funding.** As noted under the description of the Preservation Act, cities must demonstrate that they have prevented discrimination against disabled individuals in their programs, activities, and services to qualify for federal funding. This includes federal funds administered and disbursed by WSDOT and other state agencies. Oversight of local agency work with ADA compliance has been more detailed within the past few years. Cities of all types are required to demonstrate progress with the requirements under ADA by WSDOT and federal authorities or risk losing funding sources.



Coordinating Street and Accessibility Investments: City of Shelton

The Access Shelton strategic initiative consolidates the city's street and sidewalk investments with its implementation of its ADA Transition Plan, creating a single coordinated approach.

The strategy helped the City obtain grants for street and sidewalk repair and replacement. Shelton's consolidated approach improved the success of grant pursuits because most grant programs prioritize ADA accessibility and walkable business districts.

6.4.2 Fish Passage Barriers

Overview

A major cost driver expected in future transportation budgets is the management and replacement of culverts and other structures on fish-bearing stream channels. In 2001, twenty-one tribes in western Washington filed suit in Federal District Court over the State's failure to guarantee sufficient salmon stocks to support treaty rights in taking fish. The decision in *United States v. Washington* in 2013, upheld by the US Supreme Court in 2017, requires the State to address all culverts that present a barrier to salmon migration. This work, involving around 800 fish barriers, may exceed $3 billion dollars and must be completed by 2030.

Although this case only included state roads, the decision has put a focus on restoring habitat and removing barriers on salmon-bearing streams, especially in western Washington. This can be complicated as there are typically multiple barriers on fish-bearing streams, many of which are managed by different stakeholders. A 2012 Washington Department of Fish and Wildlife (WDFW) study highlighted that for every State barrier there are two downstream and five upstream barriers controlled by other agencies, including city and county governments and private landowners. Final outcomes in restoration that support salmon stocks will require comprehensive action to address these barriers, as simply removing every barrier controlled by the State may not completely open habitat and migration routes.

Many cities that control fish barriers are already planning for these needs and evaluating the costs required. Additional inventories and cost estimates are needed to evaluate the full scope of the issue, but it is clear that fish barrier removal will impose significant additional costs on cities beyond the gaps already identified for preservation. This has the potential to present significant local challenges to meeting needs with available transportation funding in the future.

To date, WDFW and other agencies have catalogued over 1,100 fish barriers in cities in the Puget Sound area. **Preliminary estimates indicate that the full cost of reconstructing these culverts would be well over $1 billion for cities alone.**[13] While many of these projects could be incorporated into expected construction and maintenance activities, the fish barrier issue will trigger construction activities not currently included in Capital Facility Plans.

Impacts to Cities

Although major fish barriers are concentrated in the Puget Sound area, cities in the southern Columbia River and Snake River areas also have barriers to salmon migration. Even cities without barriers to salmon migration specifically may have barriers that affect other species such as bull trout. Consequently, removal of fish barriers will be an extensive problem for local governments in Washington, with the potential to change city capital facility planning processes and costs over the long term.

Early data from city applications to the Brian Abbott Fish Barrier Removal Board (FBRB) show costs for city fish barrier removal projects in the range of $900,000. Beyond this, individual projects may turn out to be even more complex and costly. Addressing fish barriers in highly developed urban areas will be a significant challenge to design and expensive to construct. Moxlie Creek in Olympia, for example, is a salmon-bearing stream originating in Watershed Park and piped under city's central business district for

[13] Personal communications: Tom Jameson, Fish Passage Division Manager, WDFW.

3,200 feet before it discharges into Budd Inlet. Necessary corrective action for the creek would likely be expensive, with broad impacts in the downtown. Similar cases like this exist in a number of communities that will need to be addressed.

Funding and Future Considerations

The extent of this issue is still under review, with inventories of fish passage barriers still being carried out by WDFW in coordination with AWC, WSDOT, and the FBRB. As of this report, approximately 75% of the streams in the case area have been inventoried, but no final cost estimates currently exist for correcting the entire system.

Potential Ways Forward

There are efforts in Washington to present a holistic approach to prioritizing and addressing fish barriers. The FBRB, created in 2014, has been directed by the State to correct multiple fish barriers in streams and coordinate barrier removals between other agencies to achieve the greatest cost savings while providing the maximum benefit to salmon populations. This is done through grant funding to agencies according to two distinct strategies:

- A **coordinated pathway**, where there are no full barriers downstream and other projects to address barriers have been planned or completed;
- A **watershed pathway**, where Salmon Recovery Regions are asked which watersheds would benefit from removal of all barriers, and actions are taken on priority watersheds where comprehensive funding could provide the greatest benefit.

Efforts by the State to manage fish barrier removals to date have started to approach this from a comprehensive, collaborative perspective, involving multiple agencies to achieve maximum benefits to salmon populations given investments. Long-term efforts, however, will require an expansion of this activity and a greater focus on funding support to cities, especially those cities that may have significant resource constraints.

7.0 Conclusions and Recommendations

The previous chapter describes substantial gaps in funding for city streets, despite increased investments by cities in recent years:

- The estimated need for system maintenance and preservation is about **$1 billion more than is currently being spent each year.**
- In addition to this base gap in preserving our existing system, there are additional costs that are difficult to assess statewide, including:
  - Deferred roadway maintenance and preservation
  - System capacity needs
  - Additional expenditures including comprehensive multimodal infrastructure, full ADA Transition Plan implementation, fish passage barriers

It is reasonable to conclude that we are investing **about half** of what we should. Before presenting recommendations, it is worth considering what will happen if we make no changes.

If we make no changes:

- Inequities in local wealth and disproportionate local investment needs will result in some cities not making all desired investments in:
  - ADA access
  - Fish passage barrier removal
  - Multimodal infrastructure
  - Bridge preservation
  - Roadway preservation
  - System capacity needs
- The result will be a patchwork system with investment gaps, deteriorating infrastructure, and escalating catch-up costs.

7.1 GUIDING PRINCIPLES

The following overarching principles inform the recommendations.

Maintain the whole system, with equitable consideration of potential misalignments between local investment needs and resources.

The city street system is an essential and integral part of the statewide system. The complete network tends to be operated, maintained, and expanded in state, county, and city silos, even though users perceive it as continuous. Policy and funding decisions should focus on how to make the interconnected system function well as a collective, while respecting the different purposes of the state, county, and city networks. Revenue and resource capacities vary dramatically across the state, so we must consider equity to ensure a state of good repair, economic opportunity, and accessibility to all.

Achieve high continuity of improvements.

Different levels of government should consider continuity of improvements to reduce unintended gaps in condition, nonmotorized systems, ADA accessibility, and environmental mitigation. Setting a legislative goal of continuity tells parties at different levels of government to prioritize an interconnected system.

Collaborate for efficiencies across boundaries and levels of government.

Most facilities, equipment, and commodities follow the same siloed structure of the overall transportation system. A culture of continuous improvement and pursuit of value should be expected across levels of government. Opportunities for greater efficiency include buying services, sharing equipment, and co-purchasing supplies to ensure the system and citizens get the full value of scale economies. A cross-jurisdictional efficient purchasing team might be necessary to break down traditional silos while protecting respective funding.

Focus capital support at all levels on fully funding projects.

Funding for capital projects relies on a variety of local and grant sources, including both state and federal funds. In fact, more than 150 small cities rely primarily on grants for capital improvements. State and federal grant programs frequently do not have the authority to harmonize their investments given separate schedules or processes. Without countermeasures, the variety of sources used to achieve project funding can proliferate partially funded projects that must wait for future opportunities to achieve full funding. While some of this delay may be unavoidable, the goal should be to achieve full funding as seamlessly as possible.

Provide local flexibility and incentivize asset management.

Funding systems and regulation should be flexible to allow local control over priorities and timing of improvements. Priorities should be expected to shift in response to community needs, like coordinating with economic opportunity or developing a nonmotorized system. Incentives should be used to drive asset management and accessibility.

7.2 RECOMMENDATIONS

7.2.1 Priority recommendations

1. Increase support for preservation through new or focused funding, incentives, and services to reduce lifecycle costs.

Our analysis found a significant gap in funding for the efficient preservation of existing city transportation infrastructure. This is causing the asset condition of streets and sidewalks to deteriorate and calls for stronger focus on preservation to improve safety, service quality, and lifecycle cost. Deferred maintenance has worsened for a variety of reasons including, age of system, quality of original build, weather, and historical under-investment, often due to cities' inability to make desired investments. The investment required to catch up with deferred maintenance grows at an increasing rate, creating a spiral of increasing costs.

We recommend that investment in asset condition be prioritized to reduce overall lifecycle costs. As additional local options addressed under Recommendation A, below will not be sufficient to bridge the gap, this will require additional funding from both the state and local communities. Several options exist for new or focused state resources:

- **Fund other entities to preserve the street systems of Micros and some Small cities as defined for the purposes of this study at the lowest possible cost.** Washington has 66 cities classified here as Micro with street systems in the range of 10 miles and less. These small cities have minimal budgets and almost no capacity to fund street preservation. Budget analysis shows they receive virtually all preservation and street and sidewalk construction funding from state or federal sources, the bulk of it from TIB. This also applies to some of the lower assessed value communities in the Small category. The theory of self-sufficiency fails in these cases as they have no capacity to maintain their streets.

  A long-term strategy should be developed to maintain these streets as a service provided by TIB or purchased directly from county road departments or another city. Many counties already seal coat these streets and are reimbursed by TIB.

- **Increase funding and eligibility threshold for TIB preservation programs**. TIB uses performance-based budgeting and economy of scale principles in managing the Small City Preservation Program. Small city street condition stopped declining in 2008 and conditions have improved collectively. Average street condition across all Small cities with population of 5,000 or less now exceeds 73 on a 100-point scale where industry asset management expectations generally target 70 as a performance goal. (See feature on Mattawa on page 68.) Given TIB's success with cities below 5,000 population, our recommendation is that this role be extended to more cities with additional funding for TIB and minor amendments to eligibility statutes in RCW 47.26.345.

  The population-based eligibility thresholds for TIB should also be changed to use cumulative assessed property value. Population is used by the state and federal government to establish grant and loan eligibility. However, population-based eligibility unintentionally includes low population/high property value communities while excluding higher population/low property value communities from programs like TIB preservation grants. The state can easily avoid this shortcoming by using cumulative assessed property value to set eligibility breakpoints. Assessed value (AV) provides a better surrogate for the fiscal capacity of cities and helps ensure social equity. AV is readily

available from the state Department of Revenue and already used by TIB in cases where population thresholds are not stated in code.

- **Incentivize investments by Large cities with a sliding scale match**. Preservation grants should also be more available to large communities, but with high sliding match requirements in the 40 to 50 percent range depending on community resources. High match grants provide a dual purpose: they advance the statewide goal of establishing good repair while also positively influencing the economics of local investment decisions.
- **Explore using small dollar amounts of distributed revenue to collectively fund larger paving initiatives or buy seal coat services from counties or other cities.** State distributed motor fuel tax in Connecting Washington results in annual distributions for many cities of less than $1,000. Larger increases would be advisable. Future smaller revenue distributions could be rolled up into a paving initiative or to buy seal coat services from counties or other cities.

Targeting Preservation in Other States

In 2015, **Virginia** passed House Bill 1887, which reformed its funding distribution formula. It allocated **45% of all funds to maintenance and repair** and 55% to be split evenly between priority state projects selected through performance-based ranking and priority local projects selected through regional competitions.

In **California**, the Road Repair and Accountability Act of 2017 boosted Local Streets and Roads Funding for cities and counties. Funding is distributed on a statutory formula and is conditionally based on meeting Maintenance of Effort minimum expenditures. This is intended to avoid allowing cities to supplant their general fund transfers.

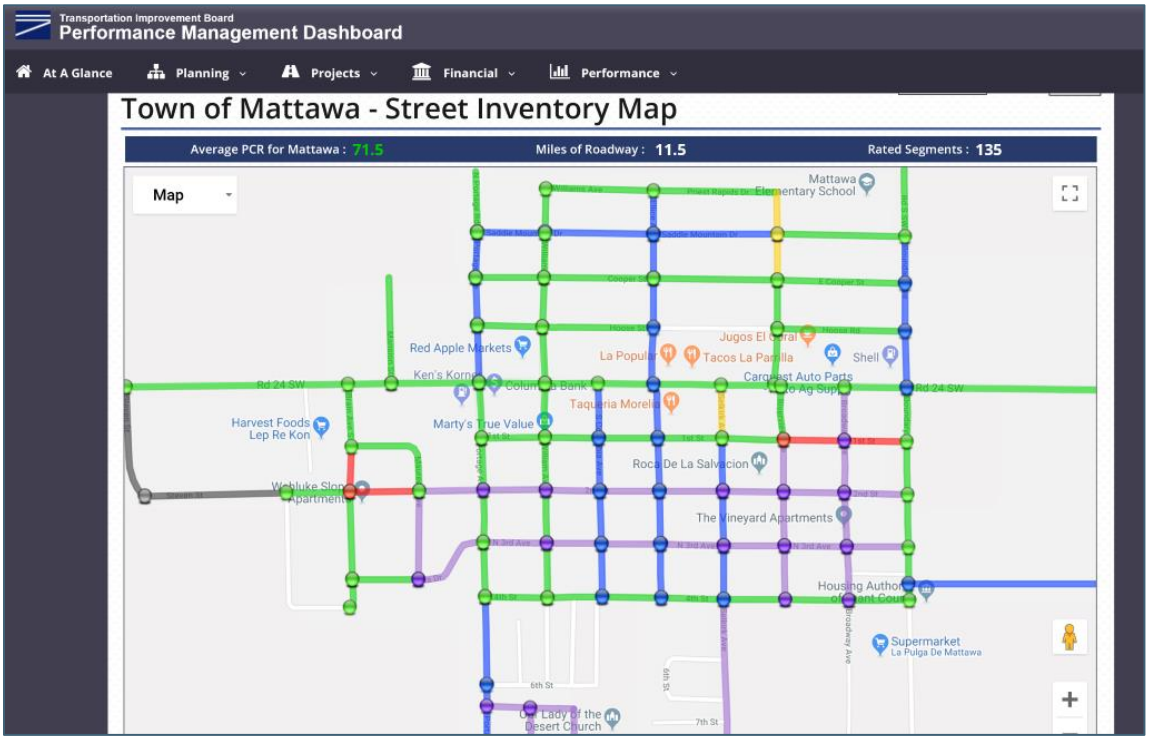
Source: Transportation for America, 2016, "Twelve Innovations in Transportation Policy Stats Should Consider in 2016".

A SUCCESSFUL INTERVENTION: CITY OF MATTAWA

Mattawa is a small rural city (4,500 pop) in southwestern Grant County. The City provides principal support to surrounding agricultural lands, providing housing, education, and commercial services.

Prior to creation of TIB's Small City Preservation Program (SCPP) by the 2005 Legislature, Mattawa had the lowest average pavement condition in the state, 33 on a 100-point scale. TIB operates the SCPP program on a performance managed basis, targeting an average pavement rating of 70 for all small cities. The SCPP program provided a concentrated effort on "worst first" addressing streets in the poorest condition. The program seeks economies of scale to counteract the geographical inefficiency of small-scale paving projects located far from asphalt suppliers.

Following implementation of this program, Mattawa's average pavement rating increased to 71 by 2018. On the map below, purple represents failed pavement. Most of Mattawa was in the purple range in 2005.



2. *Provide better paths to reach full funding of large-scale local projects that outstrip local and regional resources.*

Street projects are getting more expensive. The largest state and federal grant sources offer $4-5 million per grant, making it relatively easy, though competitive, to fund a $6-10 million project. Larger scale city projects of $20-30 million are now common, but few options exist to fund local mega-projects. Two options to address this gap include:

- **Increase grant program resources.** We recommend that funding for existing grant programs be enhanced to better support full funding for larger-scale projects.
- **Concentrate legislative appropriations.** Currently, large scale projects may receive funding through legislative appropriations. If the practice of legislative appropriations is continued, we recommend that these investments be concentrated on high-cost projects that outstrip local and regional funding capacity. Projects should also be selected based on regional interest and assurances that full funding is achievable. Connecting Washington project appropriations to cities generally focused on partnerships to address high cost projects like Richland Duportail Bridge, a $40 million project in a medium-sized city, described on the following page.

AN ALTERNATIVE TO SMALL DISTRIBUTIONS

Oregon's Small City Allotment Program sends paving money to small cities, typically as $100,000 grants, as an alternative to smaller annual direct distributions

Funding Major Projects: City of Richland's Duportail Bridge

Funding high cost projects like a major corridor or bridge is particularly difficult for cities. The $37 million Richland Duportail Bridge is an example of a high cost project in a medium-sized city. The City of Richland receives $1.2 million per year in motor fuel tax direct distributions. The scale of the project relative to city funding capacity means the project must rely on other state support. More than half of the project cost was covered by legislative action. Washington State's Connecting Washington legislation, signed by Governor Inslee in 2015, provides $20,000,000 toward the project beginning in July 2017. As of the summer of 2017, the funding package is complete as illustrated below:

FUNDING SOURCE	AMOUNT
State Connecting Washington Program	$20,000,000
State Transportation Improvement Board	$9,000,000
State Connecting Washington Program – SR240	$2,500,000
Federal – various awards	$2,687,929
City – pre-2016 investments	$1,613,081
City – Transportation Benefit District	$1,660,551
TOTAL	**$37,461,561**

In addition to the above funding for the roads and bridge, the City will invest $7.25 million in water pipelines to improve the reliability and security of its water system. Of the $7.25 million, $1,993,000 will come from a Federal Emergency Management Agency grant and $5,259,949 will come from City Water Utility Funds. The Transportation Benefit District and Water Utility Funds will be bonded.

7.2.2 Three Categories of Additional Recommendations

Beyond the two Priority Recommendations above, additional recommendations fall in three categories A. Local Funding Options; B. Efficiency; and C. Programs.

A. Local Funding Options: Enhance existing tools.

Unrestricted funds compete with other local priorities, and many existing transportation-restricted sources have been well used by cities. For example, over 100 cities have enacted TBDs; of the remaining cities,135 have a population less than 5,000 and would not generate sufficient revenues through a TBD, leaving approximately 37 cities that are using other local funding tools to fund transportation.

Because of this, our recommendation is to expand cities' use of transportation-restricted local funding options to fund preservation activities by:

- **Enhancing existing Transportation Benefit District authority.**
  - Increasing Non-voted Vehicle License Fees
  - Removing the Sales Tax Sunset
  - Creating a New TBD Utility Tax Option
- **Increasing flexibility and clarity of the local option Motor Vehicle and Special Fuel Tax.**
- **Creating a local city option Rental Car Sales Tax.**

A1. Enhance existing Transportation Benefit District authority.

Any city or town can form a TBD under Chapter 36.73 RCW to raise revenues for transportation purposes. ***City Transportation Funding Sources*** provides more information about the formation of TBDs and the revenues that TBDs can generate. As described below, we recommend that TBD authorities be amended to:

- Increase the Vehicle License Fee amount allowed without voter approval
- Remove the ten-year sunset on voter approved TBD sales tax
- Create a new tool for TBDs to increase 6% capped utility taxes by 2% and dedicate the funds to transportation

Increase Non-voted Vehicle License Fees. RCW 82.80.140 currently allows Transportation Benefit Districts to impose annual vehicle license fees not to exceed $100 dollars per vehicle. Without voter approval, a city can impose a vehicle license fee of up to $50 over a five-year period, with any amount over $40 subject to referendum. Any vehicle license fee over $50 and up to $100 must be approved by a simple majority of voters.

Exhibit 41. Non-voted License Fees

NON-VOTED VEHICLE LICENSE FEES	
Year 1	$20
Year 2	$20
Year 3	$40
Year 4	$40
Year 5	$50*

*Any Vehicle License Fee over $40 is subject to referendum.
Source: RCW 82.80.140; BERK 2019.

Pending Initiatives with Potential impacts to Vehicle License Fees

During the 2019 legislative session, Initiative 976 was filed for consideration and will be presented to voters during the November 2019 general election.

Among other limits to transportation funding, I-976 proposes repealing authority for TBDs to impose vehicle license fees. This would reduce existing city funding for transportation by almost $60 million and eliminate the ability to generate revenue through vehicle license fees in the future.

While TBDs are now in common usage, their fund-raising strength needs to be reconsidered periodically to maintain their effectiveness as costs rise. Our recommendation is to increase the non-voted Vehicle License Fee threshold from $50 to $100 and benchmark the fee to allow it to continue to increase with inflation in subsequent years.

Remove the Sales Tax Sunset. RCW 82.14.0455 currently allows Transportation Benefit Districts to impose a sales tax up to 0.2% with the approval of a simple majority of voters. Unlike most sales tax options, the TBD sales tax has a maximum duration of 10 years and then cities have the option to reintroduce the tax to the voters every 10 years in perpetuity. Uncertainty over the duration of this source makes it harder to use for projects or to support a long-term maintenance program.

Our recommendation is to remove the 10-year sunset provision from the RCW (see below) to allow the TBD sales tax option to exist in perpetuity like other voted sales tax options.

Proposed RCW amendments

RCW 82.14.0455 Sales and use tax for transportation benefit districts.

(1) Subject to the provisions in RCW 36.73.065, a transportation benefit district under chapter 36.73 RCW may fix and impose a sales and use tax in accordance with the terms of this chapter. The tax authorized in this section is in addition to any other taxes authorized by law and shall be collected from those persons who are taxable by the state under chapters 82.08 and 82.12 RCW upon the occurrence of any taxable event within the boundaries of the district. The rate of tax shall not exceed two-tenths of one percent of the selling price in the case of a sales tax,

or value of the article used, in the case of a use tax. ~~Except as provided in subsection (2) of this section, the tax may not be imposed for a period exceeding ten years. This tax, if not imposed under the conditions of subsection (2) of this section, may be extended for a period not exceeding ten years with an affirmative vote of the voters voting at the election.~~

~~(2) The voter-approved sales tax initially imposed under this section after July 1, 2010, may be imposed for a period exceeding ten years if the moneys received under this section are dedicated for the repayment of indebtedness incurred in accordance with the requirements of chapter 36.73 RCW.~~

(3) Money received from the tax imposed under this section must be spent in accordance with the requirements of chapter 36.73 RCW.

Create a New TBD Utility Tax Option. RCW 35.21.870 currently allows cities and towns to impose business and occupation taxes upon the gross operating revenues of public and private utilities that provide service within the boundaries of the jurisdiction imposing the tax. There is no restriction on tax rates for water, sewer, solid waste, and stormwater utilities, but the tax rate for electric, gas, steam, and telephone utilities is capped at 6%.

Our recommendation is to create an additional councilmanic authority for Transportation Benefit Districts in RCW 36.73.040. This would allow TBDs to increase utilities capped in statute at 6% (electric, gas, steam, and telephone) by 2% and dedicate the increase to transportation uses, creating a new dedicated transportation funding source.

A2. Increase flexibility and clarity of the local option Motor Vehicle and Special Fuel Tax.

RCW 82.38.010(2) currently allows counties to impose a motor vehicle and special fuel tax the proceeds of which are distributed to the unincorporated county and cities using a per capita formula. The local option tax must be approved by a simple majority of voters and must be levied in an amount equal to 10% of the statewide fuel tax rate. To date, no counties are enacting this tax. Spokane County and Snohomish County have attempted to levy this tax and both ballot measures failed. More information about the Local Option Motor Vehicle and Special Fuel Tax and other local transportation restricted funds can be found in City Transportation Funding Sources - Local Option Transportation Taxes Cities Are Not Eligible to Levy.

Our recommendation is twofold:

1) Make the language around the motor vehicle and special fuel tax more flexible to allow counties to impose a tax *less than* 10% of the statewide fuel tax rate, rather than *equal to* 10%; and
2) Require that the ballot communicate the tax rate *in cents* to make it more relevant and easier to understand for voters. We believe these changes will make it easier for counties to enact this tax without substantially changing the intent of the original law.

Proposed RCW amendments

RCW 82.80.010 Motor vehicle and special fuel tax.

(1) The definitions in this subsection apply throughout this section unless the context clearly requires otherwise.

(a) "Distributor" means every person who imports, refines, manufactures, produces, or compounds motor vehicle fuel and special fuel as defined in RCW 82.38.020 and sells or distributes the fuel into a county.

(b) "Person" has the same meaning as in RCW 82.04.030.

(2) Subject to the conditions of this section, any county may levy, by approval of its legislative body and a majority of the registered voters of the county voting on the proposition at a general or special election, additional excise taxes equal to **no more than** ten percent of the statewide fuel tax rates under RCW 82.38.030 on motor vehicle fuel and special fuel as defined in RCW 82.38.020 sold within the boundaries of the county. Vehicles paying an annual license fee under RCW 82.38.075 are exempt from the county fuel excise tax. An election held under this section must be held not more than twelve months before the date on which the proposed tax is to be levied. The ballot setting forth the proposition must state the tax rate that is proposed **in cents**. The county's authority to levy additional excise taxes under this section includes the incorporated and unincorporated areas of the county. The additional excise taxes are subject to the same exceptions and rights of refund as applicable to other motor vehicle fuel and special fuel excise taxes levied under chapter 82.38 RCW. The proposed tax may not be levied less than one month from the date the election results are certified by the county election officer. The commencement date for the levy of any tax under this section must be the first day of January, April, July, or October.

(3) The local option motor vehicle fuel tax on motor vehicle fuel and on special fuel is imposed upon the distributor of the fuel.

(4) A taxable event for the purposes of this section occurs upon the first distribution of the fuel within the boundaries of a county to a retail outlet, bulk fuel user, or ultimate user of the fuel.

(5) All administrative provisions in chapters 82.01, 82.03, and 82.32 RCW, insofar as they are applicable, apply to local option fuel taxes imposed under this section.

(6) Before the effective date of the imposition of the fuel taxes under this section, a county must contract with the department of revenue for the administration and collection of the taxes. The contract must provide that a percentage amount, not to exceed one percent of the taxes imposed under this section, will be deposited into the local tax administration account created in the custody of the state treasurer. The department of revenue may spend money from this account, upon appropriation, for the administration of the local taxes imposed under this section.

