FINAL REPORT

Washington State Association of Counties

COUNTY TRANSPORTATION REVENUE STUDY

SEPTEMBER 1, 2020

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2200 Sixth Avenue, Suite 1000
Seattle, Washington 98121
P (206) 324-8760
www.berkconsulting.com

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Project Team

Brian Murphy · Project Director
Sherrie Hsu · Project Manager
Kristin Maidt · Lead Analyst
Jay Shih · Analyst
Chloe Kinsey · Analyst
Andrew Bjorn · Strategic Advisor
Steve Gorcestor, Performance Plane LLC · Strategic Advisor

Executive Summary

STUDY PURPOSE AND PROCESS

In 2020, the Washington State Association of Counties (WSAC) requested a study of county transportation funding across Washington's 39 counties. The purpose of this study is to:

- Describe current county transportation funding, expenditures, and responsibilities.
- Assess the county transportation funding gap, emerging issues, and future funding needs.
- Identify and provide recommendations on potential funding options.

Counties across the state face maintenance and preservation backlogs, along with a lack of adequate funding to meet those needs. This study relies on research and data analysis to analyze revenues and expenditures and to estimate the current funding gap. We draw from interviews with county transportation staff to understand trends and challenges on the ground, and we reference insights throughout the report and provide in-depth case studies in **Appendix C.**

COUNTY TRANSPORTATION CONTEXT

County Roadway Responsibilities

Washington counties are responsible for 39,000 centerline miles of roads, representing around 59% of the total state roadway system, and 3,350 bridges, representing 45% of the state's total bridges. Counties are responsible for the design, construction, alteration, repair, improvement, and maintenance of all roadway facilities under their jurisdiction. County road facilities are multimodal and used by cars, buses, trucks, bicycles, pedestrians, farm vehicles, and more.

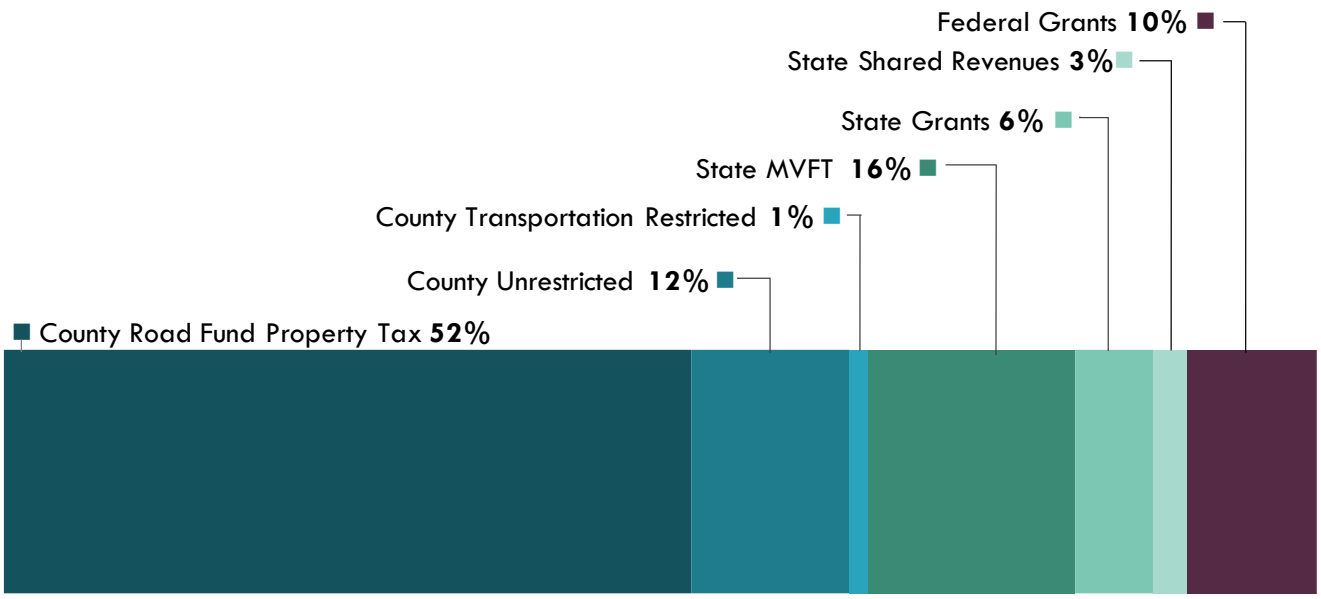
Counties are diverse, ranging from high-density urban counties to rural counties with remote farmland, forest, and mountain regions. Population densities and roadway types also vary within counties; counties with high populations may manage land that is classified as forested, rural, or farmland; and counties with a large proportion of rural land may maintain significant urban road systems. A single county can be responsible for maintaining high-traffic arterials and highways, remote rural roads, and city-type streets in unincorporated areas.

County Transportation Funding

From 2014 through 2018, total county transportation revenues were an average of $932 million per year, in 2020 dollars. ***County sources make up 65% of all county transportation funding, while state sources provide 25%, and federal sources provide 10%.***

Across the state, counties have different needs and available resources. ***Rural counties tend to rely on the state gas tax, state grants, and federal grants, while urban counties tend to rely on the road fund property tax.*** Urban counties may have larger property tax bases as greater building density affects property tax assessments.

Exhibit 1. County Transportation Funding Sources, 2014-2018 Average



Notes: Data presents a five-year average for 2014-2018. County Road Fund property tax includes diverted Road Fund property tax, as reported in WSDOT dataset. MVFT refers to motor vehicle fuel tax.
Sources: WSDOT City Streets and County Roads Dataset, 2014-2018; BERK, 2020.

LOCAL FUNDING TOOLS