(7) The state treasurer must distribute monthly to the levying county and cities contained therein the proceeds of the additional excise taxes collected under this section, after the deductions for payments and expenditures as provided in RCW 46.68.090(1) (a) and (b) and under the conditions and limitations provided in RCW 82.80.080.

(8) The proceeds of the additional excise taxes levied under this section must be used strictly for transportation purposes in accordance with RCW 82.80.070.

(9) A county may not levy the tax under this section if they are levying the tax in RCW 82.80.110 or if they are a member of a regional transportation investment district levying the tax in RCW 82.80.120.

A3. Create a local option Rental Car Sales Tax.

RCW 82.08.020(2) and RCW 82.14.049 currently allow the State and counties in Washington to levy a Sales Tax on retail car rentals. The State levies a 5.9% sales tax on retail car rentals, the proceeds of which accrue to the Multimodal Transportation Account and can be used for transportation purposes appropriated by the legislature. Counties may impose a 1% sales tax on taxable retail car rentals to fund public sports stadiums and other sports facilities without voter approval. As of 2017, this tax has been imposed in five counties: Franklin, King, Kittitas, Pierce, and Spokane.

Our recommendation is to create a local option of the retail car rental sales tax for cities to generate revenues dedicated to transportation purposes, specifically for street maintenance. Although this option would likely apply to less than 30 cities, and the primary benefit would be to cities with substantial car rental activity, particularly those with commercial airports, the additional option could generate revenue to cover additional costs in higher growth areas.

Street Utility Fees and Road Usage Charges

Street utility fees were considered, but not recommended for this study because they were previously found unconstitutional. There may be opportunities for cities to receive revenue from a similar mechanism, a road usage charge, in the future.

Street utility fees treat transportation systems like utilities in which residents and businesses pay based on their use of the system, rather than on the value of their property. Typically, they are charged based on the number of trips generated by different land uses.

Starting in 1990, City Street Utility Charges were authorized in Washington under RCW 82.80.040, allowing any city or town to establish a street utility to generate revenue in an amount up to 50% of the costs for transportation maintenance, operation, and preservation. While authorized, 12 cities adopted the charge, including: Grandview, Kent, Mabton, Marcus, Medical Lake, Richland, Seattle, Snoqualmie, Soap Lake, Union Gap, Wenatchee, and Wilkeson.

The Washington State Supreme Court declared the fee invalid in November 1995 on the grounds that it was an unconstitutionally imposed property tax.[1]

In 2012, the state legislature directed the Washington State Transportation Commission to study the feasibility of a similar mechanism, a road usage charge. A road usage charge is a per-mile charge drivers would pay based on the number of miles they drive, rather than by the number of gallons of gas purchased as with the current gas tax. The approach is similar to how people pay for their utilities, including electricity or water. The study is still in progress.

[1] https://casetext.com/case/covell-v-seattle

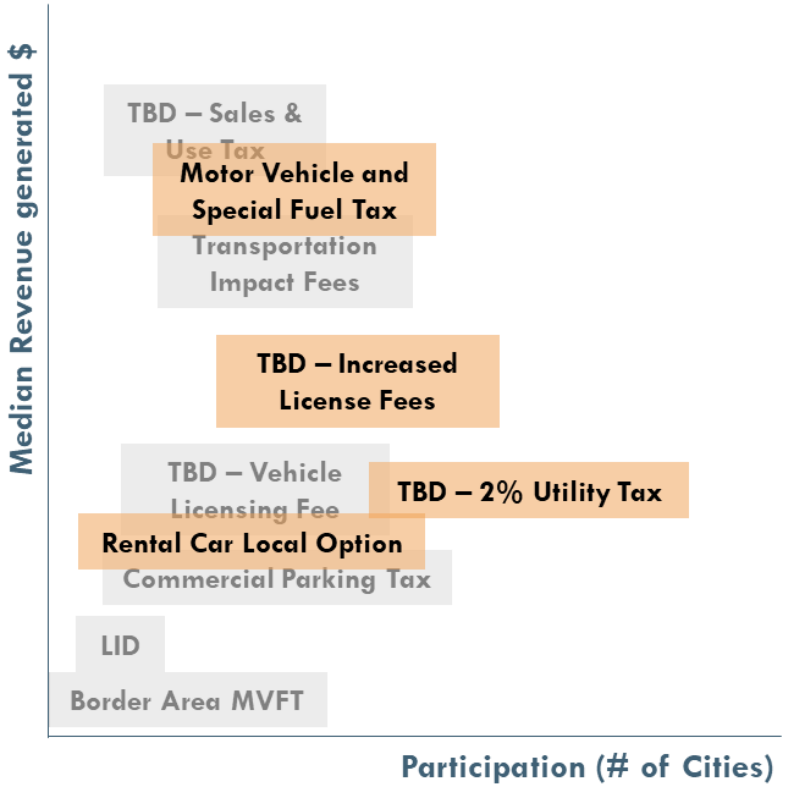
Summary of Recommended Expansions to Local Options

Exhibit 42 shows likely revenue generation of the recommended local options and ability for city participation. Of the recommended options, increased flexibility and clarity around the **local option Motor Vehicle and Special Fuel Tax** would likely generate the most revenue, but the applicability to cities across Washington is low since it must be voter-approved and implemented at the county level.

Transportation Benefit District enhancements would generate the second most revenue. **Removing the sales tax sunset** might increase the use of this option among cities, but the number of cities that would pursue this option due to the change is unknown. **Increased license fees** and the implementation of a new TBD tool – **2% utility tax dedication** without voter approval could produce good results in city participation and revenue generation.

Finally, the local option **Rental Car Sales Tax** could generate significant revenue for those that could implement it, but the number of cities that would benefit is limited to those with car rental locations, estimated at 28 across the state.

Exhibit 42. Proposed Transportation-restricted Local Options



Note: Conceptual revenue generation and likely city participation in recommended local options.
Source: SAO LGFRS 2017; BERK 2019.

B. **Efficiency:** work together to capture greater value.

B1. Rethink how to use federal funding most efficiently.

Federal resources are critical for the state overall and for funding large projects. Federal fund administrators should work carefully with local and regional government agencies to make the use of federal aid more efficient, particularly with non-certified cities and small-scale projects.

The use of federal funds on small scale projects produces higher than normal design and construction management costs, resulting in less money to put toward construction. The Transportation Research Board stated in 2011 "Although these federal programs are available to fund or partially fund small projects, accessing these federal funds may result in a disproportionate amount of resources needed to implement the projects."[14] Similarly, the US Government Accountability Office (GAO) recommended action in 2014 to set "…a potential dollar threshold under which the use of federal funds may no longer be cost-effective" (GAO-14-113).

A 2014 study of project risks by the US GAO[15] revealed that Washington has the second highest amount of federal funds administered by local agencies.

Challenges using federal transportation dollars

Federal funding comes with several requirements, including an environmental review process; a federal law requiring that federal public works projects pay local prevailing wages; federal requirements that manufactured goods must be made with US-manufactured iron and steel; union worker requirements; and federal design and construction standards. While these are desirable goals, the administration of these requirements is difficult to meet cost-efficiently on relatively small projects or by relatively small agencies. The GAO referenced two similar projects in Florida, one that used only local funds and one with federal funds. The project with federal funds cost twice as much and took three times longer to complete than the local project, as illustrated in Exhibit 43.

[14] NCHRP Synthesis 414, Effective Delivery of Small-Scale Federal-Aid Projects, National Academies of Science, 2011
[15] GAO, "Federal-Aid Highways: Federal Highway Administration Could Further Mitigate Locally Administered Project Risks," January 2014.

Exhibit 43. Comparative Project Costs

	Locally funded Sun 'N Lakes Sidewalk	Federal-aid Sun 'N Lake Sidewalk
		
Sidewalk properties	Concrete sidewalks 5 feet wide, 4 inches thick 6,575 linear feet	6,929 linear feet
Design by	Highlands County	
Construction by	Same local paving company	
Materials and testing specifications	Florida Department of Transportation Standard Specifications for Road and Bridge Construction	
Quality of construction	No difference in quality of construction according to county officials' inspections and testing	
Project duration	11 months	38 months
Project cost	$135,000	$299,000

Source: GAO, 2014.

While this is a small sample size, the results match the reported experience of local governments.

Federal reporting requirements are costly and time-consuming. Small scale projects (less than approximately $500,000) cannot efficiently amortize the higher cost of federal administrative requirements. Many federal reporting and study requirements do not scale well to smaller projects, absorbing an undesirable share of the total project budget. Contractors bid higher amounts on federal projects because reporting requirements take longer and may require additional personnel on-site.

Local staff may lack certification to directly use federal funds. Direct use of federal funds requires certification acceptance (CA), which is based in part on internally available personnel and equipment not normally available to small cities. Consequently, uncertified agencies must seek the assistance of a certified agency to use federal funds. These services come with a cost. In some cases, the cost of CA services is covered by discounting the amount of federal money by 5% or more.

City of Camas

Given the challenges of federal funding requirements, the City of Camas weighs several factors when pursuing federal funding for a project. These factors include project size, project development status, timing of project completion, funding need and scale, and agency capacity to comply with federal requirements

Options for consideration

The use of federal dollars by local agencies is not by itself a problem but should be supported by strategies to mitigate known inefficiencies. We recommend consideration of mechanisms other states have adopted to reduce inefficiencies:

- **Collaborate before federal funds are allocated to be strategic in their use.** Seek to use federal funds on state-managed projects and large projects that can absorb the higher overhead associated with federal requirements. Use state resources, which come with fewer requirements, to fund local projects that would have made less efficient use of federal dollars.
- **Establish a federal funding exchange program to allow local agencies to trade federal resources for state funds.** State funds would be used to capitalize defederalization of participating local projects. The use of state funding is revenue neutral, with state funds replaced by the receipt of federal funds. As most transportation funding in Washington State is committed to specific projects by appropriation, WSDOT or another agency would need sufficient authority to free up flexibility from siloed projects. While federal funding exchange often entails a discount in other states, we recommend setting fees, if any, at an amount designed to recover administrative costs to the State. This philosophy 1) recognizes that there are no marginal programmatic costs to the state in applying federal resources to projects that already have federal funds; and 2) seeks to maximize benefits to the user of the system.

Federal Funding Exchanges in Other States

- **California.** In 1992, California created an optional fund exchange program. The CALTRANS budget provides $60 million in state revenue to swap state funds for Surface Transportation Program federal apportionment to Regional Transportation Planning Agencies (RTPA) less than 200,000 population (Chapter 18, Local Assistance Program Guidelines, CALTRANS). RTPAs can elect to participate. A bill in the 2019 California legislature extends fund exchanges to bridge and Highway Safety Improvement Program projects (California Senate Bill 137, 2019).
- **Kansas.** The state allocates federal money using formulas, and counties and cities can exchange proposed allocation of federal funds for state funds. Local agencies receive 90 cents of state funds for every federal dollar exchanged. Cities and counties may use those state funds on other projects, and KDOT uses federal money for the state highway system. This allows KDOT to fund locally administrated projects, direct the administration of more federal dollars to state officials, reduce the size of local programs staff, and improve more roadway miles and bridges.[16]
- **Oregon.** Local agencies can exchange Federal Surface Transportation Program funds for State Highway Fund dollars at 94 cents in state funds for every dollar of federal funds. All counties are

[16] GAO, "Federal-Aid Highways: Federal Highway Administration Could Further Mitigate Locally Administered Project Risks," January 2014; Kansas Department of Transportation , *https://www.ksdot.org/Assets/wwwksdotorg/bureaus/burLocalProj/BLPDocuments/FFE/Fund%20Exchange%20Program%20Guidelines.pdf*

eligible, and cities above population of 5,000 except for cities in metropolitan planning organizations with population over 200,000 are eligible.[17]

B2. Fine tune city responsibilities for state highways that function as main streets and streets that function as state highways.

As described in **Section 2.2.1**, cities of different sizes hold different responsibilities for state highways that cross city boundaries. The recommendations below are intended to guide refinements of this relationship between local jurisdictions and the state.

- **Accelerate the population threshold or revisit the responsibilities for state highways as city streets.** Cities are delegated responsibility to maintain surface state routes within city limits. Those responsibilities are set forth in RCW 47.24.020 and clarified in a Memorandum of Understanding between WSDOT and the Association of Washington Cities (2013). Cities have fewer responsibilities if their population is less than 27,500 (47.24.020(6)(13)). The Legislature provides for a periodic increase in the responsibility threshold in 47.24.020(17). However, only six cities would move into the lower level of responsibility at the conclusion of the 15-year phased population step up.

  We recommend increasing the population threshold to 35,000 as a single action at the next adjustment date of July 1, 2023.

Exhibit 44. Timeline for Increases in Responsibility Threshold

TIMELINE	THRESHOLD	CITIES THAT WILL BE ADDED
Now	27,500	-
July 1, 2023	30,000	SeaTac
July 1, 2028	32,500	Des Moines
July 1, 2033	35,000	Lake Stevens, Pullman, University Place (no state routes), Walla Walla, and Wenatchee*

Note: *By 2033, Wenatchee will likely exceed 35,000 and retain the higher level of state highway responsibility.

[17] Oregon Department of Transportation, https://www.oregon.gov/ODOT/LocalGov/Documents/Fund-Exchange-Overview.pdf

- **Extend City Hardship Assistance Program to mitigate city street segments serving as state highways.**

  The City Hardship Assistance Program (CHAP) (46.68.110(3)) provides TIB preservation funding where certain cities have taken over decommissioned state routes. In some cases, city streets see much higher traffic volumes or truck loadings due to gaps and travel restrictions in the state route system. There are a limited number of such segments, but their pavements deteriorate faster than surrounding streets because of much higher volumes and/or truck traffic than other parts of the same network. This specific category of city street should also receive paving assistance from CHAP.

  TIB receives 1% off the top of the city distributed revenue, approximately $1 million per year, to fund CHAP. TIB previously volunteered to return half of the allocation back to the direct distribution pool because most eligible routes had been restored to good repair.

  Our recommendation is to increase the CHAP allocation to 4% of city distributed revenue in 46.68.110(3), approximately $4 million per year, and extend CHAP eligibility to city streets serving abnormally high volumes or truck traffic due to missing links or travel restrictions on a nearby state route. This condition is not intended to include traffic diverted due to congestion, construction, or short-term restrictions.

  ASSISTANCE FOR CITIES THAT BENEFIT THE STATE HIGHWAY SYSTEM

  In Florida, the County Incentive Grant Program provides 50% grants to counties to improve transportation infrastructure, including transit, which is located on the State Highway System (SHS) or which relieves traffic congestion on the SHS indirectly.

  Known Candidates

  - Auburn - West Valley Road, SR 18 to SR 167, serves in place of missing eastbound to southbound ramp.
  - Des Moines - Des Moines Memorial Drive, SR 509 to SR 516, accepts higher than normal volumes due to SR 509 gap, drops from eligibility after planned SR 509 completion.
  - Fife - 70th Avenue E, SR 167 to SR 99, serves to close gap in state route 169, drops from eligibility after SR 167 completion.
  - Rockford - Missile Base Road, serves as truck bypass for low clearance SR 27 railroad undercrossing.
  - Ritzville - First and Division Streets, serves as truck bypass for low clearance on I-90/SR 395.
  - Other routes based on TIB eligibility criteria developed in accordance with the suggested amendment to 47.26.164(3) below.

CASE STUDY HIGHLIGHT:
CITY STREET AS A STATE HIGHWAY BYPASS IN RITZVILLE

Even when they are not responsible for state highways, cities may absorb state highway impacts due to traffic being redirected to local streets.

Located just off the highway, Ritzville's First Avenue serves as a bypass route for over-height loads coming off I-90 and Highway 395. First Avenue from east city limits to Division serves as a bypass route for over-height loads that surpass the height restrictions due to the railroad crossing on I-90, just east and west of the city. Oversize loads also enter Ritzville off Highway 395, using First Avenue from south city limits to Division as a bypass route. Weight-restricted vehicles that cannot drive under the bridge must drive through county roads and city streets. A sign on the freeway calls out the Ritzville truck access route on the west bound lane just east of Ritzville. First Avenue is not set up for heavy rigs and city signs and fire hydrants have been knocked over. The City has relied on TIB funding to reconstruct several segments of First Street, and there remains a section of First Street that needs resurfacing.

Proposed RCW Amendments

RCW 46.68.110 Distribution of amount allocated to cities and towns (excerpt)

(3) ~~One~~ Four percent of such funds distributed under RCW 46.68.090 shall be deducted monthly, as such funds accrue, to be deposited in the small city pavement and sidewalk account, to implement the city hardship assistance program, as provided in RCW 47.26.164. However, any moneys so retained and not required to carry out the program under this subsection as of July 1st of each odd-numbered year thereafter, shall be retained in the account and used for maintenance, repair, and resurfacing of city and town streets for cities and towns with a population of less than five thousand;

RCW 47.26.164 City hardship assistance program—Implementation

The board shall adopt reasonable rules necessary to implement the city hardship assistance program as recommended by the road jurisdiction study.

The following criteria shall be used to implement the program:

(1) Cities with a population of twenty thousand or less and a net gain in cost responsibility due to jurisdictional transfers in chapter 342, Laws of 1991, and thereafter under *RCW 47.26.167, are eligible to receive money from the small city pavement and sidewalk account created in RCW 47.26.340;

(2) A city with a street serving abnormally high volumes or truck traffic due to missing segments in the state route system or travel restrictions, such as weight or clearance limits, as established in (3); and

(~~2~~3) The board shall develop criteria and procedures under which eligible cities may receive funding for rehabilitation projects on transferred city streets and city streets serving state route gaps or travel restrictions; and

(~~3~~4) The amount spent for the city hardship assistance program shall not exceed the amount deposited under RCW 46.68.110(3).

- **Reconsider how WSDOT recovers design review and approval costs from cities improving state highways to create a positive incentive.** City initiatives on state highways improve function and streetscape, restore traffic control, and environmental systems, and restart paving lifecycles. Currently, WSDOT charges cities for its internal design review costs when cities sponsor improvements to state highways based on RCW 47.28.140. The department has a legitimate need to finance its design review costs, but the current charges create a disincentive to city investment in state highways. Moreover, design review costs are frequently paid in part with grant funds, potentially creating a circular loop from and to the motor vehicle fund. Florida, for example, offers a County Incentive Grant Program to provide 50% of the funding necessary for County initiatives improving state highways. Washington State should incentivize city initiative on state highway improvements by funding design review within the state budget.

Existing RCW, *with relevant text* bolded

RCW 47.28.140 Highway, public transportation improvements, flood damage prevention — Cooperative agreements

When in the opinion of the governing authorities representing the department and any public agency, instrumentality, municipal corporation, or political subdivision of the state of Washington, any highway, road, street, or urban public transportation system will be benefited or improved by constructing, reconstructing, locating, relocating, laying out, repairing, surveying, altering, improving, or maintaining, or by the establishment adjacent to, under, upon, within, or above any portion of any such highway, road, street, or urban public transportation system, by either the department or any public agency, instrumentality, municipal corporation, or political subdivision of the state, and it is in the public interest to do so, ***the authorities may enter into cooperative agreements wherein either agrees to perform the work and furnish the materials necessary and pay the cost thereof, including necessary engineering assistance, which costs and expenses must be reimbursed by the party whose responsibility it was to do or perform the work or improvement in the first instance.*** The work may be done by either day labor or contract, and the cooperative agreement between the parties must provide for the method of reimbursement. In the case of some special benefit or improvement to a state highway derived from any project that assists in preventing or minimizing flood damages as defined in RCW 86.16.120 or from the construction of any public works project, including any urban public transportation system, the department may contribute to the cost thereof by making direct payment to the particular state department, agency, instrumentality, municipal corporation, or political subdivision on the basis of benefits received, but such payment may be made only after a cooperative agreement has been entered into for a specified amount or on an actual cost basis prior to the commencement of the particular public works project.

B3. Collaborate across levels of government to achieve best systemwide outcomes.

While users expect city streets, county roads, and state highways to function as an interconnected system, Washington is siloed in its approach to managing this infrastructure. Many opportunities exist to connect levels of government and jurisdictional boundaries to achieve more efficient and effective use of resources.

- **Create a way to reimburse for and an expectation that local governments share equipment, commodities, and bidding to break down silos.** Some examples include:
  - **Buy efficient seal coating from counties or other cities.** County road crews routinely seal coat up to a city's boundary, drive through the city, and restart sealing on the other side. Counties are appropriately prohibited from spending road levy revenue within cities, but continuous seal coating is highly efficient, about one-third the cost of individual small-scale projects. Counties also have skilled crews that seal many road miles. TIB has been purchasing county seal services through the Small City Preservation Program since 2008. The State should work with counties to standardize the practice of tapping the efficiency, equipment, and skills of county crews for small city preservation.
  - **Co-purchase efficient asphalt paving contracts with WSDOT.** TIB maintains an agreement with WSDOT that allows task ordering of state highway paving projects to include small city streets. A study in 2002 determined that WSDOT pays about 40% less per ton of asphalt than small cities in the same locations, mostly due to economies of scale. Larger quantities of asphalt cost less per ton. Incorporating small city streets into large scale state paving contracts saves money and accesses the skills of WSDOT construction managers to assist cities. This practice has been particularly successful in WSDOT Eastern Region because they incorporate cities into their program management. The demonstrated success of paving partnerships should be a standard practice systemwide.
- **Foster policies, cultural expectations, and awareness of opportunities to enable small agencies to benefit from assistance and resources provided by the State or larger agencies.** Existing authorities and resources designed to support less-resourced communities are not used as often as they should be. Examples include:
  - **Engineering assistance.** Smaller cities, particularly at the Micro level as defined for this study, have limited access to internal engineering capability to plan system improvements, hire consultants or bid projects. In cases where the city engineer of record is a consultant, city officials must direct such services and use engineering knowledge to interpret recommendations and make decisions. The Legislature previously

INCENTIVIZING PARTNERSHIPS WITH THE PUBLIC SECTOR

Florida's Transportation Regional Incentive Program provides funding to improve regionally significant transportation facilities in regional transportation areas defined by Florida statute. State funds are available throughout Florida to provide incentives for local governments and the private sector to help pay for critically needed projects that benefit regional travel and commerce. The department is required to approve a transportation project if it directly benefits a business that might otherwise locate outside the state, pursuant to very specific standards.

recognized this gap and made provisions in 47.24.050 for ensuring access to engineering services from the State or county. This authority is used too infrequently. The State should play a stronger role in promoting access to engineering expertise, whether through WSDOT, TIB, or by securing those services from counties.

- **Hands-on street maintenance training for small communities: crack sealing, pothole repair, signal maintenance.** Street personnel in small communities tend to come from other industries. Street maintenance activities are often added onto utility operations because all cities with water and wastewater systems require certified utility operators. Consequently, small cities may not have access to common street maintenance skills. The State should promote these opportunities for hands-on training, particularly in crack sealing, pothole repair, and signal maintenance. Field skills training could be added to the training provided by WSDOT Local Programs through the Local Technical Assistance Program or by counties with state sponsorship.

These opportunities should be promoted, via the annual Infrastructure Assistance Coordinating Council (IACC) conference and other means, and the practice of bridging levels of government should be recognized and encouraged.

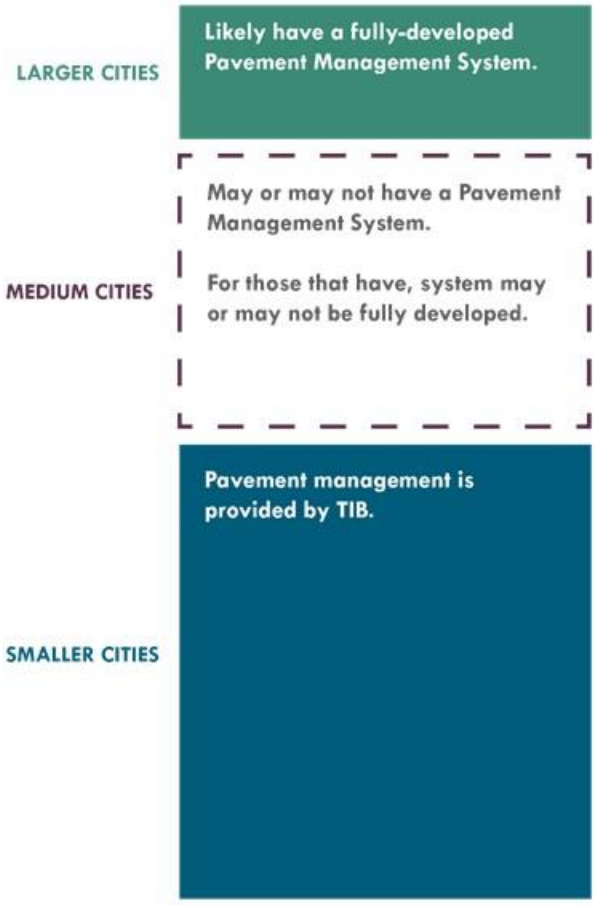
- **Partner to develop a highly connected, safe, and accessible nonmotorized system.** The State supports development of bicycle and pedestrian infrastructure and continuous ADA accessibility. This support comes through multiple programs including the WSDOT Pedestrian and Bicycle Program and the TIB Sidewalk and Complete Streets Programs. The Recreation & Conservation Office and direct appropriations through the Transportation and Capital Budget also further this policy goal. These funding efforts should collaborate to accelerate development of an integrated network of nonmotorized facilities.
- **Encourage a coordinated watershed approach to addressing fish barriers.** The funding challenges of fish barrier removal are well known to the Legislature. This study reviewed existing information rather than conducting additional empirical research. The Association of Washington Cities and Washington Department of Fish and Wildlife have worked together on original research and additional inventory and cost estimation will be necessary to arrive at a systemic solution. Currently, fish barriers are modified to current standards during street projects and in response to fish barrier grant funding. The study team concluded that fish barriers need to be addressed on a watershed basis rather than agency by agency. Improved access to grants or direct funding will be necessary to accelerate progress.

C. **Programs:** increase program support and collaboration.

C1. Facilitate access to pavement management systems to help cities make optimal investments.

Pavement management systems pair field inspection with a computer application to track and plan preservation treatment, which is usually seal coat, street recycling, or resurfacing. While pavement management is a common public works asset management function, pavement rating and operation of pavement management software is a skilled engineering activity and not accessible to every city.

All Large and some medium-sized cities likely have their own pavement management systems. All small cities with population less than 5,000 receive pavement rating and reporting services directly from TIB as part of the Small City Preservation Program. TIB conducts field rating of small city streets on a four-year cycle and posts the data publicly on the TIB Performance Management Dashboard. This leaves a gap, with some medium cities operating without robust pavement management systems.

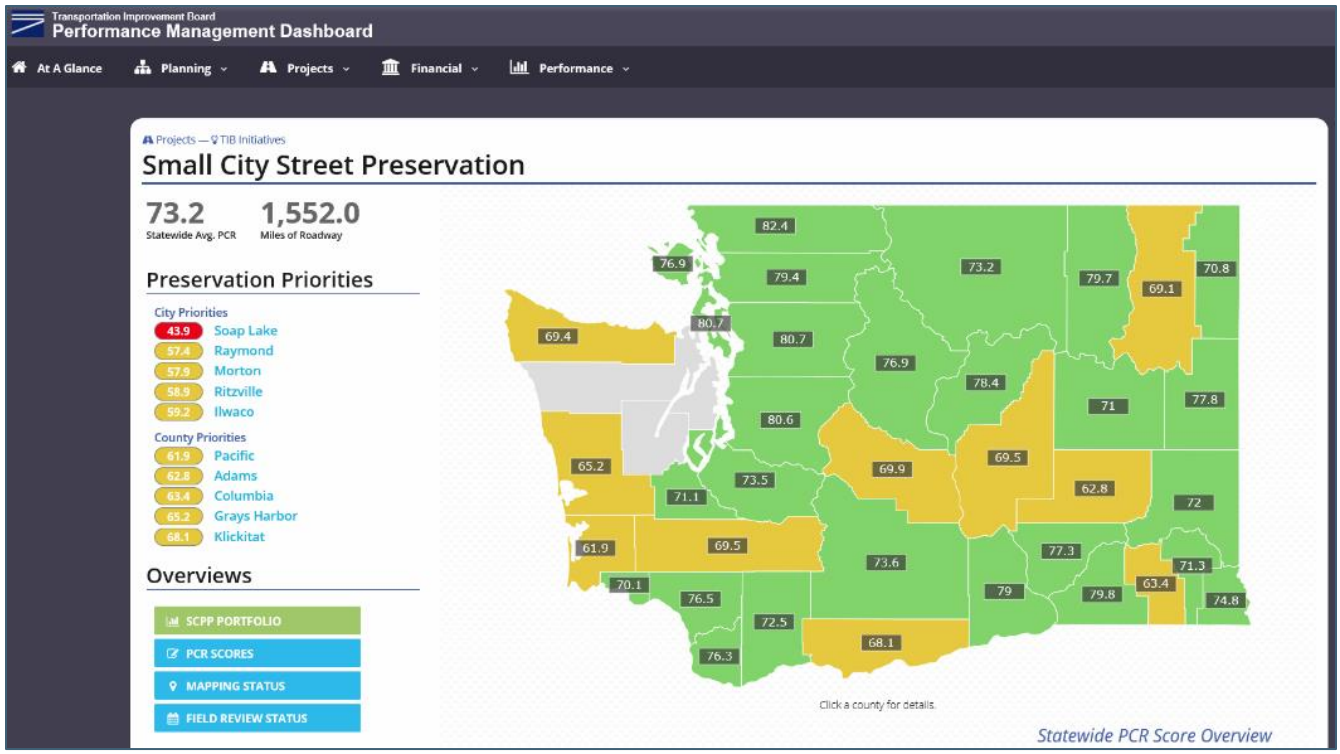


Source: BERK, 2019.

The State should seek to close the gap between large cities and those covered by TIB. This could be accomplished through funding support for pavement management systems or extending TIB services to more cities. Pavement rating is a resource-intensive activity and given the larger street mileage of cities without existing pavement management systems, TIB or any other provider would require additional funding and staff to accomplish this work.

In addition to the direct benefit of providing asset management services and insights to cities, a state-funded approach would consolidate pavement management approaches and tools around a single standard and platform. This would help cities take advantage of new innovations in pavement management and ensure comparable, high quality data is available for decision making within and across cities. As an example, the TIB Performance Management Dashboard posts pavement data for all small cities on a publicly accessible website as shown in Exhibit 45.

Exhibit 45. TIB Online Dashboard



To explore this data, go to www.tib.wa.gov/dashboard and navigate to "Projects" and then "Small City Preservation."

C2. Incorporate measures in existing programs to encourage the full funding of projects.

Several funding programs of the state and federal governments may be involved in the same project. Individually, these programs usually provide only part of the funding necessary to close the gap between local funds and full funding. Most programs have independent eligibility criteria, priorities, and schedules, often determined by budget cycles or legal requirements. This makes it difficult to coordinate funding, potentially generating partially-funded projects.

While federal programs have fixed requirements, state programs should collaborate wherever possible to achieve full funding. State grant and loan programs could be modified to work together seamlessly. For example, a project with a state grant would receive higher priority for other funding sources, or easily obtain a loan to cover the match.

7.3 SUMMARY OF RECOMMENDATIONS

The table below summarizes our recommendations, identifies whether new state resources or legislative action might be required for implementation, and assigns relative prioritization.

RECOMMENDATIONS	NEW STATE RESOURCES REQUIRED?	STATUTORY CHANGE REQUIRED?	RECOMMENDED PRIORITIZATION
Priority Recommendations			
1. **Increase support for preservation through new or focused funding, incentives, and services to reduce lifecycle costs.** ▪ Fund other entities to preserve the street systems of Micro cities and some Small cities at the lowest possible cost ▪ Increase funding and eligibility threshold for TIB preservation programs ▪ Incentivize investments by Large cities with a sliding scale match ▪ Explore using small dollar amounts of distributed revenue to collectively fund larger paving initiatives or buy seal coat services from counties or other cities	Highly desirable, though advances can be made through focusing existing funding	Yes	High *Investments in asset management reduce long-term costs*
2. **Provide better paths to reach full funding of large-scale local projects that outstrip local and regional resources.** ▪ Increase grant program resources ▪ Concentrate legislative appropriations	Yes	Yes	High *Funding for major projects is a critical gap*

RECOMMENDATIONS	NEW STATE RESOURCES REQUIRED?	STATUTORY CHANGE REQUIRED?	RECOMMENDED PRIORITIZATION
A. Local Funding Options: Enhance Existing Tools			
A1. Enhance existing Transportation Benefit District authority to increase non-voted vehicle license fees, remove the sales tax sunset, and create a new TBD utility tax option	No	Yes	High *Provides local flexibility; should be done concurrently*
A2. Increase flexibility and clarity of the local option Motor Vehicle and Special Fuel Tax	No	Yes	
A3. Create a local option Rental Car Sales Tax	No	Yes	
B. Efficiency: Work Together to Capture Greater Value			
B1. Rethink how to use federal funding most efficiently ▪ Collaborate before federal funds are allocated to be strategic in their use ▪ Establish a federal funding exchange program to allow local agencies to trade federal resources for state funds	Depends on approach taken. *Exchange option requires additional funding authority but is revenue neutral.*	Yes	High *Immediate efficiencies can be gained*
B2. Fine tune city responsibilities for state highways that function as main streets and streets that function as state highways ▪ Accelerate the population threshold or revisit the responsibilities for state highways as city streets ▪ Extend City Hardship Assistance Program to mitigate city street segments serving as state highways ▪ Reconsider how WSDOT recovers design review and approval costs from cities improving state highways to create a positive incentive	Yes	Yes	Medium

RECOMMENDATIONS	NEW STATE RESOURCES REQUIRED?	STATUTORY CHANGE REQUIRED?	RECOMMENDED PRIORITIZATION
B3. Collaborate across levels of government to achieve best systemwide outcomes ▪ Create a way to reimburse for and an expectation that local governments share equipment, commodities, and bidding to break down silos ▪ Foster policies, cultural expectations, and awareness of opportunities to enable small agencies to benefit from assistance and resources provided by the state or larger agencies ▪ Partner to develop a highly connected, safe and accessible nonmotorized system ▪ Encourage a coordinated watershed approach to addressing fish barriers	Yes	Depends	Medium
C. Programs: increase program support and collaboration			
C1. Facilitate access to pavement management systems to help cities make optimal investments	Yes	No	High *Asset management is cost effective*
C2. Incorporate measures in existing programs to encourage the full funding of projects	No	Yes	Medium

Appendix A. City Typology

A.1. PRIMARY TYPOLOGY

For this examination of the 281 cities and towns in Washington, we have divided jurisdictions into types based on four characteristics:

- **Total length of the local road network**, defined as the total centerline length of all roads within a city that are under its jurisdiction, which is used here as a proxy for the scale of the local transportation network;
- **Total assessed property value**, which is the sum of the total value of assessed real property in the city, including residential and non-residential land and improvements, used here as a proxy for local community resources;
- **Total population**, with a focus on whether the population is over or under 5,000, which is used to indicate communities that may be managed differently under state policy; and
- **Assessed property value per capita**, which indicates communities with very high local land values.

Exhibit 46 displays total network length versus total assessed value for all 281 communities using a logarithmic scale, with a division between four major community types based on an initial clustering analysis. These include:

- **Micro cities**: The smallest cities in the typology represent communities with the smallest street networks and local resources among cities in the state. These communities would be expected to need support not only for the integrity of the system, but also administrative and organizational capacity.
- **Small cities**: Small cities include those jurisdictions between the groups that have populations of less than 5,000 residents in 2018. These communities are eligible for support from state programs such as TIB Small City programs but may have greater local resources than the smallest communities to support minor maintenance and system integrity.
- **Medium cities**: Medium cities include those jurisdictions between groups 1 and 4 that have populations greater than 5,000 residents. These communities generally have greater resources available versus their smaller counterparts to support maintenance, preservation, and limited capital investment, but may not have access to the types of funding support available to smaller cities.
- **Large cities**: Large cities represent those communities with considerable resources and extensive local street networks, and can support local maintenance, presentation, and capital investment.

In addition to these groups, the distribution in Exhibit 46 also includes smaller residential enclaves with very high local property values per capita. These represent distinct outliers among the distribution of other communities of similar size due to their relative wealth. The assessments in this study mange these communities as special cases within their respective city types.

To highlight major areas of exploration in this analysis, Exhibit 47 indicates the general support that could be required for these community types given their resources and organizational capacity.

Exhibit 46. Typology for Washington cities.

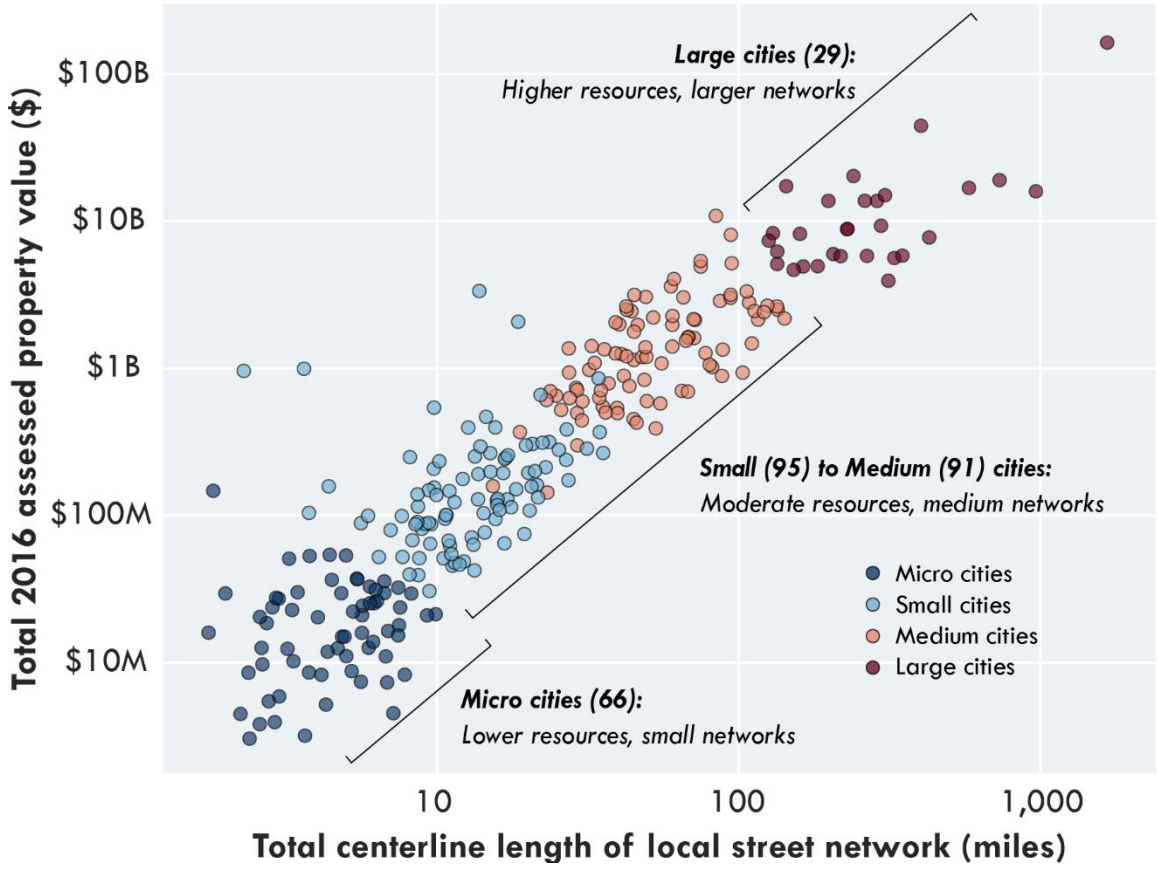


Exhibit 47. Potential areas of support, by city type.

	1: MICRO	2: SMALL	3: MEDIUM	4: LARGE	OUTLIERS
State policy initiatives (e.g., ADA, freight, complete streets, safety)	✓	✓	✓	✓	✓
Major capital projects	✓	✓	✓	✓	✓
Minor capital projects	✓	✓			✓
Major maintenance and preservation	✓	✓	✓		✓
Preventative maintenance	✓	✓			
Organizational / administrative	✓				✓

A.2. CITY TYPOLOGY DETAILS

Group 1: Micro Cities (65 communities)

COMMUNITY	POPULATION	COMMUNITY	POPULATION	COMMUNITY	POPULATION
Albion	550	LaCrosse	310	Skykomish	205
Almira	275	Lamont	80	South Cle Elum	530
Bucoda	575	Latah	195	South Prairie	435
Carbonado	665	Lind	550	Spangle	275
Cathlamet	490	Lyman	455	Sprague	440
Colton	440	Malden	200	Springdale	315
Conconully	235	Mansfield	330	St. John	505
Coulee City	570	Metaline Falls	240	Starbuck	130
Creston	225	Marcus	175	Toledo	720
Cusick	205	Mesa	495	Uniontown	345
Elmer City	290	Metaline	170	Vader	610
Endicott	295	Mossyrock	760	Washtucna	210
Fairfield	620	Naches	960	Waverly	125
Farmington	155	Nespelem	245	Wilkeson	490
Garfield	600	Northport	295	Wilson Creek	210
George	720	Oakesdale	425		
Hamilton	300	Oakville	690		
Harrah	670	Pe Ell	650		
Harrington	415	Prescott	330		
Hartline	155	Reardan	575		
Hatton	110	Riverside	285		
Index	175	Rock Island	1,040		
Ione	445	Rockford	480		
Kahlotus	165	Rosalia	560		
Krupp	50	Roy	815		

Group 2: Small Cities (90 communities)

COMMUNITY	POPULATION	COMMUNITY	POPULATION	COMMUNITY	POPULATION	COMMUNITY	POPULATION
Algona	3,180	Deer Park	4,240	Montesano	4,155	Tekoa	770
Asotin	1,275	Eatonville	2,955	Morton	1,125	Tenino	1,785
Benton City	3,405	Electric City	1,030	Moxee	4,020	Tieton	1,305
Bingen	735	Elma	3,360	Napavine	1,940	Tonasket	1,110
Black Diamond	4,360	Entiat	1,205	Newport	2,170	Twisp	975
Brewster	2,405	Everson	2,730	Nooksack	1,500	Waitsburg	1,230
Bridgeport	2,480	Forks	3,615	North Bonneville	1,015	Warden	2,745
Buckley	4,765	Friday Harbor	2,345	Odessa	905	Waterville	1,175
Carnation	2,155	Gold Bar	2,175	Okanogan	2,620	Westport	2,120
Cashmere	3,095	Goldendale	3,530	Omak	4,935	White Salmon	2,505
Castle Rock	2,200	Grand Coulee	1,055	Oroville	1,705	Wilbur	890
Chelan	4,210	Granger	3,945	Palouse	1,060	Winlock	1,340
Chewelah	2,670	Granite Falls	3,615	Pateros	585	Winthrop	465
Cle Elum	1,875	Ilwaco	965	Pomeroy	1,395	Yacolt	1,780
Colfax	2,820	La Conner	940	Rainier	2,020	Zillah	3,165
Colville	4,745	Langley	1,175	Republic	1,100		
Concrete	740	Leavenworth	2,030	Ritzville	1,660		
Cosmopolis	1,665	Long Beach	1,445	Roslyn	900		
Coulee Dam	1,100	Mabton	2,315	Royal City	2,275		
Coupeville	1,905	Mattawa	4,900	Ruston	990		
Darrington	1,400	McCleary	1,760	Soap Lake	1,575		
Davenport	1,715	Medical Lake	4,990	South Bend	1,625		
Dayton	2,560	Millwood	1,790	Stevenson	1,575		

Group 3: Medium Cities (91 communities)

COMMUNITY	POPULATION	COMMUNITY	POPULATION	COMMUNITY	POPULATION
Aberdeen	16,760	Fircrest	6,710	Othello	8,270
Airway Heights	9,085	Gig Harbor	10,320	Pacific	6,915
Anacortes	16,990	Grandview	11,180	Port Angeles	19,370
Arlington	19,300	Hoquiam	8,560	Port Orchard	14,160
Battle Ground	20,890	Issaquah	37,110	Port Townsend	9,545
Blaine	5,315	Kelso	12,080	Poulsbo	10,850
Bonney Lake	20,940	Kenmore	22,920	Prosser	6,125
Bremerton	41,500	Lake Forest Park	13,090	Pullman	33,730
Brier	6,605	Lake Stevens	32,570	Quincy	7,510
Burlington	9,025	Liberty Lake	10,390	Ridgefield	7,705
Camas	23,770	Longview	37,710	SeaTac	29,130
Centralia	17,060	Lynden	14,160	Sedro-Woolley	11,350
Chehalis	7,515	Lynnwood	38,260	Selah	7,820
Cheney	12,200	Maple Valley	25,280	Sequim	7,460
Clarkston	7,205	Mercer Island	24,270	Shelton	10,140
College Place	9,590	Mill Creek	20,470	Snohomish	10,150
Connell	5,460	Milton	7,900	Snoqualmie	13,450
Covington	20,080	Monroe	18,860	Stanwood	6,835
Des Moines	31,140	Moses Lake	23,660	Steilacoom	6,425
DuPont	9,385	Mount Vernon	35,180	Sultan	5,050
Duvall	7,655	Mountlake Terrace	21,560	Sumner	10,030
East Wenatchee	13,670	Mukilteo	21,320	Sunnyside	16,850
Edgewood	10,990	Newcastle	12,410	Toppenish	9,090
Ellensburg	19,660	Normandy Park	6,595	Tukwila	19,800
Enumclaw	11,660	North Bend	6,825	Tumwater	23,830
Ephrata	8,130	Oak Harbor	22,780	Union Gap	6,235
Ferndale	13,640	Ocean Shores	6,220	University Place	32,820
Fife	10,100	Orting	8,105	Walla Walla	34,000

COMMUNITY	POPULATION	COMMUNITY	POPULATION	COMMUNITY	POPULATION
Wapato	5,040				
Washougal	16,020				
Wenatchee	34,530				
West Richland	15,320				
Woodinville	11,830				
Woodland	6,205				
Yelm	9,030				

Group 4: Large Cities (29 communities)

COMMUNITY	POPULATION	COMMUNITY	POPULATION	COMMUNITY	POPULATION
Auburn	80,615	Lakewood	59,350	Tacoma	209,100
Bainbridge Island	24,320	Marysville	67,040	Vancouver	183,500
Bellevue	142,400	Olympia	52,490	Yakima	94,190
Bellingham	88,500	Pasco	73,590		
Bothell	45,260	Puyallup	41,100		
Burien	51,850	Redmond	64,050		
Edmonds	41,820	Renton	104,100		
Everett	111,200	Richland	55,320		
Federal Way	97,440	Sammamish	63,470		
Kennewick	81,850	Seattle	730,400		
Kent	128,900	Shoreline	55,730		
Kirkland	87,240	Spokane	220,100		
Lacey	50,170	Spokane Valley	95,810		

Outlier Communities (6 communities)

COMMUNITY	POPULATION	COMMUNITY	POPULATION	COMMUNITY	POPULATION
Beaux Arts Village	300	Hunts Point	420	Woodway	1,340
Clyde Hill	3,045	Medina	3,245	Yarrow Point	1,065

Appendix B. City Transportation Funding Sources

B.1. SUMMARY OF CITY TRANSPORTATION REVENUE SOURCES AND LIMITATIONS

The table below summarizes the following funding sources that cities may use to fund their street infrastructure:

- Federal sources.
- State sources.
- Local transportation-restricted sources.
- Local non-restricted sources.

Exhibit 48. City Transportation Revenue Sources and Limitations

REVENUE SOURCE	TRANSPORTATION RESTRICTED	NOTES	ELIGIBLE EXPENDITURES		VOTED
			PROGRAMMATIC	CAPITAL	
Federal Sources – all of which passes through the state and/or MPTs/RTPOs					
Federal Highway Administration/ Fixing America's Surface Transportation (FAST) Act federal aid	✓	▪ States receive apportioned share of federal funds based on allocation process specified in federal law. ▪ Federal funds passed along to cities through 1) Federal pass through programs, 2) Federally managed programs, 3) State grant programs.	✓	✓	No
State Sources					
Local Project Appropriations for Transportation Projects	✓	▪ *Legislature may make direct appropriations to specific transportation projects in the state budget.*	✓	✓	No
State Motor Vehicle Fuel Tax (state gas tax distribution) *RCW 82.38* *RCW 46.68.090*	✓	▪ Limited to"transportation purposes" per *RCW 82.80.070* and "highway purposes" per the 18th Amendment. ▪ Distributed to cities and counties; the city portion is distributed on a per-capita basis. ▪ State transfers an additional portion from State Motor Vehicle Account under Connecting Washington Act starting 2015.	✓	✓	No
State Multimodal Account Distribution *RCW 46.68.126*	✓	▪ State transfers a portion from the State Multimodal Account under Connecting Washington Act starting 2015.	✓	✓	No

REVENUE SOURCE	TRANSPORTATION RESTRICTED	NOTES	ELIGIBLE EXPENDITURES		VOTED
			PROGRAMMATIC	CAPITAL	
Capron Refunds RCW 46.68.080		▪ Cities located in counties entirely composed of islands (San Juan, Island) receive gas tax refund to compensate them for their lack of state highways and state highway investment.	✓	✓	No
Freight Mobility Strategic Investment Board (FMSIB) Grants RCW 47.06A, WAC 226.01	✓	▪ To support statewide freight mobility transportation system.		✓	No
Transportation Improvement Board (TIB) Grants RCW 47, WAC 479-05, WAC 479-10, WAC 479-14	✓	▪ Funded by state gas tax.		✓	No
WSDOT Local Programs: Safe Routes to School	✓	▪ Funded by federal and state funds for projects that improve conditions for and encourage children to walk and bike to school.		✓	No
WSDOT Local Programs: Pedestrian & Bicycle Funding	✓	▪ Funded by federal and state funds for projects that enhance safety and mobility for people who walk or bike.		✓	No
Local Sources: Transportation-Restricted					
Border Area Motor Vehicle Fuel Tax RCW 82.47.020	✓	▪ To fund street construction and maintenance. ▪ Only cities next to international border crossing are eligible.	✓	✓	Yes
Commercial Parking Tax RCW 82.80.030	✓	▪ For general "transportation purposes" per *RCW 82.80.070*. ▪ Subject to planning provisions. ▪ Tax exempt carpools, vehicles with handicapped decals, government vehicles exempt.	✓	✓	No

REVENUE SOURCE	TRANSPORTATION RESTRICTED	NOTES	ELIGIBLE EXPENDITURES		VOTED
			PROGRAMMATIC	CAPITAL	
Local Improvement District RCW 35.43 RCW 36.88	✓	▪ To fund improvements in specific areas which must directly benefit nearby property owners. ▪ RIDs are enacted by counties.		✓	No
Transportation Benefit District – Sales and Use Tax RCW 36.73 RCW 82.14.0455	✓	▪ For transportation improvements on state highways, county roads, and city streets. ▪ Limited to "transportation purposes" per *RCW 82.80.070*.	✓	✓	Yes
Transportation Benefit District – Vehicle Licensing Fee RCW 36.73 RCW 36.73.065 RCW 82.80.140	✓	▪ For transportation improvements on state highways, county roads, and city streets. ▪ Limited to "transportation purposes" per *RCW 82.80.070*.	✓	✓	No, up to $50. Yes, above $50 up to $100.
Transportation Impact Fees RCW 82.02.050 (Growth Management Act) RCW 39.92 (Local Transportation Act)	ü	▪ Under GMA, only for public streets and roads addressed by a capital facilities plan element of a GMA comprehensive plan.		✓	No
Local Sources: Non-Restricted					
Property Tax Title 84 RCW RCW 84.55.050		▪ Not restricted.	✓	✓	No Yes, for levy lid lift
Business and Occupation Tax (local) RCW 35.22.280(32)		▪ Not restricted.	✓	✓	No

REVENUE SOURCE	TRANSPORTATION RESTRICTED	NOTES	ELIGIBLE EXPENDITURES		VOTED
			PROGRAMMATIC	CAPITAL	
Retail Sales & Use Tax *RCW 82.08* *RCW 82.24.030*		▪ Not restricted.	✓	✓	No
Utility Tax (local) *RCW 35.22.280(32)*		▪ Not restricted.	✓	✓	No
Real Estate Excise Tax 1 (REET 1) *RCW 82.46.010(5)* *RCW 82.45.030* *RCW 82.46.035(2)*		▪ GMA cities: capital projects included capital facilities element of Comprehensive Plan. ▪ Non-GMA cities: capital purpose identified in a capital improvements plan or acquisition of lands associated with such improvements.		✓	No
Real Estate Excise Tax 2 (REET 2) *RCW 82.46.010(5) RCW 82.45.030* *RCW 82.46.035(2)*	ü	▪ GMA cities only. ▪ Restricted to streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, bridges, water/storm/sewer systems, parks. From July 1, 2017 - June 30, 2019 only, funds may be used for housing for homeless.		✓	No
Additional REET 3 *RCW 82.46.010(3)*		▪ Cities that do not levy 0.5% local sales tax may levy REET 3 for general fund operating expenses.	✓		No
Local Debt Financing					
Limited Tax General Obligation (LTGO) Bonds *RCW 39.36* *Article 8, Sec. 6, State Constitution*		▪ Total debt is limited to 2.5% of assessed value; LTGO debt is limited to 1.5% of assessed value of taxable properties.	✓	✓	No

REVENUE SOURCE	TRANSPORTATION RESTRICTED	NOTES	ELIGIBLE EXPENDITURES		VOTED
			PROGRAMMATIC	CAPITAL	
Unlimited Tax General Obligation (UTGO) Bonds RCW 39.36 RCW 84.52.056 Article 7, Sec. 2, State Constitution		▪ Total debt is limited to 2.5% of assessed value. ▪ Limited to capital purposes.		✓	Yes

Source: Washington JTC Transportation Resource Manual, 2017; MRSC, 2018; State Auditor's Office Local Government Financial Reporting System, 2017; Department of Revenue, 2018; BERK, 2019.

B.2. LOCAL UNRESTRICTED FUNDS

There are many local tax mechanisms that generate revenues of varying magnitudes in Washington. Below are the four primary taxes that cities collect and feed into the General Fund. These funds are not dedicated transportation funds, so they compete with other General Fund needs.

Property Tax

Title 84 RCW

- Property tax has traditionally been the primary funding source for local government in Washington. Property tax revenues are a major funding source since they are unrestricted, can generate large revenues, and do not require voter approval.
- With Initiative 747, annual property tax increases were limited to 1% of the prior year's collections plus any new construction, leading to erosion in property taxes as a local funding source due to inflation and service demand (based on per capita and per modified capita growth) outpacing that 1 percent growth allowance.
- A city's "banked" capacity is available to use in future years without voter approval, per RCW 84.55.092.

Voted Levy Lid Lift

RCW 84.55.050

- Cities can levy either a single-year or multiyear levy lid lift, temporary or permanent, to increase property taxes in taxing districts without banked capacity beyond the 1 percent limit.
- With a permanent single-year lid lift, cities can increase general property taxes beyond the 1 percent limit in the first year, and then that amount is used to calculate all future 1 percent levy limitations. The measure never expires, and the levy lid never reverts. Single-year lid lifts may be submitted to voters at any special, primary, or general election.
- With a permanent multiyear lid lift, cities can increase general property taxes beyond the 1 percent limit (up to a limit factor specified in the ballot measure), for 6 consecutive years up to a rate equal to or less than the statutory maximum, which is $2.25 per $1,000 of assessed value. After the 6 years, the total levy can increase by up to 1 percent annually. Multiyear lid lifts must be submitted at the primary or general election.

Retail Sales and Use Tax

RCW 82.08

RCW 82.24.030

- Cities can impose, by resolution or ordinance, a non-voted sales and use tax at 0.5% on any taxable event, per *RCW 82.24.030(1)*. Cities may impose, by legislative body majority, an additional sales tax up to 0.5%, in increments of 0.1%, per *RCW 82.14.030(2).* Revenues are not restricted. For both, the combined city/county rate may not exceed 0.5%, so the effective city rate may be lower.

- Collection of retail sales and use taxes are driven by the distribution of major retail sales. This means that retail sales and use taxes are also highly volatile, following changes in the economy.

Business and Occupation (B&O) Tax

RCW 35.22.280(32)

- General B&O taxes are levied on gross receipts of businesses, based on the industry. Historically, many cities have chosen not to implement B&O taxes, due to the perception that business taxes erode local competitiveness for attracting businesses to the City. However, as property tax revenues continue to erode, more cities are considering implementing them.
- *As of 2018, 62 cities levy a local B&O tax.*

Utility Tax

RCW 35.22.280(32)

- Utility taxes are a form of Business and Occupation tax. These revenues contribute to a municipality's General Fund and may be used for many city expenses, including capital improvements.
- Washington State sets the maximum rate of tax on electrical, natural gas, steam energy, and telephone businesses at 6.0%, unless a higher rate is approved by voters. There is no tax rate limit on other utilities such as water, sewer, and garbage services. These taxes are generally smaller in total collections but also less volatile in response to the economy.
- *As of 2018, 246 cities levy a local utility tax.*

Beyond these four taxes, cities can collect Real Estate Excise Tax (REET), hotel-motel lodging taxes, gambling taxes, admissions taxes, leasehold excise taxes, and use taxes on brokered natural tax. Of these, only REET is commonly adopted and used for transportation.

Real Estate Excise Tax (REET)

RCW 82.46.010(5), RCW 82.45.030, RCW 82.46.035(2), RCW 82.46.010(3)

Washington State levies a 1.28% real estate excise tax (REET) on all property taxes. Cities may levy a local tax in addition to the state tax.

- Cities can implement can levy two REET taxes (REET 1 and REET 2), each of which is a 0.25% tax on the full sales price of real estate.
- **REET 1:** All cities may levy REET 1. Cities planning under GMA must use REET 1 on capital projects included in the capital facilities element of the City's Comprehensive Plan. Cities not planning under GMA can use REET 1 on any capital purpose identified in a capital improvements plan or acquisition of lands associated with such improvements.
- **REET 2:** Only cities planning under GMA may levy REET 2. REET 2 must be spent on capital projects as defined in *RCW 82.46.035(5)*: streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, bridges, water/storm/sewer systems, and parks.

- **Additional Half Percent REET 3:** Cities that are not levying the optional half-cent sales tax under RCW 82.14.030(2) may levy an additional 0.5% REET. These revenues are not designated for capital projects but are a general fund revenue for city operating expenditures.
- *As of 2018, 231 cities levy REET 1, 130 cities levy REET 2, and five cities levy REET 3.*

B.3. LOCAL TRANSPORTATION RESTRICTED FUNDS

In 1990, the State Legislature established new local option revenue sources, recognizing that the state distributed revenue from the gas tax was not sufficient.

Two of these options are no longer available:

- The street utility was found unconstitutional in 1995
- The local option vehicle license fee was repealed by Initiative 776 in 2002 (the fee had been levied by King, Pierce, Snohomish, and Douglas counties, and was shared with cities).

Per *RCW 82.80.070(1),* **local option transportation taxes** created under *RCW 82.80.010* (commercial parking tax) and *RCW 82.80.030* (local option motor vehicle and special fuel tax for counties) must be used for **"transportation purposes,"** which limits them to expenditure toward the following:

- The operation and preservation of roads, streets, and other transportation improvements;
- New construction, reconstruction, and expansion of city streets, county roads, and state highways and other transportation improvements;
- Development and implementation of public transportation and high capacity transit improvements and programs; and,
- Planning, design, and acquisition of right-of-way and sites for such transportation purposes.

No counties have levied the local option motor vehicle and special fuel tax for counties. 12 cities have levied a commercial parking tax.

The 18th Amendment to the Washington Constitution restricts the use of certain transportation revenues exclusively to **"highway purposes."** This applies to gas tax and vehicle license fees deposited into the motor vehicle fund. Based on the codified Article II, section 40 of the State Constitution, "highway purposes" includes:

- (a) the necessary operating, engineering and legal expenses connected with the administration of public highways, county roads and city streets;
- (b) the construction, reconstruction, maintenance, repair, and betterment of public highways, county roads, bridges and city streets; including the cost and expense of (1) acquisition of right-of-way, (2) installing, maintaining and operating traffic signs and signal lights, (3) policing by the state of public highways, (4) operation of movable span bridges, (5) operation of ferries which are a part of any public highway, county road, or city street…

The revenues may be used to pay debt service on LTGO or UTGO bonds in the city issued them for the purposes above. Local option transportation revenues must be spent in a manner consistent with the city's transportation and land use plans.

Commercial Parking Tax

RCW 82.80.030

- Cities, counties (unincorporated areas), and RTIDs can impose a commercial parking tax. The tax may be used for general transportation purposes, including construction and operation of state highways, county roads, and city streets; public transportation; high capacity transportation; transportation planning and design; and other transportation-related activities. The tax may be set on the commercial parking business, based on gross proceeds or number of stalls, or on the customer.
- Tax exempt carpools, vehicles with handicapped decals, and government vehicles are exempt.
- *As of 2018, 12 cities have implemented this tax:* Bainbridge Island, Bremerton, Burien, Des Moines, Fife, Milton, Mukilteo, Port Angeles, SeaTac, Seattle, Sumner, and Tukwila.

Border Area Motor Vehicle Fuel Tax

RCW 82.47.020

- Cities along 10 miles of an international border crossing or TBDs with an international border crossing can levy this tax by voter approval. The purpose is to fund street maintenance and construction in cities along the Canadian border that experience extraordinary traffic levels and impacts due to Canadian motorists.
- *Three cities in Washington are currently levying this tax: Sumas, Blaine, and Nooksack.*

Transportation Benefit Districts

RCW 36.73, RCW 36.74

Transportation Benefit Districts have specific powers to levy taxes and fees for transportation projects. They can be formed by cities or counties to fund most types of transportation preservation and construction. TBD funds are commonly allocated to paving or construction projects by the TBD board, usually the local government council or commission in special session. TBDs are now in widespread use. Small cities rarely form TBDs, in large part because of the limited revenue generated by them in small economies.

- Cities and counties may form transportation benefit districts (TBDs), quasi-municipal corporations and independent taxing districts that fund specific transportation projects. TBD revenue may be used for transportation improvements included in a local, regional, or state transportation plan. Maintenance, operation, and construction costs are eligible.
- TBDs are typically funded by a vehicle licensing fee or sales tax. Other potential funding sources for TBDs are general obligation bonds, border area fuel tax, impact fees, vehicle tolls, excess property taxes, and LIDs, but these are seldom or never used.
- *As of February 2017, 96 cities have formed TBDs. Some TBDs are currently unfunded. Some cities collect both the TBD vehicle license fee and the TBD sales tax.* [18]

[18] MRCS List of Transportation Benefit Districts, 2017. http://mrsc.org/getdoc/042e7d31-772b-4102-a785-1363d09a3bcb/TBD-List-Map.aspx

TBD Vehicle Licensing Fee

RCW 36.73.065*, *RCW 82.80.140

- Independent taxing districts created through ordinance can impose a vehicle fee, without voter approval, of up to $20. If a $20 fee has been in effect for at least 24 months, then a vehicle fee up to $40 can be imposed; if a $40 fee has been in effect for at least 24 months, then a $50 vehicle fee can be imposed. Vehicle license fees can be up to $100 with voter approval.
- Two ordinances are required to establish a Vehicle Licensing Fee, first a Transportation Benefit District (TBD) and then a Vehicle Licensing Fee itself.
- The fee can be collected 6 months after it is approved, and the County must notify DOL once the fee has been approved so that the fee can be included in vehicle renewal notices. DOL collects 1% of revenue generated from a Vehicle Licensing Fee.
- This fee is limited to vehicles under 6,000 pounds, which means that in certain areas there may be an equity concern such that large vehicles, which may cause a significant amount of wear on the roads, would not bear the burden of these costs.
- *As of 2018, 49 cities are collecting TBD vehicle license fees.*

TBD Sales Tax

RCW 82.14.0455

- Independent taxing districts created through ordinance can impose an additional voted sales and use tax of up to 0.2 percent. The tax must be reauthorized by voters after 10 years.
- This option could potentially help to align costs with beneficiaries, since the sales and use tax would apply to recreational users passing though cities. This option could be more susceptible to market volatility, since taxes collected depend on commercial use.
- *As of 2018, 27 cities are collecting a TBD sales tax.*

Local Improvement Districts

RCW 35.43, RCW 36.88, RCW 36.94.220

Local Improvement Districts are a project-specific funding source that may be created by ordinance or petition of property owners. Local governments can then establish a zone of special benefit for a specific infrastructure project. Appraisers normally determine special benefit for street projects based on the increased value of property from the improvement. A benefit assessment is charged on property taxes within the zone and those funds are generally dedicated to debt service on project specific bonds.

- Cities, counties, port districts, water districts, TBDs, and other local governments can create LIDs to fund improvements in specific areas. The local improvements must directly benefit nearby property owners and can be initiated by a petition of property owners. Counties can create Road Improvement Districts (RIDs) to fund county road improvements in unincorporated areas.
- LIDs/RIDs are funded by special assessments. Property owners who benefit from improvements are assessed at proportionate levels to pay for the improvements.

Transportation Impact Fees

RCW 82.02.050 (Growth Management Act), RCW 39.92 (Local Transportation Act)

Impact fees are a charge on new developments for construction of specific transportation projects in proportion to the usage of those facilities. Fee revenue must be expended within a reasonable period of time as identified in a capital facilities plan.

- Transportation impact fees under the Growth Management Act (GMA) must be used for public streets and roads addressed by a capital facilities plan element of a comprehensive plan adopted under the GMA. Impact fees cannot be used to fund maintenance and operations costs.
- The Local Transportation Act (LTA), which predates GMA by two years, authorizes all cities, towns, counties, and TBDs to impose transportation impact fees, regardless of whether they are planning under GMA.
- Local governments are authorized to charge fees only for system improvements that are reasonably related to the new development, do not exceed a proportionate share of the costs of necessary system improvements, and are only used for system improvements that will reasonably benefit the new development. In addition, impact fees cannot be the sole source of funding for system improvements that address growth impacts.
- Impact fees must be adjusted for other revenue sources that are paid by development, if such payments are earmarked or pro-ratable to particular system improvements. Likewise, the city or county must provide impact fee credit if the developer dedicates land or improvements identified in the adopted Capital Facilities Plan and such construction is required as a condition of development approval. Collected impact fees may only be spent on public facilities identified in a capital facilities plan and may only be spent on capital costs; they may not be used to pay for operating expenses or maintenance activities.

Local Option Transportation Taxes Cities Are Not Eligible to Levy

Exhibit 49. Local Options Cities Are Not Eligible to Levy

REVENUE SOURCE	ELIGIBILITY	WHO IS LEVYING THIS TAX?
Local Option Motor Vehicle and Special Fuel Tax RCW 82.80.010	▪ Counties may levy the local option motor vehicle fuel excise tax at 10% of the state rate. ▪ The tax would be collected by the state and distributed to the county and cities based on population.	▪ No counties are enacting this tax. Two counties have attempted to levy this tax, Spokane County and Snohomish County, and both ballot measures failed.
Local option taxes for high capacity transportation (MVET, rental car tax, employee tax, sales tax) RCW 81.104.140, RCW 81.104.150, RCW 81.104.160, RCW 81.104.170	▪ Regional transit authorities (RTA) in King, Pierce, and Snohomish counties; transit agencies in Thurston, Clark, Kitsap, Spokane, and Yakima counties; and high capacity transportation corridor areas (per RCW 81.104.200) can levy a high capacity transportation tax, by voter approval. ▪ MVET authority was repealed by Initiative 776; Sound Transit is permitted to continue to levy the MVET as long as bonds remain outstanding.	▪ Only Sound Transit imposes high capacity transportation taxes.
Local option taxes for high occupancy vehicle (HOV) systems (MVET, rental car tax, employer tax, sales tax) RCW 81.100.030, RCW 81.100.060	▪ Regional Transportation Investment Districts (RTIDs), and King, Pierce, and Snohomish counties can levy an HOV tax, by voter approval.	▪ No entity has enacted an HOV tax.
Local option taxes for ferry services RCW 36.54, RCW 36.57A	▪ Counties, County Ferry Districts, and a Public Transportation Benefit Area may levy taxes to support ferry services, by voter approval.	▪ King County established a ferry district. ▪ Kitsap Transit service area enacted a sales and use tax.
Local option taxes for Regional Transportation Investment Districts (RTIDs) RCW 36.120	▪ RTIDs can be established in King, Pierce, and Snohomish counties, by voter approval.	▪ No RTIDs have been formed. ▪ King, Pierce, and Snohomish counties attempted to establish an RTID, but the measure did not pass voters.

Source: Washington JTC Transportation Resource Manual, 2017; BERK, 2019.

B.4. LOCAL DEBT FINANCING

Cities can levy debt through main financing tools, Limited Tax General Obligation (LTGO) Bonds and Unlimited Tax General Obligation (UTGO) Bonds. Debt bears additional costs through interest, and any use of bonding capacity for transportation projects reduces the remaining bonding capacity available for other projects. LTGO bonds will impact the General Fund, while UTGO bonds will have an additional tax burden.

Cities, TBDs, and LIDs may issue general obligation bonds, by special election or council decision, to finance projects of general benefit to the city or district. In addition to the principal and interest costs of issuing debt, there are usually costs associated with issuing bonds, including administrative time, legal and underwriting costs, and insurance costs. The Washington State Constitution limits the amount of debt municipalities can incur to 5.0% of the City's assessed value of taxable properties; the Washington State Legislature has statutorily limited the debt carrying capacity further to 2.5% of the assessed value.

Taking on additional bond debt will affect cities' credit rating, so best practices suggest using less than two-thirds of the debt capacity to maintain credit rating.

Limited Tax General Obligation Bonds

RCW 39.36* and *Article 8, Section 6 of the Constitution of the State of Washington

- LTGO bonds, sometimes referred to in Washington as "councilmanic" bonds, do not require voter approval and are payable from the issuer's general tax levy and other legally available revenue sources. LTGO bonds can be used for any purpose, but funding for debt service must be made available from existing revenue sources.
- There are constitutional and statutory limits on a municipality's authority to incur non-voted debt. Total debt is limited to 2.5% of the assessed value of taxable properties; and councilmanic debt is limited to 1.5% of the assessed value of taxable properties.

Unlimited Tax General Obligation Bonds

RCW 39.36*, *RCW 84.52.056*, and *Article 7, Section 2 of the Constitution of the State of Washington

- UTGO bonds are voted bonds that require 60% voter approval with a minimum voter turnout of 40% of voters who cast ballots in the last general election within the district. When voters of a jurisdiction vote for a bond issue, they are being asked to approve: (a) the issuance of a fixed amount of general obligation bonds and (b) the levy of an additional tax to repay the bonds, unlimited as to rate or amount. Once voter approval is obtained, a municipal corporation is still restricted by constitutional and statutory debt limits with these bonds.
- UTGO bonds can be used only for capital purposes, and replacement of equipment is not permitted.

B.5. STATE SOURCES

The State supports local governments to help meet local needs primarily through the state gas tax and state and federal grants.

Motor Vehicle Fuel Tax (State Gas Tax)

RCW 82.38*, *RCW 46.68.090

The motor vehicle fuel tax is a state distributed revenue, where the state collects a state gas tax of 49.4 cents per gallon, and the local portion is distributed to cities and counties. The city portion is distributed on a per-capita basis and cities, together, receive **2.96** cents per gallon.

The 49.4 cents are distributed as follows:

- State Highway Program: 10.21 cents
- Transportation 2003 Account (Nickel Account): 5 cents
- Transportation Partnership Account: 8.50 cents
- State Highway Program – Special Category C: 0.75 cents
- Connecting Washington Account: 11.9 cents
- Rural Arterial Program: 0.58 cents
- Transportation Improvement Account (TIB funded programs): 3.04 cents or 13.2336% of 23 cents deposited in TIB
- County Arterial Preservation Program: 0.45 cents
- Counties: 4.92 cents
- **Cities: 2.96 cents** (2.88 cents after deductions for state supervision, studies, and Small City Pavement and Sidewalk Account)
- Ferry Operations: 0.54 cents
- Ferry Capital Construction: 0.55 cents

Capron Refunds

RCW 46.68.080

Under the Capron Act, cities located in counties that are entirely composed of islands receive a refund share of the gas tax (collected under *RCW 82.38)* and vehicle license fees (collected under *RCW 46.17.355* and *RCW 46.17.350*). These refunds compensate these cities and counties for their lack of state highways.

- In counties with neither a state highway nor a fixed connection with the mainland (San Juan), that revenue is returned to the county and shared with cities in that county based on their relative assessed valuation.

- For counties with a state highway or a fixed connection with land, half of the gas tax and motor vehicle license fees are returned (Island County's funds are shared among Oak Harbor, Coupeville, and Langley.)
- *As of 2018, 4 cities are collecting Capron refunds: Oak Harbor, Coupeville, Langley, San Juan.*

State Multimodal Account

Starting in 2015, under the Connecting Washington Act, the state also transfers a portion from the State Motor Vehicle Account and the State Multimodal Account. This amount of set by *RCW 46.68.126* and is proportioned evenly between cities and counties. This amount was $11.7 million in 2015-17 biennium, and $25.1 million in subsequent biennia.

Transportation Improvement Board (TIB) Grants

RCW 47*, *WAC 479-05*, *WAC 479-10*, *WAC 479-14

- TIB is an independent state agency, created by the Legislature, that manages street construction and maintenance grants to cities and counties across Washington. Funding is generated by three cents of the state gas tax.
- TIB distributes grant funding through the following three programs:
  - Urban Programs for cities with a population over 5000 and counties with urban unincorporated area
  - Small City Programs for cities and towns with a population under 5,000.
  - Other Opportunities are available based on specialized eligibility requirements.

Freight Mobility Strategic Investment Board (FMSIB) Grants

RCW 47.06A*, *WAC 226.01

- FMSIB was created in 1998 to ensure strategic investments to facilitate freight movements among local, national, and international markets. The Board proposes policies, projects, corridors, and funding to the Legislature to promote strategic investments in statewide freight mobility transportation system.

WSDOT Local Programs

Under the Federal Highway Administration's Federal-Aid Stewardship Agreement with WSDOT, WSDOT Local Programs serves as the steward of FHWA funding for public agencies in the state. WSDOT administers all federal highway transportation funds, subject to federal and state criteria, including funds that go to local agencies.

Safe Routes to School

- This grant program provides technical assistance and funding to public agencies to improve conditions for and encourage children to walk and bike to school. The program has awarded $71

million to 182 projects since 2005. The program is funded through a competitive application process, evaluated based on consideration for need, project potential, deliverability, and value.[19]

Pedestrian and Bicycle Funding Program

- This grant program's objective is to improve the transportation system to enhance safety and mobility for people who walk or bike. The program has awarded $72 million for 159 projects since 2005.[20]

B.6. FEDERAL SOURCES

Federal transportation funding primarily comes from two legislative sources:

- Authorization bills that authorize policy, programs, and funding ceilings over years, such as the Fixing America's Surface Transportation (FAST) Act. The FAST Act was passed on December 4, 2005 and will expire on September 30, 2020.
- Annual appropriation bills that set annual spending levels for transportation programs

The federal transportation financing cycle starts with Congressional authorization of a transportation act. States receive a notice of their annual apportioned share of federal funds, and the transportation programs work through reimbursements, with states paying expenses and then the federal government reimbursing (typically for 80%) of project costs. Most projects have an 80% federal share, while Interstate rehabilitation and maintenance projects have a 90% federal share.[21]

The Federal Highway Trust Fund (HTF) is managed by the U.S. Department of Transportation's Federal Highway Administration. HTF was established by the Highway Revenue Act of 1956 to fund construction of the Interstate Highway System. In the 1980s, the HTF created two accounts, one for highways and one for transit. The primary sources of revenue for the HTF accounts are the federal gas tax (18.4 cents per gallon) and the federal diesel tax (24.4 cents). Taxes dedicated to the HTF are extended periodically by Congress, most recently as part of the FAST Act.

Federal Highway Trust Fund/FAST Act

The FAST Act provides most of the federal aid highway funds to states through apportionment to core programs:

- National Highway Performance Program
- Surface Transportation Block Grant Program
- Highway Safety Improvement Program
- Congestion Mitigation and Air Quality (CMAQ)
- National Freight Program

The FAST Act requires FHWA to divide the total federal apportionment among states using an allocation process specified in law. The federal apportionment is then distributed among the state's core programs.

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[19] WSDOT, https://www.wsdot.wa.gov/LocalPrograms/SafeRoutes/default.htm
[20] WSDOT, https://www.wsdot.wa.gov/LocalPrograms/ATP/funding.htm
[21] JTC, Transportation Resource Manual, 2017, http://leg.wa.gov/JTC/trm/Pages/TRM2017.aspx

State Revenue from Federal Highway Administration

The State receives federal allocations from Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) programs. Over the past 10 years, federal funds on average have made up 27% of Washington's highway budget. They provided 21.9% of WSDOT's 2013- 15 budget and are projected to provide 23.8% of WSDOT's 2015-17 budget.[22]

In Washington, the FAST Act Advisory Group (legislators, local government entities, and transportation system users) reviews and recommends distributions of federal highway funds between state and local. [23]

Federal funds are passed along to cities through:[24]

- Federal pass through programs
- Federally managed programs
- State grant programs

WSDOT Local Programs serves as the steward of FHWA funding for public agencies.

[22] JTC, Transportation Resource Manual 2017, http://leg.wa.gov/JTC/trm/Pages/TRM2017.aspx
[23] WSDOT, https://www.wsdot.wa.gov/sites/default/files/2009/01/14/LP_FAST-Memo-Governor-2016.pdf
[24] WSDOT, https://www.wsdot.wa.gov/LocalPrograms/ProgramMgmt/funding.htm

Appendix C. Case Studies

Exhibit 50. Overview of Case Studies

CITY	TYPOLOGY	POPULATION	AVG 5-YEAR GROWTH RATE	NUMBER OF CENTERLINE MILES	APPROXIMATE ANNUAL TRANSPORTATION BUDGET	PREVAILING CONDITIONS
Bellingham	Large	88,500	7.5%	296.5	$22 million	High need for non-motorized network
Pasco	Large	73,590	12.2%	313.6	$9 million	High need for urban retrofit
Tacoma	Large	209,100	4.3%	733.1	$90 million	Aged system
Camas	Medium	23,770	17.0%	106.2	$12 million	High street demand from growth
Ritzville	Small	1,660	-2.4%	20.3	$770,000	Aged system
Twisp	Small	975	3.7%	8.6	$190,000	Low design original build

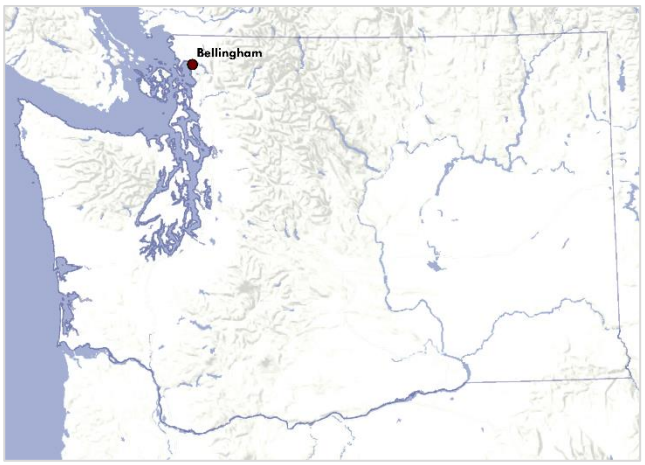
Sources: OFM, 2018; HPMS, 2017; Bellingham 2017 Street Revenues; Tacoma 2018 Transportation Revenue; Camas 2019 Transportation Revenue; Ritzville 2019 Street Budget; Twisp 2019 Street Budget; Pasco 2020 Street Budget.

Exhibit 51. City Transportation Funding Tools in Case Studies

		Bellingham	Camas	Pasco	Ritzville	Tacoma	Twisp
Local Unrestricted Funding	Property Tax	✔	✔	✔	✔	✔	✔
	Business & Occupation Tax (local)	✔				✔	
	Retail Sales and Use Tax (local)	✔	✔	✔	✔	✔	✔
	Utility Tax (local)	✔	✔ gas utility	✔	✔	✔	✔
	Real Estate Excise Tax 1 (REET 1)	✔	✔	✔	✔	✔	✔
	Real Estate Excise Tax 2 (REET 2)	✔	✔	✔		✔	
	Additional REET 3	Not eligible	Not eligible	Not eligible	Not eligible	Not eligible	Not eligible
Local Transportation Restricted Funding	Border Area Motor Vehicle Fuel Tax	Not eligible	Not eligible	Not eligible	Not eligible	Not eligible	Not eligible
	Commercial Parking Tax				Not relevant		Not relevant
	Local Improvement District	Used in past	Used in past	✔		Used in past	
	Transportation Benefit District Vehicle Licensing Fee		Considered implementing			✔	
	Transportation Benefit District Sales and Use Tax	✔				✔	✔
	Transportation Impact Fee	✔	✔	✔		Considering	
Local Debt Financing	General Obligation Bonds (limited and unlimited)		✔ (LTGO)	✔ (LTGO)		✔	

Sources: City budgets, confirmed with city staff. The checkmark (✔) means the city is levying this funding tool; green shading means the tool is used for transportation.

Case Study: **City of Bellingham**



Source: City of Bellingham, 2019

Case Study Highlights

- Bellingham is a large, coastal, college city that has prioritized mode-shift goals.
- Transportation planning is largely driven by the City's goals of creating a non-motorized system for bike and pedestrian travel.
- Resurfacing and pavement management projects are often connected with bike and pedestrian projects.
- The City has enacted a Transportation Benefit District with a voted sales tax, collects transportation impact fees, and dedicates a portion of General Fund sales tax to transportation.
- The Port of Bellingham generates additional demands on transportation capacity and connectivity through Bellingham International Airport.

Key Statistics

- Typology for this study: **Large**
- Population: **88,500**
- 5-year average growth rate: **7.5%**
- Centerline road miles: **52.13**
- Approximate size of annual transportation budget: **$22 million** (varies by year)

Sources: OFM, 2018; HPMS, 2017; City of Bellingham, 2017; BERK, 2019.

Summary: Bellingham's Story

Bellingham is a growing coastal college town that has prioritized **mode-shift** goals to create a highly connected **non-motorized system** for bike and pedestrian travel and transit. While the City's transportation system is in decent condition, preservation funding capacity falls short of the need. The primary challenge is reinvesting in existing assets through pavement management and resurfacing.

Source: City of Bellingham, 2019

Because of the City's highly prioritized mode-shift goals, Council policy and investments are driven by this goal, political pressure surrounds it, and local money supports this objective. Resurfacing and pavement management projects have fallen off in recent years, often only completed when associated with a utility project or non-motorized project. Because the City does not face noticeable challenges like congestion and parking, there is not much pressure from community members to further add capacity for automobiles. Meanwhile, costs of transportation investments have grown over time, driven in part by Americans with Disabilities Act (ADA) requirements on resurfacing, environmental mitigation, right of way acquisition, and fish passage barrier improvements.

Public Works has proactively pursued local funding options and applied for grants. The City passed a **Transportation Benefit District** with a voted 0.2% sales tax in 2010, which captures revenue from Canadian consumers who use the roads and impact the system. From 2011-2015, TBD revenue was split with one-third toward non-motorized projects, one-third toward resurfacing, and one-third via contract with Whatcom Transit Authority for Sunday bus service. Since 2016, the City no longer contracts with WTA, and revenue is split with half toward resurfacing and half to non-motorized projects.

The City also levies a **transportation impact fee** and **dedicates a portion of General Fund sales tax** to streets. That amount has been decreasing; it used to be 50%, then dropped to 42.5% after the 2008 recession, and is now at 38%. Other General Fund revenues are not directed toward transportation; no property tax or business and occupation tax (B&O) goes toward transportation, and utility tax – the largest contributor to the General Fund – specifically supports police and fire. Public Works received a fair amount of real estate excise tax (REET) before the 2008 recession, but now REET funds parks capital maintenance and railroad crossings, and occasionally maintenance of municipal buildings.

City Transportation System

Bellingham's infrastructure includes 296.5 centerline road miles (52.1 miles arterials, 34.2 miles of collectors, and 210.2 miles of local roads)[1] and 29 bridges that the City owns and/or is responsible for maintaining.[2]

Transportation Planning

The Public Works department is responsible for current and long-range transportation planning, which includes planning, budgeting, and financial analyses. The most recent transportation plan, 2016-2036, is included in the City's 20-year Comprehensive Plan Update. Transportation projects are outlined in the City's six-year Transportation Improvement Program (TIP). Transportation investments are guided by the City's high-level goals, and the Comprehensive Plan includes a Multimodal Transportation Chapter.[3]

Transportation in the Context of City Priorities

The City has prioritized mode-shift goals, and the overarching policy focus is on non-motorized projects, bike and pedestrian modes of travel, and increasing transit ridership. In the Multimodal Transportation Chapter, the City has prioritized connectivity, equity among transportation networks, limiting urban sprawl, safe and well-connected networks, and mode shift to reduce single-occupancy vehicles. This mode-shift goal drives Council decisions, political pressure, and ultimately local funding.

The City has also prioritized climate action goals of achieving no fossil fuel emission by 2035.

Current Transportation Needs

The city's transportation system is in decent condition, but the un met need is beyond the City's ability to fund projects. With most local dollars directed toward non-motorized projects, it is difficult to make investments in resurfacing streets unless they add bike lanes.

The City currently relies on its Transportation Benefit District (TBD) voted 0.2% sales tax to bring in up to $6 million a year. With this voted sales tax reaching the end of its ten-year horizon in 2021, the City hopes to renew this important funding source and to continue to direct 50% of TBD revenue toward resurfacing.

Source: City of Bellingham, 2019

[1] Highway Performance Monitoring System, 2017.
[2] National Bridge Inventory, 2017.
[3] City of Bellingham, Multimodal Transportation Chapter. https://www.cob.org/Documents/planning/comprehensive-plan/2016-multimodal-transportation.pdf

Port of Bellingham

The Port has several areas within Bellingham or the Urban Growth Area with significant transportation needs. The **freight route** from I-5 to the Port's Waterfront properties, including the Shipping Terminal and the industrial lands, has several trucking heavy operations.

Bellingham International Airport (BIA) generates unique demands on the I-5/Bakerview interchange, along with hotels and surrounding development that relies on the transportation network. The City serves the airport through **utilities** but cannot charge impact fees outside city limits. BIA has been a funding partner on improvements in the past, through a settlement agreement between the City and BIA where the City collects a Traffic Effect Fee. The Port has also been involved in **SEPA offsite mitigation**, helping with environmental cleanup, and the City and Port are working together on the **waterfront redevelopment.**

Transportation Investments

Bellingham organizes transportation investments around **operations**, **maintenance**, **preservation**, and **capital.** Bellingham uses IMS as its pavement management system. The City is starting to explore hiring an asset manager.

System Preservation

The City's primary challenge is reinvesting in existing assets through pavement management and resurfacing. City staff estimated that the City is investing around 50% of what it needs to invest in preservation. Resurfacing and pavement management projects have declined in recent years, and they are typically completed only when associated with utility project or bike/pedestrian project.

Some activities in each category:

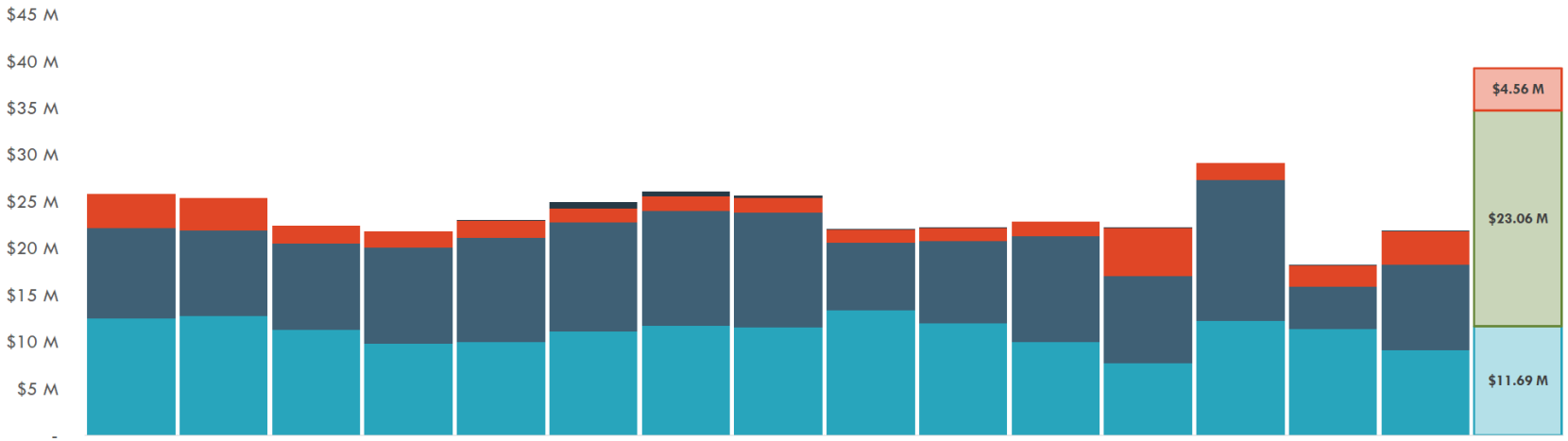
- **Maintenance:** repair and replacement
- **Preservation**: spot repair, chip seal
- **Capital:** resurfacing

Cost Drivers

Cost drivers affecting transportation costs in Bellingham are **ADA requirements** on resurfacing, **environmental mitigation**, **right of way acquisition**, and **fish passage barrier requirements.** In relation to ADA, staff estimated that 40% of resurfacing project costs are related to redoing curb ramps.

Exhibit 1 shows Bellingham transportation expenditures over the last 13 years, as reported in the WSDOT City Streets and County Roads dataset. In this dataset, the City's resurfacing work (around $2.5-3 million per year) is reported under "construction." In this study, *preservation* is defined as maintenance and restoration of the existing system, while *system enhancement* is defined as adding capacity to the system. Using these definitions, out of the $7-12 million reported in "construction," around 20-40% of this is preservation.

Exhibit 1. Distribution of Expenditures in 2018 Dollars, City of Bellingham 2003–2017



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Est. Need
MAINTENANCE	$12.47 M	$12.77 M	$11.26 M	$9.79 M	$9.98 M	$11.15 M	$11.73 M	$11.55 M	$13.33 M	$12.00 M	$9.96 M	$7.73 M	$12.23 M	$11.40 M	$9.07 M	
PRESERVATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CONSTRUCTION	$9.70 M	$9.18 M	$9.23 M	$10.26 M	$11.14 M	$11.62 M	$12.25 M	$12.31 M	$7.26 M	$8.77 M	$11.36 M	$9.32 M	$15.06 M	$4.52 M	$9.15 M	
DEBT SERVICE	$3.03 M	$3.04 M	$2.14 M	$1.64 M	$1.27 M	$1.09 M	$0.67 M	$0.46 M	$0.35 M	$0.24 M	$0.31 M	$0.23 M	$0.27 M	$0.60 M	$0.58 M	
ADMINISTRATION & OPERATIONS	$3.64 M	$3.42 M	$1.94 M	$1.78 M	$1.86 M	$1.54 M	$1.60 M	$1.50 M	$1.44 M	$1.43 M	$1.50 M	$5.13 M	$1.85 M	$2.21 M	$3.62 M	
MAINT. & CONSTR. OF FACILITIES	-	-	-	-	$0.04 M	$0.63 M	$0.53 M	$0.27 M	$0.05 M	$0.05 M	-	$0.03 M	-	$0.04 M	$0.02 M	
OTHER	$5.71 M	$6.01 M	$4.68 M	$7.01 M	$4.56 M	$3.95 M	$4.17 M	$3.94 M	$3.66 M	$4.06 M	$1.56 M	$1.40 M	$0.29 M	-	-	
TOTAL	**$34.55 M**	**$34.41 M**	**$29.24 M**	**$30.47 M**	**$28.85 M**	**$29.97 M**	**$30.94 M**	**$30.01 M**	**$26.09 M**	**$26.55 M**	**$24.71 M**	**$23.84 M**	**$29.69 M**	**$18.77 M**	**$22.44 M**	

Notes: Estimated 2017 preservation expenditures are based on the total centerline-miles of the local road network and annualized estimates of costs according to calculations along the entire street life-cycle. Estimated 2017 maintenance and operations expenditures are proportional to budgets. Deferred roadway maintenance and preservation are not included in these estimates.
Source: WSDOT City Streets and County Roads, 2003 – 2017; BERK, 2019.

Unfunded Need

BERK and Perteet used centerline miles and annualized estimates based on calculations along the entire street life-cycle to generate an annual estimated maintenance, preservation, and operations funding need of **$39.3 million** for Bellingham for 2017. However, this does not include deferred roadway maintenance and preservation. Catching up on system preservation needs requires both a one-time cost and an ongoing cost. Bellingham currently spends around $2.5-3 million each year on resurfacing. To maintain current pavement condition ratings, and using data from the pavement management system, staff estimate that the City needs to spend around $4 million each year. This is a **$1-1.5 million** average annual cost of deferred maintenance. Additionally, to fully catch up, there would also need to be a **$10 million per year infusion over six years ($60 million).**

Transportation Funding Capacity and Revenue Sources

Use of Existing Funding Tools

Public Works has been aggressive in pursuing local funding options and applying for grants. Despite levying several General Fund taxes, no property tax or B&O is used for transportation. Utility tax (the largest contributor to the General Fund) funds police, fire, and other general governmental services. Before the 2008 recession, Public Works received a fair amount of REET, but now this revenue funds parks capital maintenance and railroad crossings. The one piece of General Fund that supports transportation is the sales tax. For many years, the City dedicated 50% of General Fund sales tax to streets. After the 2008 recession, this dedicated portion dropped to 42.5%, and now it is down to 38%. The Street Fund is comprised of the **State MVFT** and this **dedicated portion of total sales tax.**

Exhibit 2. Use of Local Tools

	Funding Tool	Levied by City	Used for transportation
Local Unrestricted Funding	Property Tax	✔	
	Business & Occupation Tax (local)	✔	
	Retail Sales and Use Tax (local)	✔	✔
	Utility Tax (local)	✔	
	Real Estate Excise Tax 1 (REET 1)	✔	
	Real Estate Excise Tax 2 (REET 2)*	✔	
	Additional REET 3	Not eligible	
Local Transportation Restricted Funding	Border Area Motor Vehicle Fuel Tax	Not eligible	
	Commercial Parking Tax		
	Local Improvement District	Used in past	
	Transportation Benefit District Vehicle Licensing Fee		
	Transportation Benefit District Sales and Use Tax	✔	✔
	Transportation Impact Fee	✔	✔
Local Debt Financing	General Obligation Bonds (limited and unlimited)		

*REET 2 is restricted to transportation, water/storm/sewer, park capital purposes, and from July 1, 2017 - June 30, 2019 only, housing for homeless.
Sources: City of Bellingham, 2019; BERK, 2019.

In 2010, Bellingham passed a **Transportation Benefit District** with a voted 0.2% sales tax. This source captures spending money from Canadian consumers who use the roads and have an impact on the system. From 2011-2015, TBD revenue was split with one-third toward non-motorized projects, one-third toward resurfacing, and one-third via contract with Whatcom Transit Authority (WTA) for Sunday bus service. Since 2016, the City no longer contracts with WTA. TBD revenue is now split with half toward resurfacing and half to non-motorized projects. When the TBD voted sales tax sunsets in 2020, the City hopes to renew this funding source and to continue to direct 50% toward resurfacing.

The **transportation impact fee** has steadily brought in $700,000 to $1 million per year. Looking at other options, the City tried to have Bellingham included as a border area to qualify for a Border Area MVFT, but that failed. A commercial parking tax is not viable, as there are very few fee parking lots.

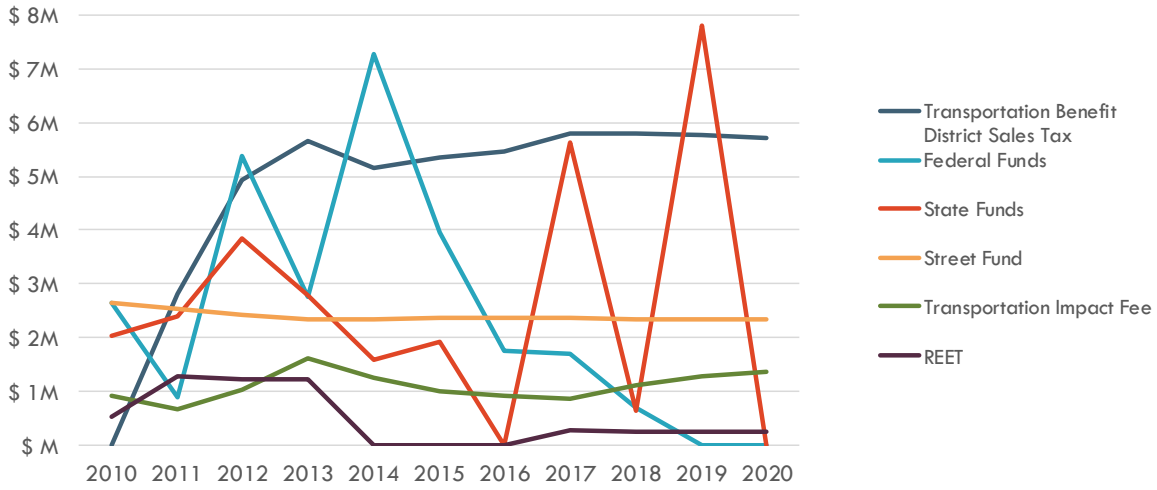
Exhibit 3 summarizes estimated annual revenue from these sources, and Exhibit 4 shows the trend over the last ten years. While Street Fund (MVFT and dedicated sales tax), TBD, REET, and transportation impact fee have remained relatively steady, state and federal grant funds vary widely per year.

Exhibit 3. Summary of Bellingham Transportation Funding Sources

FUNDING SOURCE	EST. ANNUAL REVENUE FOR TRANSPORTATION	DEDICATED, SUNSET	USES
TBD Sales Tax 0.2%	$6 million	Yes, 2011- 2021	Capital, preservation
Transportation impact fee	$1.2 million	Yes	Capital
REET 1 and 2	$250,000	No	Capital
Sales and use tax	$8.6 million	Dedicated percentage (38%), rest goes to General Fund	Capital, preservation, maintenance
MVFT (State)	$1.9 million	Yes	Capital, operations & maintenance
TIB	$190,000	Yes	
Federal grants	$2.4 million	Yes	Capital
State grants	$2.5 million average over 11 years, but skewed high by large Orchard Street project	Yes	Capital

Sources: City of Bellingham, 2018; BERK, 2019.

Exhibit 4. City of Bellingham Transportation Revenues, 2010-2020, in 2018 Dollars



Note: Street Fund is MVFT plus the dedicated portion of sales and use tax. Revenues adjusted to 2018 dollars using Consumer Price Index.
Sources: City of Bellingham, 2019; BERK, 2019.

The 2017 and 2019 spikes in State Funds are from the Orchard-Birchwood Connector, which was a $10 million Connecting Washington project that received direct appropriation over two budget cycles.

The 2014 spike in Federal Funds was from the Granary-Laurel Waterfront $6.7 million federal earmark.

Public Works relies on grants for capital projects, including corridor, capacity, or level of service projects, while scraping together local money for the match.

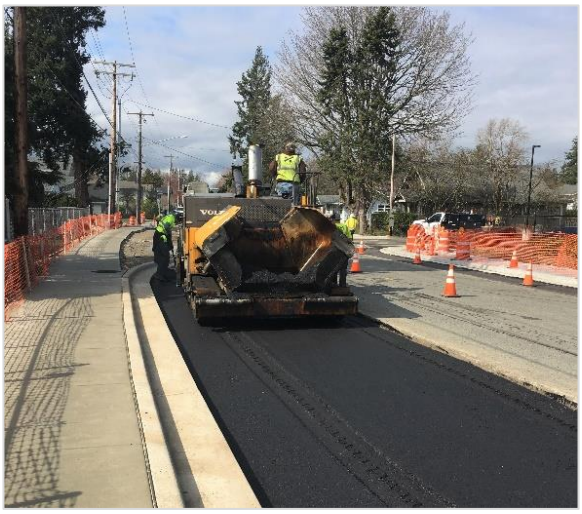
Project Highlight: Telegraph Road Multimodal Safety Improvements

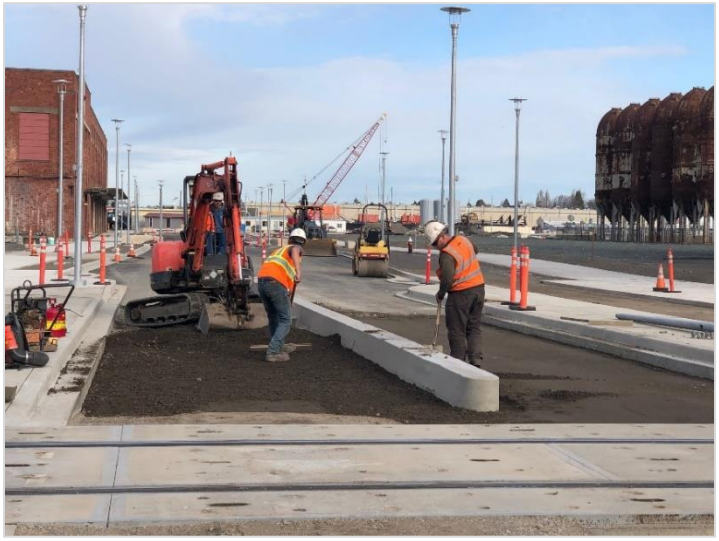
Telegraph Road is a two-thirds of a mile road from Deemer Road to James Street. This project installed a center turn lane, traffic signals, bike lanes, sidewalks, stormwater, flashing crosswalks at bus stops, and it required a right-of-way acquisition. The City pieced together various funding local, state, and federal funding sources for this project. There is still a $1M funding gap.

	2019	2020	2021	Total
Street Fund	$0.3M	$0.5M	$0.5M	$1.3M
TBD Non-Motorized		$1.0M		$1.0M
TBD Resurfacing		$0.5M		$0.5M
Private Mitigation	$0.1M	$0.1M	$0.1M	$0.3M
Whatcom Transit Authority			$62,000	$62,000
Federal Surface Transportation Block Grant			$1.65M	$1.65M
Unfunded				*$1.0M*
Total				**$5.8M**

Potential Alternative Local Funding Tools or Changes in State Policy or Programs

Public Works staff expressed that more state direct distributions would benefit transportation, especially if it were preservation-restricted. Also, transportation funding that is not project-restricted, like Complete Streets, is very useful. Bellingham's mode-shift goals resulted in two Complete Streets Awards out of the two award cycles since the program was created in 2016, generating $1 million in flexible funding for non-motorized and streetscape projects.





Source: City of Bellingham, 2019

Case Study: **City of Camas**

Case Study Highlights

- Camas is a medium-sized city located along the Columbia River. It is experiencing high growth and challenged with bringing annexed infrastructure up to city standards.
- The City has prioritized preservation using a pavement management system to guide investments and relying on previously banked property tax to fund preservation projects.
- The ability to execute big projects requires the City to carefully assemble funding over several project phases from a variety of federal, state, and local funding sources.
- Despite success in partially funding preservation, the City still struggles to create community and political support for new local tools to meet unfunded preservation and other unfunded transportation needs.

Key Statistics

- Typology for this study: **Medium**
- Population: **23,770**
- 5-year Average Growth Rate: **17%**
- Centerline Road Miles: **106.23**
- Approximate size of annual transportation budget: **$12 million** (varies by year)

Sources: OFM, 2018; HPMS, 2017; City of Camas; 2019; BERK, 2019.

Summary: Camas' Story

Camas is a quickly growing medium-sized community of over 23,000 at the southern border of Washington with over 106 road miles and five bridges that it either owns and/or is responsible for maintaining. Less than a 30-minute drive from Portland, Oregon along the Columbia River, Camas has experienced rapid growth in residents and employment over the last five years, generating extra transportation capital needs on the City as they annex streets that need to be brought up to citywide standards.

The City organizes its transportation needs into operations and maintenance (O&M), preservation, and capital. Since transportation-restricted local revenues and state shared revenues, such as motor vehicle fuel tax distributions, don't cover the full cost of the City's transportation needs, the City relies on general fund contributions to cover operations and maintenance funding. Camas' General Fund sources include property tax, sales tax, and other city revenues which are pooled together and then allocated to specific uses depending on Council priorities for the year. As a result, transportation O&M funding competes with other city priorities like emergency services, parks, and other general government services.

Starting in 2014, the City Council set aside previously banked property tax funds for transportation preservation needs after the Public Works department was successful in demonstrating the benefit of investing in preservation using asset management principles. Since then, the City has leveraged its pavement management program to prioritize transportation investments and continue to emphasize the benefits of investing in preventative maintenance treatments.

Due to high growth in the region, Camas has many system enhancement projects that need attention. The current 6-year transportation improvement plan (TIP) highlights 59 priority street projects totaling almost $95 million. Assembling the required funding to complete big system enhancements or bridge projects requires a large administrative lift from the City to not only identify and apply for available grants and loans, but also to manage the different spending requirements and restrictions once a grant or loan is received. The City often considers the challenges of federal funding, such as administrative cost and time delays, when deciding whether to pursue funding from federal sources. Increasingly, the City considers and is using debt issuance to help fully fund big projects.

Despite the considerable progress the City has made towards funding transportation, the City has insufficient revenues to provide the level of service the community expects. As costs and needs continue to increase and transportation must compete with other city priorities for general fund dollars, the City and Public Works department have considered new transportation-restricted funding tools. The City considered implementing a Transportation Benefit District in early 2019 with a Vehicle Licensing Fee, but uncertainty associated with Initiative 976, which could potentially limit vehicle taxes and fees, has played a significant role in delaying the decision.

City Transportation System Context

Camas' infrastructure includes 106.2 centerline road miles, including 19.6 miles of arterials, 11.4 miles of collectors, and 75.2 miles of local roads.[4] The City has five bridges that it owns and/or is responsible for maintaining.[5]

Transportation Planning

Camas' Transportation Plan is largely led by the Public Works Department's Engineering group, who work closely with Community Development and Planners. The City looks at a 20-year planning horizon, working within city planning documents as well as Regional Transportation Council (RTC) planning criteria. The city-wide Comprehensive Plan provides an overall guide of what the City is trying to accomplish in transportation policy, while the 2012 Traffic Impact Fee Analysis is currently used to guide specific project investments and development activities. The City is in the process of completing a comprehensive Transportation System Plan to guide policymakers and projects through the next 20 years. On a day-to-day basis, transportation investments react to current needs.

Transportation in the Context of City Priorities

The City relies on general fund contributions to cover preservation and operations and maintenance funding. Camas' General Fund sources include property tax, sales tax, and other city revenues that are pooled and allocated to specific uses depending on **Council priorities** for the year. As a result, transportation O&M funding **competes with other city priorities** like fire service, parks, and other general government services. Starting in 2014, Camas began dedicating previously banked property tax to address preservation needs. Similarly, transportation capital projects often compete with other city priorities, primarily parks projects, for funding available through sources like REET 2 and debt issuance.

Current Transportation Needs

The City's overall street network is in good condition with an average pavement condition index of 74. This rating is an average over the entire street network that includes the core downtown grid which is over 100 years old, many streets from the late 80s and early 90s when the city experienced a large amount of growth, and roads from new development since 2007.

The City's fairly strong average pavement rating is due to recent investments in and prioritization of preservation using the banked property tax revenues as discussed above.

Despite an infusion of preservation funding, the City has insufficient revenues to provide the level of service the community expects. As a result, the City adopts a more

Source: City of Camas, 2019.

[4] Highway Performance Management System, 2017.
[5] National Bridge Inventory, 2017.

reactionary approach, investing where there is need and paying attention to areas that receive the most traffic, typically arterials and collectors.

The City's main challenges lie with its high growth and the annexation of what were once county roads. Capacity and preservation needs drive the City's imperative to bring county roads up to citywide standards. This necessitates that the City fund both one-time capital investments and ongoing maintenance and preservation of the now larger system.

Transportation Investments

Camas organizes its transportation system around three areas: **operations and maintenance, preservation,** and **capital.** Preservation and capital overlap at times and the line between the two can be blurry. Preservation is currently funded through previously banked property tax which grows by the allowed 1% each year, O&M is funded through General Fund contributions that compete with other city needs, and capital projects are funded through a variety of sources including direct legislative budget requests, TIB grants, federal grants, traffic impact fees, or increasingly bond issuance.

Some activities in each category

- **Operations & Maintenance:** striping, street lights, filling pot holes, spraying shoulders, medians, crosswalks
- **Preservation:** chip seal, overlay, slurry seal
- **Capital:** new lanes, other system enhancements

Camas uses the Streetsaver Pavement Management Program, which serves as a major tool in the City's process to determine where it makes transportation investments.

Cost Drivers

Costs of transportation investments are largely influenced by the following cost drivers.

- **Responding to high growth.** Growth affects operations and maintenance, preservation, and capital.
- **Age of existing infrastructure.** Costs increase as roads and transportation system changes.
- **Requirements for federal funding.** Given the challenges of federal funding requirements, the City weighs several factors when considering whether to pursue federal funding for a project. These factors include project size, project development status, timing of project completion, funding need and scale, and agency capacity to comply with federal requirements.
- **ADA and multimodal demands.** City staff estimates that 30-40% of preservation project costs are spent on ADA improvements.

  Other major cost drivers for transportation investments are related to **stormwater, environmental permitting, right of way, and inflation.**

Source: City of Camas, 2019.

Unfunded Need

To estimate the funding need, BERK and Perteet used centerline miles and annualized estimates based on calculations along the entire street life-cycle to generate an annual estimated maintenance, preservation, and operations need of **$9.7 million** for Camas for 2017; an annual gap of over $3.5 million. However, this estimate does not include deferred roadway maintenance and preservation. Catching up on system preservation needs requires one-time and ongoing costs.

According to Camas' Pavement Preservation program, approximately 10% of the city streets have experienced deferred maintenance with a pavement condition index (PCI) rating of 50 or less. Camas estimated in December 2016 that it would cost **$19.2 million** over the next five-year period (2017 – 2021) to bring the street network to an optimal PCI level in the lower to mid-80s.[6] .Transportation Funding Capacity and Revenue Sources

Use of Existing Funding Tools

The City collects property tax, local retail sales and use tax, a gas utility tax, and REET 1 and 2. These general city taxes are not dedicated to transportation and compete with other city priorities. The City currently implements a gas utility tax, but no other utility taxes. It is considering implementing other utility taxes in the future to diversify its tax base and generate more revenue. The City also collects transportation impact fees and has used Local Improvement Districts (LIDs) in the past. The City also helps fund transportation projects using debt.

Exhibit 5. Use of Local tools

	Funding Tool	Levied by City	Used for Transportation
Local Unrestricted Funding	Property Tax	✔	✔
	Business & Occupation Tax (local)		
	Retail Sales and Use Tax (local)	✔	✔
	Utility Tax (local)	Have gas utility tax, considering implementing others	✔
	Real Estate Excise Tax 1 (REET 1)	✔	✔
	Real Estate Excise Tax 2 (REET 2)	✔	
	Additional REET 3	Not eligible	
Local Transportation Restricted Funding	Border Area Motor Vehicle Fuel Tax	Not eligible	
	Commercial Parking Tax		
	Local Improvement District	Used in past	
	Transportation Benefit District Vehicle Licensing Fee	Considered implementing	
	Transportation Benefit District Sales and Use Tax		
	Transportation Impact Fee	✔	✔
Local Debt Financing	General Obligation Bonds (limited and unlimited)	✔ (LTGO bonds)	✔

Sources: City of Camas, 2019; BERK, 2019.

[6] City of Camas Pavement Management Program Budget Options Report, p. 5, December 2016

Starting in 2014, the City Council began using previously banked property tax to fund transportation preservation needs after the Public Works department demonstrated the benefit of investing in preservation using asset management principles. Although this funding is not formally dedicated to transportation in city code, the City Council has been diligent at not using these funds for other purposes. Since 2014, the property tax preservation funding continues to increase every year by the allowed 1%.

The City considered implementing a Transportation Benefit District in early 2019 with a Vehicle Licensing Fee, but uncertainty associated with Initiative 976, which could potentially limit vehicle taxes and fees, has delayed the decision.

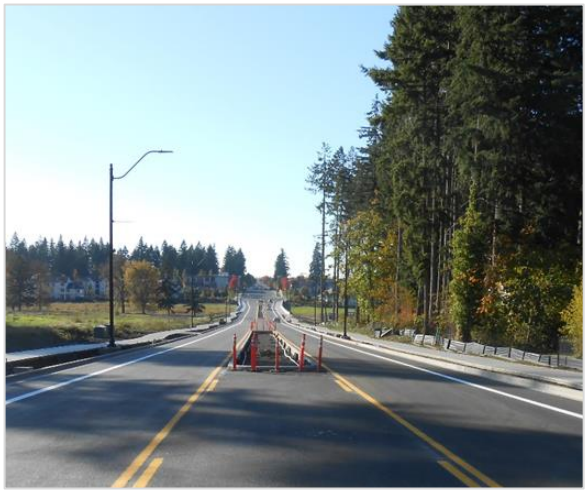
The transportation funding sources that Camas currently uses are outlined in Exhibit 6. In addition, the City relies on additional sources to fund capital projects, including: direct legislative budget requests, TIB grants, federal grants, and limited tax general obligation bonds. An example of how funding is assembled over several project phases is included in the project highlight below.

Project Highlight: 38th Ave/20th Street Improvements

The City's biggest transportation challenge is keeping up with high growth. The 38th Ave/20th Street project is a main arterial that serves as a primary gateway between Camas and Vancouver. The project is a typical system enhancement and preservation project that includes widening the road from two lanes to three and adding multimodal capacity in the form of bike lanes.

The project started in 2011and has three phases. Over the course of the last eight years, the biggest challenge for Camas has been assembling the $11.5 million needed to complete the first two phases of the project. Funding has been cobbled together using local, state, and federal funds as shown in the table below.

	Phase 1			Phase 2		
	Engineering	ROW	Construction	Engineering	ROW	Construction
Federal						
STP		$350,000	$1,450,000			$2,200,000
State						
PWTF	$78,000	$515,000	$999,500	$456,000	$551,500	
TIB			$2,012,500			$1,720,000
DOE Grant					$900,000	
Local						
City Utility Fund			$127,000			$73,000
TOTAL			**$5,532,000**			**$5,900,500**



Source: City of Camas, 2019

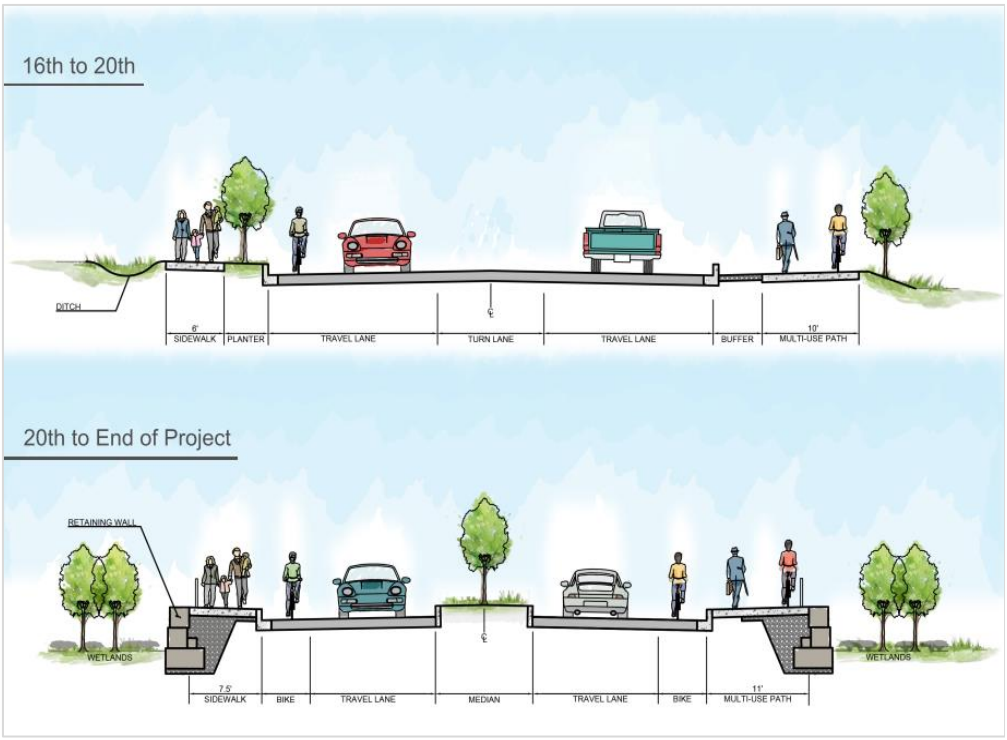
Exhibit 6. Summary of Camas Transportation Funding Sources

FUNDING SOURCE	EST. ANNUAL REVENUE FOR TRANSPORTATION	DEDICATED, SUNSET	USES
General Fund Sources	$2.5M ($1.5M for O&M and Admin, $1M for Preservation)	A portion of previously banked property taxes dedicated to transportation preservation in 2014.	Preservation, O&M, Administration
REET 1	$389,000	No. Competes with other city needs, but transportation is typically the highest use.	Capital
REET 2	$0	No. Competes with other city needs, traditionally used for parks.	Capital
Transportation Impact Fee	$669,000	Yes. Primarily used to pay debt service	Capital

Note: Capital projects typically include some preservation of existing roadway. REET 1 investment in transportation can vary significantly year to year depending on capital projects.
Sources: City of Camas, 2018; BERK, 2019.

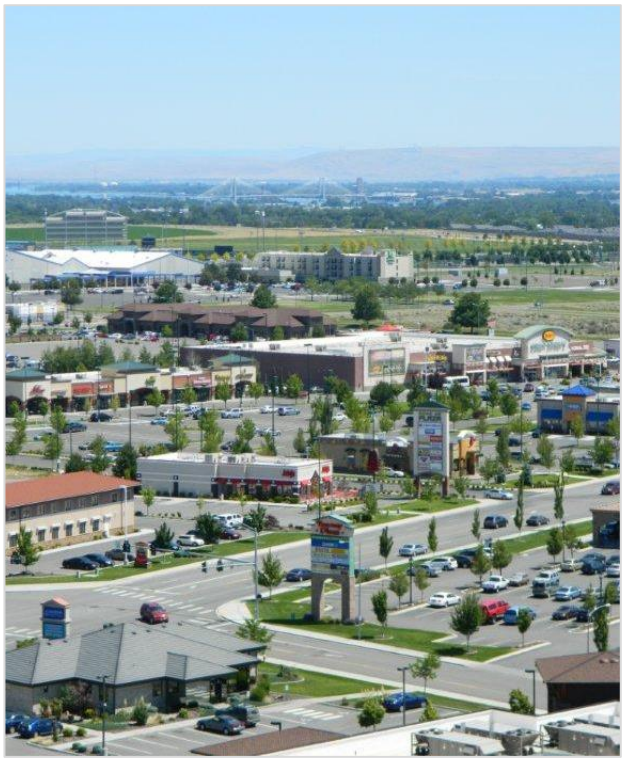
Potential Alternative Local Funding Tools or Changes in State Policy or Programs

City staff expressed interest in a street utility fee, which would be a dedicated street utility for transportation (similar to other enterprise funds like stormwater, sewer, or solid waste). The City might also benefit from adjustments in the distribution of federal funds, which could potentially ease challenges of complying with federal funding requirements. The City could benefit from the State expanding flexible direct distributions that cities can spend as they need on transportation. If the City has a good project that generates a lot of attention, it can secure direct legislative appropriations. For example, Camas received $6M for Northwest Brady Road in the Connecting Washington transportation package. However, in communities that cannot generate this interest among legislators, they do not receive this direct State funding. City staff suggested that if there was more direct distribution like fuel tax, based on population or other criteria, it could help cities.



Source: City of Camas, 2019.

Case Study: **City of Pasco**



Case Study Highlights

- Pasco is a large city with rapid population and employment growth.
- The City's transportation network is challenged not only by growth, but also by its history as a river and rail hub, moving agricultural and other products to other parts of the world.
- The City's transportation planning has not kept pace with growth and preservation investment is critical.
- It is difficult to assemble funding for big projects with pressing needs, such as the Lewis Street Overpass. It often takes multiple years and many funding sources.

Key Statistics

- Typology for this study: **Large**
- Population: **73,590**
- 5-year Average Growth Rate: **12.2%**
- Centerline Road Miles: **313.6**
- Approximate size of annual transportation budget: **$9 million** (varies by year)

Sources: OFM, 2018; HPMS, 2017; City of Camas; 2019; BERK, 2019.

Summary: Pasco's Story

Pasco is a large city in Franklin County of almost 74,000 people located at the confluence of the Columbia and Snake rivers and is the easternmost of the Tri-Cities. The city has a long history as a river and rail transportation hub and continues to move agricultural good, dry goods, technology, and other products to other parts of the world through all modes of transportation including its surface streets. The city has experienced rapid growth in recent years, adding over 40,000 people since 2000. Throughout this expansion, the City has successfully maintained quality of life with good schools, health care facilities, retail opportunities, and recreational areas.

In addition to impacts from growth, the transportation system is impacted by freight. BNSF operates one of the largest railways in the country in Pasco. The street system is impacted by the freight movement between the railway, river, farm fields, and large food processing companies in the area. In addition to the BNSF railway, the Port of Pasco provides facilities for barge shipments, properties with access to rail, and operates the Tri-Cities Airport. The Port often partners with the City on transportation improvements and commits funds to improvements near their facilities.

The City is still catching up with growth in terms of its planning and is creating a Transportation System Master Plan and expanding its pavement management program to guide investments in transportation improvements in the future. The city is at a point where continued deferred maintenance on arterials could lead to exponentially increasing costs. Because of this, the City is also considering shifting operations staff to focus on in-house preservation work.

City Transportation System Context

Pasco's infrastructure includes 313.6 centerline road miles including 35.8 miles of arterials, 33.2 miles of collectors, and 244.6 miles of local roads.[7]

Transportation Planning Process

The City's Public Works department is primarily responsible for transportation planning and identifying any needed projects for inclusion in the six-year Transportation Improvement Plan. Transportation planning is also guided by the Transportation Element of the City's Comprehensive Plan. The 2018-2038 Comprehensive Plan update is scheduled to be adopted in the fall of 2019. Due to the recent and projected population and employment growth in the City, they expect to be more deliberate about planning in the future by creating a Transportation Master Plan to guide transportation planning, which has not been done before.

In addition to planning documents, the Pasco City Council establishes two-year goals that consider community input collected through forums and surveys. For 2018-2019 the transportation network was identified as one of six goal areas for the City.

Transportation in the Context of City Priorities

The 2018-2019 City Council goals identify several transportation priorities including: the final design and funding plan for a freight/railyard overpass, improving heavily used corridors including a state highway that serves as a main street, pro-active traffic calming in neighborhoods, collaboration with transit, and transportation planning to support multimodal uses.

Although the City identified highly-functional multi-modal transportation as a priority, it competes for limited resources against other priority areas, which include: quality of life, financial sustainability, safety, economic vitality, and community identify.

Current Transportation Needs

Although the City's transportation network is in good condition, there are several principal arterials that need immediate attention to prevent them from dropping below a pavement condition index (PCI) rating of 60. The City will face increased costs if streets deteriorate beyond that point.

The City's rapid growth has put pressure on the transportation system, requiring the City to retrofit annexed arterials to bring them up to city standards. The City's transportation impact fee has not been reassessed recently and therefore new development is not significantly contributing revenues required for needed improvements.

Source: City of Pasco, 2019.

[7] Highway Performance Monitoring System, 2017.

Transportation Investments

The City organizes its transportation department in two divisions, the Operations division and the Engineering division. The Operations division handles streets, and utilities and plants (sewer/water/industrial wastewater). The Operations division is starting to handle more preservation type projects as well, but this is a recent shift. Transportation Operations are budgeted each year based on the funding needed to do an annual program of crack seal, etc. The Engineering division works on larger "capital" projects included in the Transportation Improvement Plan (TIP). Many of these projects are put out to bid and can include preservation and widening projects, or overpasses and intersections.

Some activities in each category

- **Operations:** crack seal, filling potholes, replacing damaged street signs, snow removal, storm drain flooding, street sweeping, some preservation paving.
- **Engineering:** Design, bid, and manage capital improvement projects included in the TIP that are put out to bid (preservation, widening, overpasses, and intersections) and maintain signals.

System Preservation

Historically, the City has had limited resources to monitor pavement condition, using one staff member to evaluate the entire city network using WSDOT's pavement rating system. In 2018, the City completed a system-wide evaluation of the network to get a point in time understanding of the PCI rating on all streets. The City currently has no process for evaluating future pavement condition but is shifting to using the new systemwide PCI data on an ongoing basis with a more active pavement management program.

Project Highlight: Lewis Street Overpass

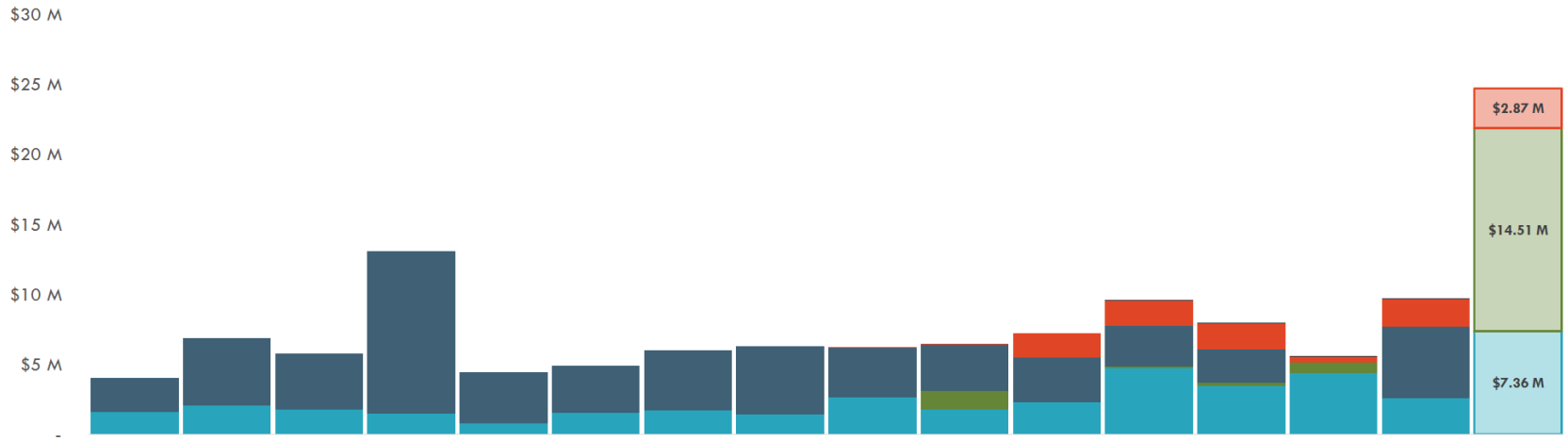
The Lewis Street overpass will replace an existing underpass, originally built in 1937, that provides the main connection across railroad tracks to Downtown from East Pasco. Other connections are too far from the crossing to be viable alternate routes. The existing underpass is functionally obsolete and presents safety concerns due to the narrow traffic lanes, inability to meet overhead clearance standards, and risk to vehicles, pedestrians, and bicyclists due to increasing congestion. The underpass is a choke point on a major arterial and any closure due to an accident or disaster would affect statewide freight mobility.

The replacement overpass project is many years in the making and will provide appropriate travel lanes to enhance mobility and safety. The project was made possible through multiple partnerships and through multiple funding sources including Connecting Washington funds, TIB, earmark requests, and local funding.

Anticipated Project Cost

- Total: $35.7 million (2017 dollars)
- Construction: $24.5 million
- State Funding Request: $15 million (Committed as part of the Connecting Washington funding package)
- Local Funding: $2.2 million ($8.5 million has been spent for engineering, permitting, and right-of-way acquisition

Exhibit 7. Distribution of Expenditures in 2018 Dollars, City of Pasco 2003–2017



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Est. Need
MAINTENANCE	$1.58 M	$2.09 M	$1.76 M	$1.47 M	$0.79 M	$1.52 M	$1.71 M	$1.42 M	$2.62 M	$1.75 M	$2.31 M	$4.74 M	$3.47 M	$4.36 M	$2.57 M	
PRESERVATION	-	-	-	-	-	-	-	-	$0.02 M	$1.35 M	-	$0.09 M	$0.24 M	$0.79 M	-	
CONSTRUCTION	$2.44 M	$4.80 M	$4.04 M	$11.65 M	$3.67 M	$3.40 M	$4.32 M	$4.90 M	$3.56 M	$3.31 M	$3.17 M	$2.93 M	$2.35 M	-	$5.11 M	
DEBT SERVICE	$0.79 M	$0.33 M	$0.19 M	$0.14 M	$0.11 M	$0.01 M	$0.00 M	$0.04 M	-	-	-	-	-	-	$0.02 M	
ADMINISTRATION & OPERATIONS	-	-	-	-	-	-	-	-	$0.02 M	$0.03 M	$1.74 M	$1.77 M	$1.88 M	$0.39 M	$2.00 M	
MAINT. & CONSTR. OF FACILITIES	-	-	-	-	-	-	-	-	-	-	-	$0.05 M	$0.01 M	$0.03 M	$0.02 M	
OTHER	$0.15 M	-	-	-	-	-	-	$0.34 M	$2.51 M	$3.22 M	-	-	$0.98 M	-	-	
TOTAL	**$4.96 M**	**$7.22 M**	**$5.98 M**	**$13.26 M**	**$4.56 M**	**$4.94 M**	**$6.04 M**	**$6.70 M**	**$8.72 M**	**$9.66 M**	**$7.23 M**	**$9.57 M**	**$8.91 M**	**$5.58 M**	**$9.71 M**	

Notes: The percent change is calculated as the average annual growth rate of expense categories from 2014–2017. Estimated 2017 maintenance/preservation expenditures are based on the total centerline-miles of the local road network and annualized estimates of costs according to calculations along the entire street life-cycle. Estimated administration and operations costs are assumed to be equal to 15% of the total preservation. Estimates of bridge life-cycle costs are not included in these estimates.
Sources: WSDOT City Streets and County Roads, 2003-2017; BERK, 2019.

Unfunded Need

To estimate the funding need, BERK and Perteet used centerline miles and annualized estimates based on calculations along the entire street life-cycle to generate an estimated preservation need of **$14.5 million** for Pasco. Maintenance and administration costs are estimated based on preservation's relationship to historic spending. This estimate does not include deferred maintenance. Catching up on system preservation needs requires both a one-time cost and an ongoing cost. The City currently doesn't have a cost estimate for bringing their arterials with PCI ratings near 60.

Transportation Funding Capacity and Revenue Sources

Use of Existing Funding Tools

Pasco's Public Works department relies on State motor vehicle fuel tax (MVFT) and grants for transportation funding, with over 64% of the budget coming from these sources over the last five years. More information about Pasco's funding sources is in Exhibit 8.

Exhibit 8. Summary of Pasco Transportation Funding Sources

FUNDING SOURCE	EST. ANNUAL REVENUE FOR TRANSPORTATION	DEDICATED, SUNSET	USES
Motor Vehicle Fuel Tax (State)	$1.6M	Yes	Capital and Operations
Utility Tax	$1.3M	Dedicated percentage (2% to arterials), rest goes to General Fund)	Capital, Operations, and Preservation
Grants	$6.8M	Yes	Capital
Transportation Impact Fee	$407,000	Yes	Capital
Licenses and permits	$306,000	No, Varies	Operations
Maintenance and construction	$152,000	No, Varies	Operations
Miscellaneous	$96,000	No, Varies	Capital, Operations, and Preservation

Sources: City of Pasco, 2018; BERK, 2019.

The City also uses local funding sources for transportation. The biggest local funding tool is an 8.5% Utility Tax, of which 2% is dedicated to arterials. The City also uses Transportation Impact Fees, but because the fees have not been updated recently, revenue related to growth in the city is not sufficient to pay for needed improvements associated with that growth. The City also uses Local Improvement Districts for specific projects, where property owners can contact the City to initiate LID projects. The City uses debt when needed for road improvements, and it's not uncommon for the Council to sell non-voted, councilmanic bonds on a three-year cycle. While general fund revenue has not historically been used for transportation it can be at City Manager or Council discretion. More information about use of local tools is in Exhibit 9.

Exhibit 9. Use of local tools

	Funding Tool	Levied by City	Used for Transportation
Local Unrestricted Funding	Property Tax	✔	
	Business & Occupation Tax		
	Retail Sales and Use Tax	✔	
	Utility Tax	✔	✔
	Real Estate Excise Tax 1 (REET 1)	✔	
	Real Estate Excise Tax 2 (REET 2)	✔	
	Additional REET 3	Not eligible	
Local Transportation Restricted Funding	Border Area Motor Vehicle Fuel Tax	Not eligible	
	Commercial Parking Tax		
	Local Improvement District	✔	✔
	Real Estate Excise Tax 2 (REET 2)	✔	
	Transportation Benefit District Vehicle Licensing Fee		
	Transportation Benefit District Sales and Use Tax		
	Transportation Impact Fee	✔	✔
Local Debt Financing	General Obligation Bonds (limited and unlimited)	✔ (LTGO)	✔

Potential Alternative Local Funding Tools or Changes in State Policy or Programs

City transportation staff indicated an interest in allowing cities to implement a city road levy, similar to the county road levy which is the primary source of property tax revenues for the county road fund. Counties can impose a road levy up to $2.25 per $1,000 of assessed value for the county road district. The tax is imposed by the county legislative body and does not require voter approval. This levy is restricted to funding transportation investments in unincorporated areas, including things like: planning, constructing, altering, repairing, improving, and maintaining county roads bridges; the cost of establishing roads or acquiring rights-of-way; expenses associated with an engineering office; and removal of barriers to fish passage among other uses.

Case Study: **City of Ritzville**

Case Study Highlights

- Ritzville is a small city in eastern Washington with an aged transportation system and limited capacity to generate local resources.
- The City relies on Transportation Improvement Board (TIB) assistance for reconstruction projects. However, TIB does not cover crack seal. The City is now actively budgeting for preservation needs.
- Ritzville's First Avenue serves as a bypass route for over-height trucks that do not meet height restrictions on I-90. This adds wear on the roadways as trucks are redirected to local streets.

City of Ritzville

- Typology for this study: Small
- Population: **1,660**
- 5-year Average Growth Rate: **-2.4%**
- Centerline road miles: **20.3**
- Approximate size of annual transportation budget: **$770,000** (varies by year)

Sources: OFM, 2018; HPMS, 2017; City of Ritzville, 2019; BERK, 2019

Summary: Ritzville's Story

Ritzville is a small town of 1,600 residents in eastern Washington. With an aged transportation system and limited resources, the City has been unable to invest in system preservation at its desired level.

The City has relied on Transportation Improvement Board (TIB) assistance for reconstruction projects. TIB grant money supports chip seal or slurry seal, not crack seal, a core expense that the City takes on. The City receives around $35,000 from the state motor vehicle fuel tax distributions each year, which primarily supports snow plowing rather than preventative maintenance.

First Street Project. Source: TIB.

Recently, the City started to actively plan and budget for system preservation. In 2015, the City started tracking street blocks that need crack seal and scheduling those repairs. If the City continues with this plan, in five years it will complete crack seal for every street. To support this effort, in 2018, City Council and the Finance Committee committed $30,000 of discretionary general funds annually for a strategic, five-year crack seal program. The crack seal program will preserve streets, but the City can only stay on this crack seal repair schedule if it continues to receive TIB grant funding for construction projects.

Located just off the highway, First Avenue, from east city limits to Division, serves as a bypass route for over-height loads that surpass the height restrictions due to the railroad crossing on I-90, just east and west of the city. Oversize loads also enter Ritzville off Highway 395, using First Avenue from south city limits to Division as a bypass route. This creates significant wear and tear and the City does not receive dedicated state funding to maintain these routes.

Project Highlight: First Street from Division to Jackson

- Cities like Ritzville absorb state highway impacts due to traffic being redirected to local streets.
- The State uses First Avenue as a bypass route for over-height loads. With a railroad crossing I-90, just west and east of the city, the railroad bridge is too low. Weight-restricted vehicles that cannot drive under the bridge must drive through county roads and city streets. A sign on the freeway calls out the Ritzville truck access route on the west bound lane just east of Ritzville. There are height signs on two overpasses east and west of Ritzville. First Avenue is not set up for heavy rigs; city signs and fire hydrants have been knocked over.
- TIB funding supported reconstruction of First Avenue from Division to Cascade in 2001, and from Columbia to Cascade in 2015. In 2013, the section from Division to Jackson was reconstructed with TIB pavement funding ($756,978) and Department of Health utility funding from the Drinking Water State Revolving Fund Grant ($199,130). The project reconstructed existing two lanes with parking on both sides; add curb, gutter, and a sidewalk on both sides of the roadway; replaced storm drainage; and upgraded utilities.
- There remains a section of First Avenue from Division to Palouse that needs resurfacing due to lack of surfacing thickness, trucks, and bypass.

City Transportation System

The City of Ritzville's infrastructure includes 20.3 centerline road miles (9.6 miles of collectors and 15.8 miles of local roads) [8] and two bridges that the City owns and/or is responsible for maintaining.[9]

Transportation Planning

Projects that are prioritized and where funding is identified are included in the 6-year Transportation Improvement Plan (TIP). Only projects included in the TIP are eligible for TIB funding.

Transportation in the Context of City Priorities

Of the annual city budget of around $9 million, the City has around $770,000 available for transportation. Much of this depends on grant funding, which varies each year. Law enforcement comprises around 45% of current expenses. Water and sewer are other priorities in the City's budget. Ritzville is fortunate to have a county engineer on their City Council, who assists with strategic maintenance decisions.

Current Transportation Needs

Ritzville has not been able to invest in system preservation at its desired level. With an average pavement condition rating of 59, Ritzville has been a prime candidate for TIB assistance, and the City relies on TIB for reconstruction. However, TIB does not cover crack seal, a core expense for cities. In 2015, the City started to track how many blocks of street needed crack seal and what could be completed each year. If the City continues with this plan, in five years it will have every street crack sealed. Last fall, City Council and the Finance Committee committed $30,000 of discretionary general funds annually for a strategic, five-year crack seal program.

A few years ago, TIB funded LED light installations to replace the traditional street lights. Previously, cities used gas tax distributions to pay for street lights. With the switch to LED, cities saved money as they could now invest their gas tax distributions into snow plowing and crack seal.

Transportation Investments

While Ritzville does not have a formal pavement management system, the City uses a blend of TIB data and its own new targeted crack seal database to track conditions. Some factors that drive transportation costs are asphalt costs, Americans with Disabilities Act (ADA) requirements, and environmental mitigation costs.

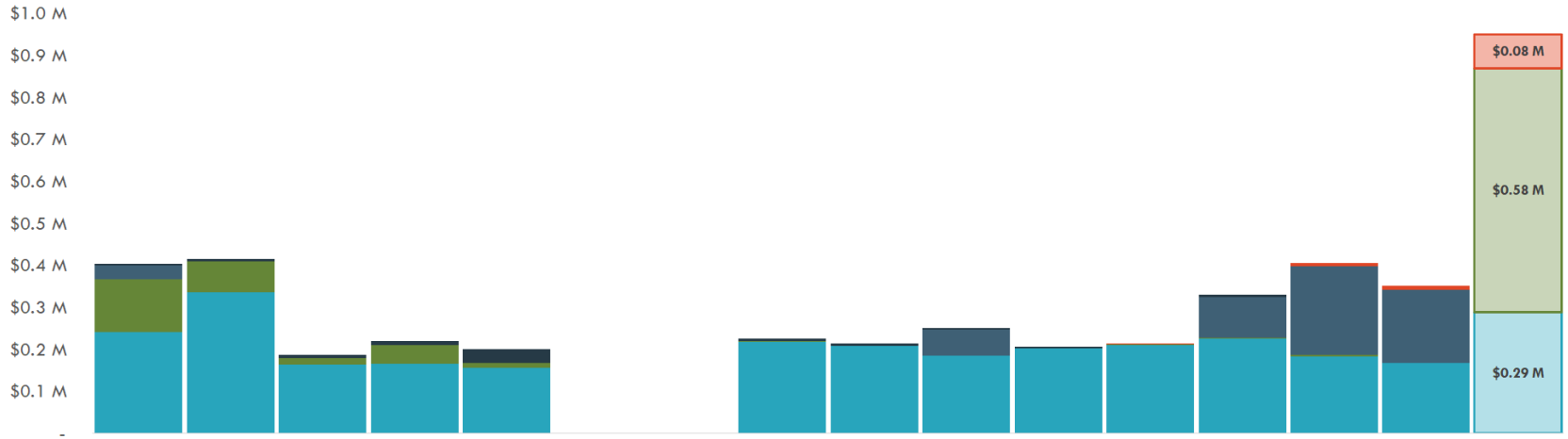
[8] Highway Performance Monitoring System, 2017.
[9] National Bridge Inventory, 2017.

Exhibit 12 summarizes historical transportation expenditures over the last 13 years, as reported in the

FUNDING SOURCE	EST. ANNUAL REVENUE FOR TRANSPORTATION	DEDICATED, SUNSET	USES
General Fund transfer to Street Fund	$30,000	Dedicated portion	Capital, operations & maintenance
Motor Vehicle Fuel Tax	$35,000	Yes	Capital, operations & maintenance
TIB	Varies (~$500,000 in 2019)	Yes	Capital
State and Federal Grants	Varies	Yes	Capital

WSDOT City Streets and County Roads dataset. The absence of "preservation" after 2007 is due to a change in reporting method, where the City now reports preservation in "maintenance." Data for 2008 and 2009 was not available.

Exhibit 10. Distribution of Expenditures in 2018 Dollars, City of Ritzville 2003–2017.



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Est. Need
MAINTENANCE	$0.24 M	$0.34 M	$0.16 M	$0.17 M	$0.16 M	-	-	$0.22 M	$0.21 M	$0.19 M	$0.20 M	$0.21 M	$0.22 M	$0.18 M	$0.17 M	
PRESERVATION	$0.13 M	$0.07 M	$0.02 M	$0.04 M	$0.01 M	-	-	$0.00 M	$0.00 M	-	-	$0.00 M	$0.00 M	$0.00 M	-	
CONSTRUCTION	$0.03 M	-	-	-	-	-	-	-	-	$0.06 M	-	-	$0.10 M	$0.21 M	$0.17 M	
DEBT SERVICE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ADMINISTRATION & OPERATIONS	-	-	-	-	-	-	-	-	-	-	-	$0.00 M	-	$0.01 M	$0.01 M	
MAINT. & CONSTR. OF FACILITIES	$0.00 M	$0.01 M	$0.01 M	$0.01 M	$0.03 M	-	-	$0.00 M	$0.00 M	$0.00 M	$0.00 M	-	$0.01 M	-	-	
OTHER	$0.07 M	-	-	$0.06 M	$0.06 M	-	-	$0.04 M	$0.02 M	-	$1.34 M	$0.55 M	-	-	-	
TOTAL	**$0.48 M**	**$0.42 M**	**$0.19 M**	**$0.28 M**	**$0.26 M**	**-**	**-**	**$0.26 M**	**$0.23 M**	**$0.25 M**	**$1.55 M**	**$0.76 M**	**$0.33 M**	**$0.41 M**	**$0.35 M**	

Notes: Estimated 2017 preservation expenditures are based on the total centerline-miles of the local road network and annualized estimates of costs according to calculations along the entire street life-cycle. Estimated 2017 maintenance and operations expenditures are proportional to budgets. Deferred roadway maintenance and preservation are not included in these estimates.
Source: WSDOT City Streets and County Roads, 2003 – 2017; BERK, 2019.

Construction expenses depend on TIB grants, and maintenance expenses are driven by snowfall accumulation. The decline in preservation spending from 2003 to 2007 meant that streets deteriorated to a point where the City increasingly needed investment in construction over the last decade. In the last few years, Ritzville has received more construction funding through TIB, and the City began to dedicate money for a crack seal program. Crack seal is a preservation activity that is captured under "maintenance."

Unfunded Need

To estimate the funding need, BERK and Perteet, used centerline miles and annualized estimates based on calculations along the entire street life-cycle to generate an annual estimated maintenance, preservation, and operations need of **$878,000** for Ritzville for 2017. However, this does not include deferred roadway maintenance and preservation. City staff estimated that deferred maintenance costs were around $4.8 million for 12 blocks of reconstruction and $3.5 million for chip seal, crack seal, and slurry seal, for a total of around **$8.3 million**.

Transportation Funding Capacity and Revenue Sources

Use of Existing Funding Tools

The City receives around $35,000 from the state motor vehicle fuel tax each year, which is primarily used for snow plowing and does not fund preventative maintenance. Most of the street budget comes from state TIB grants, which includes a local 5% match. TIB grant money supports chip seal or slurry seal, not crack seal, a core expense that the City takes on. Last fall, City Council and the Finance Committee transferred $30,000 annually from the General Fund into the Street Fund to support street preventative maintenance, including the crack seal program.

While the City has considered a Transportation Benefit District, neither vehicle license fees nor a sales tax could generate a significant amount of revenue relative to the cost and legislative effort.

Exhibit 11. Use of local tools

	Funding Tool	Levied by City	Used for transportation
Local Unrestricted Funding	Property Tax	✔	✔
	Business & Occupation Tax (local)		
	Retail Sales and Use Tax (local)	✔	✔
	Utility Tax (local)	✔	✔
	Real Estate Excise Tax 1 (REET 1)	✔	✔
	Real Estate Excise Tax 2 (REET 2)*		
	Additional REET 3	Not eligible	
Local Transportation Restricted Funding	Border Area Motor Vehicle Fuel Tax	Not eligible	
	Commercial Parking Tax	Not relevant	
	Local Improvement District		
	Transportation Benefit District Vehicle Licensing Fee		
	Transportation Benefit District Sales and Use Tax		
	Transportation Impact Fee		
Local Debt Financing	General Obligation Bonds (limited and unlimited)		

*REET 2 is restricted to transportation, water/storm/sewer, park capital purposes, and from July 1, 2017 - June 30, 2019 only, housing for homeless.
Sources: City of Ritzville, 2019; BERK, 2019.

Division Street Project. Source: TIB.

Project Highlight: Division Street from First to Sixth

- In 2014, the City received TIB funding to complete grind, overlay, and upgrade 20 ADA ramps on Division Street from 1st to 6th Avenue.
- The project cost $249,849, and TIB funded $233,138 with Ritzville matching the remaining $16,711.
- The new pavement and ADA ramps provide access for school kids on their way to school.

Exhibit 12. Summary of Ritzville Transportation Funding Sources

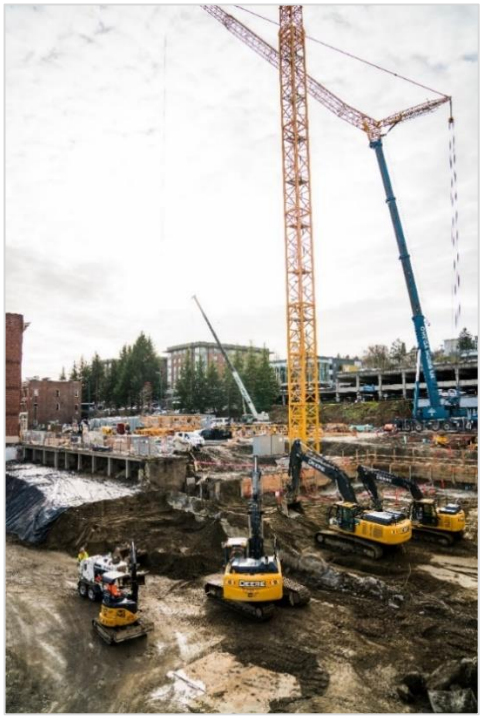
FUNDING SOURCE	EST. ANNUAL REVENUE FOR TRANSPORTATION	DEDICATED, SUNSET	USES
General Fund transfer to Street Fund	$30,000	Dedicated portion	Capital, operations & maintenance
Motor Vehicle Fuel Tax	$35,000	Yes	Capital, operations & maintenance
TIB	Varies (~$500,000 in 2019)	Yes	Capital
State and Federal Grants	Varies	Yes	Capital

Sidewalk Project. Source: TIB.

Project Highlight: Sidewalk Project (Division from 10th to Bauman Street)

- In 2008, the City received TIB funding to add a new sidewalk on one side of Division Street. Prior to this, pedestrians walked in the main roadway from residential areas to their jobs in the commercial areas. Since it was the main entrance to the city, this roadway carried a high volume of traffic traveling at speeds above the posted speed limit.
- Not only is the new sidewalk a significant safety improvement, but the street now provides multimodal access to downtown, allowing pedestrians to walk from the historic part of the city to the businesses at the I-90/SR 261 intersection, including McDonalds.
- The project cost $146,558, and TIB provided $117,246, with Ritzville matching 20% at $29,312.
- This project was included in the County's park plan that includes city components.

Case Study: **City of Tacoma**



Source: City of Tacoma, 2019

Case Study Highlights

- Tacoma is a large city with an aged transportation system and significant transportation infrastructure responsibilities.
- The City faces challenges of investing in system preservation and making asset management investments in streets that appear to be in good condition.
- The City's 10-year voted Streets Initiative has been important, and several factors contributed to its success.
- Tacoma is pursuing a new asset management initiative to create sustainable funding for asset investments.
- The Port of Tacoma generates both economic benefits and demand for capacity and connectivity.
- A major bridge replacement project required piecing together funds across several grant cycles for over a decade.

Key Statistics

- Typology for this study: **Large**
- Population: **209,100**
- 5-year average growth rate: **4.3%**
- Centerline road miles: **733.13**
- Approximate size of annual transportation budget: **$90 million** (varies by year)

Sources: OFM, 2018; HPMS, 2017; City of Tacoma, 2018; BERK, 2019.

Summary: Tacoma's Story

The third largest city in Washington, the City of Tacoma has a growing population, an aged transportation system, and significant transportation needs. Faced with immediate needs and competing city priorities, it has been difficult for the City to make asset management investments in streets. The backlog of streets that need reconstruction continues to grow.

Source: City of Tacoma, 2019

In recent years, the City made a dent in this backlog through its **voted Streets Initiative**. As impacts of decades of deferred maintenance became visible to voters, transportation needs arrived at the forefront of public consciousness. The City had no more bonding capacity and had exhausted all other funding options. The Streets Initiative includes a 10-year increase in property tax, utility tax, and sales tax (via a Transportation Benefit District). It dedicates a portion of the gross earnings business and occupation tax (B&O), that otherwise would go into the General Fund, to transportation. The Streets Initiative brings in around $17.5 million per year, around 16% of the total transportation budget. The City tried and failed to pass a Streets Initiative in 2013-2014.

In addition to a **visible need for increased street maintenance and repair**, the Initiative's success is attributed to a previous City Manager who followed through on a commitment by dedicating a portion of the B&O tax to transportation, even after the initial initiative failed in 2013-2014, as well as support from the business community and Chamber of Commerce, which resulted from including them in the process.

Despite the success of the voted Streets Initiative, all revenue increases approved with it sunset in ten years, so there are concerns about how Tacoma will maintain transportation investments after 2025. Transportation preservation and maintenance needs **ongoing funding.** Tacoma already levies local unrestricted and restricted funding sources that it is eligible for, but unrestricted city funds must be balanced with other city priorities, and some transportation-restricted tools are not viable. For example, the commercial parking tax is not feasible in a city that only recently started charging for on-street parking. The City is considering exploring a transportation impact fee, but there has not been much appetite for this in the past, and success ultimately depends on political feasibility and city objectives.

City staff are working on a **new asset management initiative** to create a sustainable funding for maintenance and to assist City Council in applying strategic thinking to larger asset investments. The goal is to view the asset portfolio more holistically and factor in ongoing maintenance costs when considering initial project investments.

City Transportation System Context

Tacoma's infrastructure includes 733.1 centerline road miles (134.8 miles of arterials, 72.5 miles of collectors, and 525.8 miles of local roads)[10] and 41 bridges that the City owns and/or is responsible for maintaining.[11]

Transportation Planning

The Public Works Department completes transportation planning in alignment with the Long-Range Plan and regional planning. The process starts with a 40-year Transportation Master Plan, which includes a list of all projects that the City would like to realize over the next 20-30 years. The highest priority projects are rolled up into the 6-Year Transportation Improvement Plan (TIP), updated annually based on grant availability. The TIP becomes the transportation section of the 6-Year Capital Facilities Plan, an element of the City's Comprehensive Plan, and is adopted every two years to allocate funding to a specific project list. This becomes the City's capital budget.

Transportation in the Context of City Priorities

In making decisions about transportation investments relative to other city priorities, the primary factor is **funding availability**. Transportation improvements are easier to prioritize where there is transportation-dedicated money. However, with requests for one-time funding from non-dedicated funds, capital requests must be balanced against other facility requests and capital needs.

Transportation investments are also decided through **Council priorities**. Transportation investments that help the City achieve outcomes in its strategic plan are prioritized. Right now, the Council prioritizes school safety, which supports funding for safety-related projects such as flashing pedestrian beacons by schools.

Current Transportation Needs

The City faces a gap of unfunded projects, and maintenance is not funded adequately. Many transportation improvements rely on one-time funding, but maintenance requires **ongoing funding**, and the City does not currently dedicate maintenance dollars. A challenge is helping community members see the value in investments that are less visible, such as replacing a traffic signal system and box. There is a need to holistically examine the entire network and considering projects that serve pedestrians, bicyclists, and drivers, rather than focusing on one task such as paving a street.

Source: City of Tacoma, 2019

[10] Highway Performance Monitoring System, 2017.
[11] National Bridge Inventory, 2017.

Port of Tacoma

Ports both contribute to a city's economic growth and generate additional demands for infrastructure and connectivity. Ports often contribute to higher traffic volumes than city streets may otherwise experience; at the same time, ports often contribute to infrastructure investments and help cities to acquire funding for projects.

Taylor Way Rehabilitation Project. Taylor Way is an important arterial, emergency access route, and freight corridor serving the Port of Tacoma Manufacturing Industrial Center. The route carries four to ten million tons of freight each year; however, the pavement was not designed to carry heavy truck loads. The route operates over capacity, delays traffic, and sees common conflicts between truck and rail. The 2018-2021 project will address failing pavement, congestion at the SR 509/Taylor Way Intersection, and a lack of pedestrian facilities. Total project funding ($23 million) comes from City of Tacoma, Puget Sound Regional Council, Freight Mobility Strategic Investment Board, and other local contributions.

Port of Tacoma Road Project. The Port of Tacoma Road Project is a $42.5 million investment to address high large truck traffic volumes and major growth around the interchange. It will convert the Port of Tacoma Road and existing bridge over I-5 to a one-way southbound while converting the parallel 34th Avenue NE and new bridge over I-5 to a one-way northbound. The project is funded by local, state, and federal sources.

Transportation Investments

Tacoma budgets transportation investments through two categories: **Street Operations and Maintenance** (which also includes preservation) and **Capital**. For management purposes, all categories are grouped together through the same pool of resources. Tacoma uses Lucity software program for pavement management. To prioritize projects, the City considers policy goals, matching grant opportunities, and the geographic equity of its investments across the city.

Some activities in each category

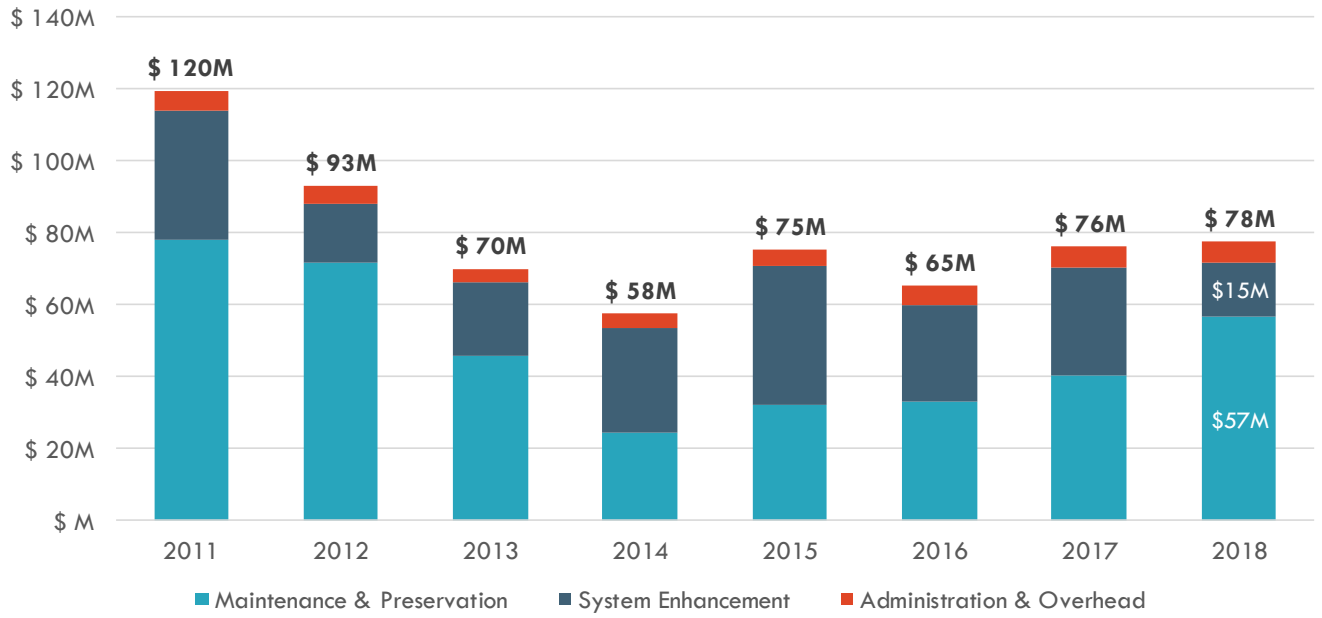
- **Operations:** snow removal, clean up, grass removal in pedestrian islands
- **Maintenance:** filling potholes, re-striping
- **Preservation:** slurry seal, chip seal
- **Capital:** system enhancements, street replacement, new assets

Source: City of Tacoma, 2019

Cost Drivers

Tacoma's transportation investment costs over the last eight years are shown in Exhibit 13, which is adjusted for inflation. In addition to growth, which generates demand for additional capacity, key cost drivers are **stormwater, environmental mitigation,** and the **Americans with Disabilities Act (ADA).** ADA costs have been consistent over time because Tacoma committed to meeting ADA requirements early and has had time to adjust to those costs.

Exhibit 13. City of Tacoma Transportation Expenditures, in 2018 Dollars, 2011-2018



Notes: Expenditure costs adjusted for inflation with WSDOT Construction Cost Index. Administration/overhead refers to fixed costs and internal services. Maintenance & preservation refers to costs related to restoration or maintenance of the existing system. System enhancement refers to costs of projects that add capacity to the transportation system. Costs in either category could include labor, capital, operations, debt service; M = millions.
Sources: City of Tacoma, 2019; BERK, 2019.

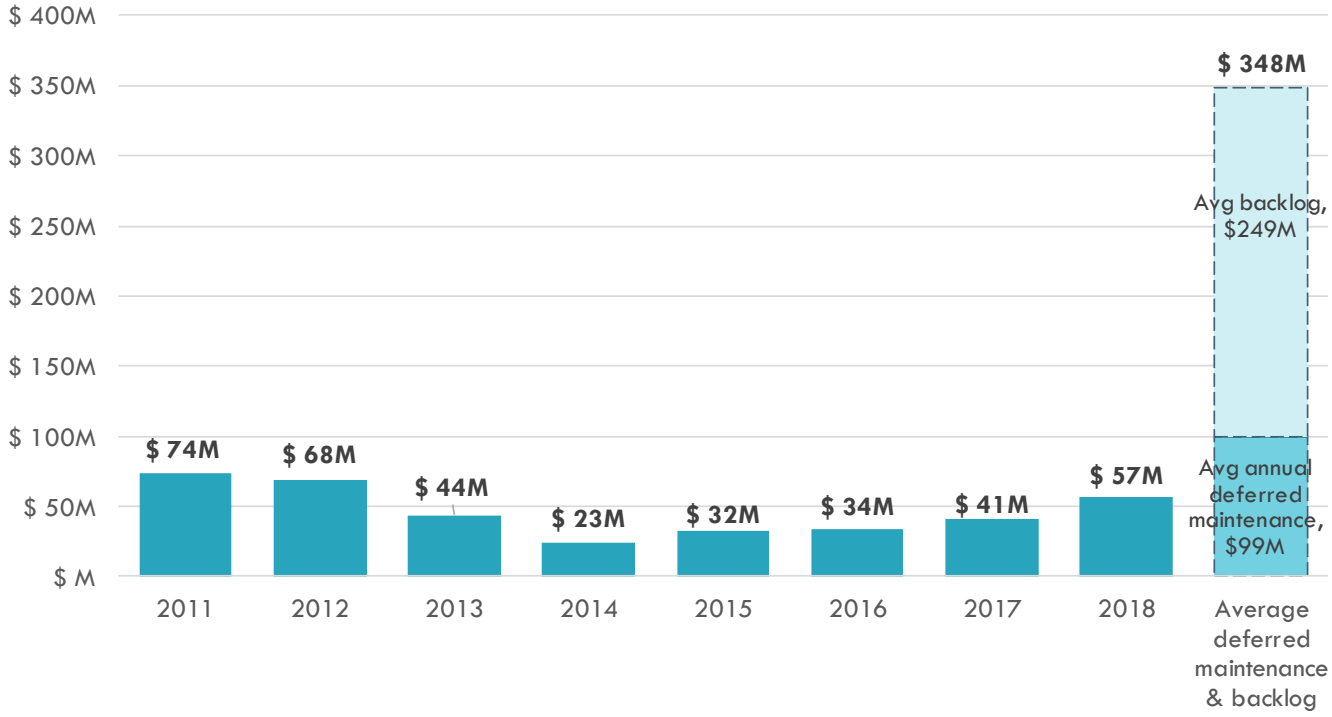
Unfunded Need

In 2018, the City invested around $78 million in transportation,[12] including **$57 million** in preservation (defined in this study as maintenance and restoration of the existing system) and **$15 million** in system enhancement (projects that add capacity to the transportation system).

Historical data does not represent actual need. Tacoma has a backlog of streets that need reconstruction. BERK and Perteet used centerline miles and annualized estimates based on calculations along the entire street life-cycle to generate an estimated maintenance and preservation need of **$42 million** for Tacoma. While Tacoma's investments in preservation have steadily increased and may appear to meet the estimated need, system enhancement or deferred maintenance costs are not included. Using data from the City's pavement management system, which tracks projects that are planned but not implemented, the average annual cost of deferred maintenance is **$99 million**; combined with an average backlog of **$249 million**, a total shortfall of **$348 million.**[13]

[12] Budgets may report higher revenues and expenditures if they include transfers between funds that show up both in revenues and expenditures. Fund transfers that are double-counted in both revenues and expenditures are not included in this chart.
[13] The pavement management system considers "deferred maintenance" to be work that cannot be completed in a given year due to lack of funding. When a street reaches a pavement condition index rating of 35 on residential streets and 40 on arterial streets, it goes into the "backlog" for reconstruction and is weighted so that a minimum number of these are selected for improvements.

Exhibit 14. City of Tacoma Past Preservation & Maintenance, in 2018 Dollars, and Estimated Shortfall



Notes: Expenditure costs adjusted for inflation with WSDOT Construction Cost Index. The pavement management system considers "deferred maintenance" to be work that cannot be completed in a given year due to lack of funding. When a street reaches a pavement condition index rating of 35 on residential streets and 40 on arterial streets, it goes into the "backlog" for reconstruction and is weighted so that a minimum number of these are selected for improvements.
Sources: City of Tacoma, 2019; BERK, 2019.

Asset Management

To reduce the backlog of deferred maintenance, not just in streets but also in other areas, City staff are working on a new **asset management initiative**, which has two goals: 1) to create a sustainable funding for maintenance, which will reduce the maintenance backlog, and 2) to assist the City Council in applying strategic thinking to larger asset investments.

The initiative is still in early stages, and staff are researching practices in other cities, as well as facilitating discussions with Councilmembers to examine funding options and develop a holistic approach to project investments. This involves viewing projects together, rather than in isolation, and acknowledging that investing in one area reduces the ability to make investments in other areas. This initiative currently focuses on public facilities, as this is a more visible asset class; it will then move onto other asset classes, including streets. Ideally, repair and replacement costs will be factored into the process of adding a new building to the City's portfolio. The goal is to present a yearly report on the state of assets to City Council.

Transportation Funding Capacity and Revenue Sources

Use of Existing Funding Tools

Like every city in Washington, Tacoma receives State motor vehicle fuel tax (MVFT) and Multimodal Fund direct distributions. The City dedicates a portion of MVFT for operations and maintenance and a portion for capital projects. Property, sales, business and occupation, and utility taxes all feed into the General Fund; portions of these revenues are dedicated to transportation. The City levies real estate excise tax (REET) 1 and 2, and it has levied Local Improvement Districts in the past. Recent legislation approving the use of REET 2 for Affordable Housing and Homelessness will further reduce its availability for transportation needs. There has not been much appetite for transportation impact fees in the past, but the City is planning to explore that option. Commercial parking taxes are considered politically infeasible as the City only recently started charging for on-street parking.

Exhibit 15. Use of Local Tools

	Funding Tool	Levied by City	Used for transportation
Local Unrestricted Funding	Property Tax	✔	✔
	Business & Occupation Tax (local)	✔	✔
	Retail Sales and Use Tax (local)	✔	✔
	Utility Tax (local)	✔	
	Real Estate Excise Tax 1 (REET 1)	✔	
	Real Estate Excise Tax 2 (REET 2)*	✔	✔
	Additional REET 3	Not eligible	
Local Transportation Restricted Funding	Border Area Motor Vehicle Fuel Tax	Not eligible	
	Commercial Parking Tax		
	Local Improvement District	Used in past	
	Transportation Benefit District Vehicle Licensing Fee	✔	✔
	Transportation Benefit District Sales and Use Tax	✔	✔
	Transportation Impact Fee	Considering exploring	
Local Debt Financing	General Obligation Bonds (limited and unlimited)	✔	✔

*REET 2 is restricted to transportation, water/storm/sewer, park capital purposes, and from July 1, 2017 - June 30, 2019 only, housing for homeless.
Source: City of Tacoma, 2019; BERK, 2019.

Tacoma passed a **voted Streets Initiative** in 2015, following unsuccessful attempts in 2013-2014. The Streets Initiative includes a 10-year increase in property tax, utility tax, and sales tax (via a Transportation Benefit District). It dedicates a portion of the gross earnings business and occupation tax, that otherwise would go into the General Fund, to transportation.

Several factors helped to pass the voted Streets Initiative

- The previous City Manager **followed through** on a commitment to dedicate a portion of the gross earnings B&O tax to transportation, even though the initial initiative failed in 2013-2014.
- Transportation needs came to the forefront of **public consciousness** as the impacts of decades of deferred maintenance became visible to voters. The City had no more bonding capacity and had exhausted all other funding options.
- **Support from the business community and Chamber of Commerce** was critical. Previously, the initiative did not have the support of the business community, so there was a conscious effort to include them in the process and secure their support the second time.
- This was a long process. It was important to **be methodical** and not rush the process.
- Because a voted sales tax through a TBD is limited to ten years, there is concern about how Tacoma will maintain transportation investments after the initiative sunsets.

Large capital projects require piecing together grant awards over many years. For example, the major replacement of the Puyallup River Bridge required securing funds of $41 million over 13 years.

Project Highlight: Puyallup River Bridge

- The Puyallup River Bridge opened in 1927 as one of the state's last segments of the famous Pacific Highway, also known as State Route 1 and later Highway 99. The bridge is an important commercial arterial, linking Fife to Tacoma's industrial area and the Port of Tacoma. In 2013, after over 85 years, age, and the elements caught up with the bridge. The City pursued a design build procurement process and selected a design of a continuous span precast concrete girder bridge to replace certain sections of the existing bridge. Phase 1 began in March 2018, and Phase II is anticipated to be complete in July 2019.
- This $41 million project took 13 years to fund across many sources:

	2004	2006	2009	2012	2017	Total
Federal Bridge Program Funds	$5M	$7M			$3M	$15M
Federal STP Funds			$6M	$6.2M		$12.2M
FMSIB				$5M		$5M
State legislative earmark				$7M		$7M
Port of Tacoma				$1.2M		$1.2M
Total						**$40.4M**

- While the current project replaces the most deteriorated segments of the bridge and completes an important link across the railroad, many more spans will need to be replaced. The City estimates an additional $140 million is needed to complete remaining spans, including the span across the river. Without these improvements, older spans will likely become weight-restricted.

Exhibit 16. Summary of Tacoma Transportation Funding Sources

FUNDING SOURCE	EST. ANNUAL REVENUE FOR TRANSPORTATION	DEDICATED, SUNSET	USES
Motor Vehicle Fuel Tax (State)	$4.2M	Yes Ongoing	Maintenance, Capital
Multimodal Fund (State)	$0.55M	Yes 2015-2031	Maintenance, Capital
Transportation Benefit District - $20 Vehicle Fee	$2.9M	Yes 2012-Ongoing	Maintenance, Capital
Streets Initiative ▪ Gross Earnings Tax (1.5% on Power, Natural Gas, Telephone) ▪ Sales Tax - (.1%) through TBD ▪ Property Tax (0.20/$1,000 of Assessed Value)	$17.5M	Yes 2015-2025	Maintenance, Capital
Gross Earnings Tax (2% on Cable, Water, Rail, Solid Waste, Wastewater, Surface Water)	$7.5M	Yes 2013-Ongoing	Street Maintenance
Heavy Haul Corridor	$0.1M	Yes (Port Area) Ongoing	Overhead, reconstruction, repair
Real Estate Excise Tax	Varies ($2.5M - $5.0M)	No Ongoing	Capital
Federal, State, Local Grants	Varies	Yes, Varies	Capital
General Fund	Varies	No, Varies	General

Source: City of Tacoma, 2019.

Potential Alternative Local Funding Tools or Changes in State Policy or Programs

City transportation staff expressed that they would benefit if the legislature removed the sunset requirement from a voted sales tax under a TBD. Other potential options to generate revenue are road user fees and a street utility.

Transportation staff also suggested they would benefit from state policy changes that increase and protect transportation-dedicated revenues. This desire could be in tension with that of others in the City, who may prefer more unrestricted state funding.

Source: City of Tacoma, 2019.

Case Study: **Town of Twisp**

Source: Town of Twisp, 2019

Case Study Highlights

- Twisp is a small town that aggressively pursues local funding tools but remains largely dependent on state resources for transportation.
- Extreme weather conditions, geographic isolation, poor-quality original road build, a short construction season, volatility of oil prices, and environmental and archaeological requirements drive costs up.
- Project scale and costs are often not advantageous to a small city.
- Overcoming past underinvestment in system preservation is difficult, but in recent years, the Town has built momentum toward catching up.
- The Town passed a voted Transportation Benefit District sales tax with a 72% pass rate. But local funding tools have limited fund-raising capacity in small communities.

Key Statistics

- Typology for this study: **Small**
- Population: **975**
- 5-year average growth rate: **2.0%**
- Centerline road miles: **8.6 miles**
- Approximate size of annual transportation budget: **$190,000** (varies by year)

Sources: OFM, 2018; HPMS, 2017; Town of Twisp, 2019; BERK, 2019.

Summary: Twisp's Story

Twisp is a small town with 1000 residents and nine road miles. Historically, the Town has underinvested in transportation, but over the last few years, it has pushed aggressively to fund transportation and developed **momentum in catching** up on projects. A supportive administration has been crucial in advancing this effort.

Source: Town of Twisp, 2019

Investing in transportation is more difficult in Twisp than in other communities due to extreme weather conditions, poor-quality original road build, and project scale and costs that are not advantageous to such a small city. Unit costs are high due to poor access for construction and preservation contractors and to commodities. Other cost drivers include geographic location, bidding time, a short construction season, volatility of oil prices, environmental and archaeological requirements, and federal funding requirements. Additionally, the Town has limited staff capacity and resources for transportation projects.

The Town is highly **dependent on state funds** through direct distributions, the Transportation Improvement Board (TIB), and grants. But it also raises local funding. In 2017, Twisp passed a **Transportation Benefit District** with a voted 0.2% sales tax, at **a 72% pass rate**. This is a huge statement, indicating that community members see transportation as a priority and are willing to pay for it. However, this only generates about $50,000.

The extreme weather and risk of fires in the Methow Valley mean the Town faces high capital infrastructure needs. A real estate excise tax (REET) generates around $16,000 annually, and while this revenue is not designated for a specific use, it has **limited capacity** for capital improvements and has not typically been used for streets in Twisp.

Source: Town of Twisp, 2019

Implementing additional funding tools is difficult due to limited staff and resource capacity to administer new funding mechanisms. The Town has explored Local Improvement Districts (LIDs), but with a town median household income of $32,000, which is half that of the state overall, a LID would generate **limited capacity** and burden families already in need.

City Transportation System

The Town of Twisp includes 8.6 centerline road miles, of which 7 miles are local roads, and 1.6 miles are collectors.[14] The Town is responsible for maintaining and replacing sidewalks and streets, and for cleaning catch basins. The Town also maintains State Route 20, which runs through town and serves as its main street. The City neither owns nor maintains any bridges.[15]

Source: Town of Twisp, 2019

Transportation Planning

Twisp's Public Works department is responsible for transportation planning. Transportation investments are guided by the Transportation Element of the Town's Comprehensive Plan. The Transportation Benefit District, established in 2017, sets transportation priorities for the town. The Capital Facilities Plan mirrors the State Transportation Improvement Plan (STIP).

Transportation in the Context of City Priorities

This small community faces many pressing needs, including addressing extreme weather conditions and fires. The need for transportation funding is an additional layer on top of other critical needs. Twisp dedicates 35% of property tax revenue to the Street Fund, and the voted TBD shows that transportation is a community priority. The General Fund supports other city needs, including police, town halls, a municipal pool, and the airport. The cost of establishing an emergency management center is a current priority, as the town has experienced multiple emergency situations necessitating coordinated emergency response.

Current Transportation Needs

Under previous administrations, the Town underinvested in transportation, and because costs accumulate over time, the average pavement condition rating (PCR) is now around 60 out of 100.

In the last nine years, the current administration has made significant headway in improving street conditions. A supportive administration has pushed this effort forward and been mindful of maximizing efficiencies through the order of repair. Utility investments and street improvements require staff time and financial resources, so if both types of improvements are required, then projects start with utility installations so that the streets are dug up once. While Public Works has secured funding for sewer/water infrastructure with US Department of Agriculture money, the Town needs partners to help fund street restoration.

[14] Highway Performance Management System, 2017.
[15] National Bridge Inventory, 2017.

Because of ice and snow on sidewalks, the streets have four to five feet of plowed snow on the edge of pavements. This means that when snow starts to melt, it sits on the edge and freeze-thaws for weeks. Town leaders discern the best treatment for a given project to use taxpayer money most efficiently. This may mean applying curb gutter sidewalk where appropriate, as in highways, while using a shared use walking path in residential areas, where this type of sidewalk is better suited due to lower traffic volumes.

Twisp was selected through WSDOT Pedestrian and Bicyclist Program to complete sidewalks on SR20. The Town is now working on three major projects trying to get connectivity across town, and plans to complete the last segment in 2020.

Transportation Investments

Town leaders critically decide how to best use Street Fund dollars by considering how to make projects whole and fund viable projects. The Town budgets its transportation system through Operations and Maintenance (O&M) and Capital. O&M and preservation fall under the operating budget, funded by the 35% of property tax that supports the Street Fund. Capital expenses are mainly funded by TIB and grants to support specific projects, such as extending a parking lot or a new sidewalk.

Some activities in each category:

- **Maintenance:** filling potholes, gravel, raising water valves
- **Preservation:** chip seal, seal coat, Bituminous surface treatments (BST), overlay
- **Capital:** new sidewalks, new roundabout, transit stop

Cost Drivers

Below are some cost drivers that affect transportation investments in Twisp:

- **Construction and commodity disadvantages** due to geographic isolation and high impact from fires in the Methow Valley.
- **Project bidding time**, which delays time between grant application and construction.
- **Short construction season** due to extreme weather conditions.
- **Volatility of oil prices**, which affects price of commodities including fuel and asphalt.
- **Environmental and archaeological requirements**. Because Twisp is near the Okanogan Tribal area, the Town hires an archaeologist to stand-by during dig-outs, incurring costs of travel and accommodation.
- **Federal funding requirements**, such as use of American steel and paying prevailing wage.

Source: Town of Twisp, 2019

Unfunded Need

The costs of deferred maintenance increase as preservation needs are not addressed.

For a street requiring overlay that is not completed for five years, Town staff estimate that costs will be around **3.5 times** the initial cost.

As projects that need preservation do not receive attention, they eventually require Full Depth Reclamation (FDR). For a street that has completely fallen apart and requires FDR, the cost five years later is around **10 times** the initial cost.

The backlog of deferred maintenance is estimated at **$2.1 million** in 2019 dollars over the past five years. This represents 20 street segments that had previously been on a preservation list that are now on the FDR construction list. These same segments had an estimated cost of $358,000 in 2019 dollars when they were on the preservation list.

Transportation Funding Capacity and Revenue Sources

Use of Existing Funding Tools

Twisp dedicates 35% of property tax to the Street Fund to pay for transportation. REET, which generates around $16,000 annually, has limited capacity to fund capital infrastructure, and historically it has not been used by Twisp for street projects since there is a separate Street Fund.

Exhibit 17. Use of local tools

	Funding Tool	Levied by Town	Used for transportation
Local Unrestricted Funding	Property Tax	✔	✔
	Business & Occupation Tax (local)		
	Retail Sales and Use Tax (local)	✔	
	Utility Tax (local)	✔	
	Real Estate Excise Tax 1 (REET 1)	✔	
	Real Estate Excise Tax 2 (REET 2)*		
	Additional REET 3	Not eligible	
Local Transportation Restricted Funding	Border Area Motor Vehicle Fuel Tax	Not eligible	
	Commercial Parking Tax		
	Local Improvement District		
	Transportation Benefit District Vehicle Licensing Fee		
	Transportation Benefit District Sales and Use Tax	✔	✔
	Transportation Impact Fee		
Local Debt Financing	General Obligation Bonds (limited and unlimited)		

*REET 2 is restricted to transportation, water/storm/sewer, park capital purposes, and from July 1, 2017 - June 30, 2019 only, housing for homeless.
Source: Town of Twisp, 2019; BERK, 2019.

In 2017, Twisp passed a TBD with a voted 0.2% sales tax, at a **72% pass rate.** The TBD supports both O&M and capital, and there are specific line items that TBD revenue can be spent on in the budget.

Aside from the TBD, other local options have not been viable. One of the challenges of trying to implement more local funding options in a small town is that resources are sized to scale. Applying for grants requires more staff time and resources. The Town has explored LIDs to fund neighborhood projects that are not eligible for TIB grants, and community members stepped up to try to complete the LID. However, even if the Town passed a LID, the ability to manage it would be limited, and its capacity to produce revenue is minimal in a community where median household income is $32,000, significantly below the state's median household income.

Exhibit 18. Summary of Twisp Transportation Funding Sources, Street Fund Budget, 2019

FUNDING SOURCE	EST. ANNUAL REVENUE FOR TRANSPORTATION	DEDICATED, SUNSET	USES
Property Tax	$67,542	35% dedicated, Ongoing	Operations & Maintenance
Transportation Benefit District – Sales tax 0.2%	$50,000	Yes 2017-2027	Operations & Maintenance, Capital
Motor Vehicle Fuel Tax (State)	$20,850	Yes Ongoing	Operations & Maintenance
Multimodal Fund (State)	$1,311	Yes 2015-2031	Operations & Maintenance
Leaseholder Excise PDA (TwispWorks) (State)	$500	Yes	Operations & Maintenance
Leasehold Tax – Cascade Pipe – Ground Lease Pass Through (State)	$232	Yes	Operations & Maintenance
Cascade Pipe Ground Lease Investment Interest	$1,800	Yes	Operations & Maintenance

Sources: City of Twisp, 2019; BERK, 2019.

Potential Alternative Local Funding Tools or Changes in State Policy or Programs

Twisp has been aggressive in pursuing funding and now has some momentum. As the residents have demonstrated a willingness to invest, it would be cost effective to keep that momentum going with more State support. The Town would benefit from more state dollars for smaller cities, more grant funding, as well as better and readily accessible training for preservation, O&M, and crack seal.

Project Highlight: SR20 Canyon St. Intersection and Transit Stop

- SR20 Canyon Street was a $475,000 project to build a transit stop at the intersection. The project was a priority project included in the 6-year TIP and will be completed in 2020.
- Twisp received funding from the federal Surface Transportation Block Grant and partnered with the Okanogan County Transit Authority.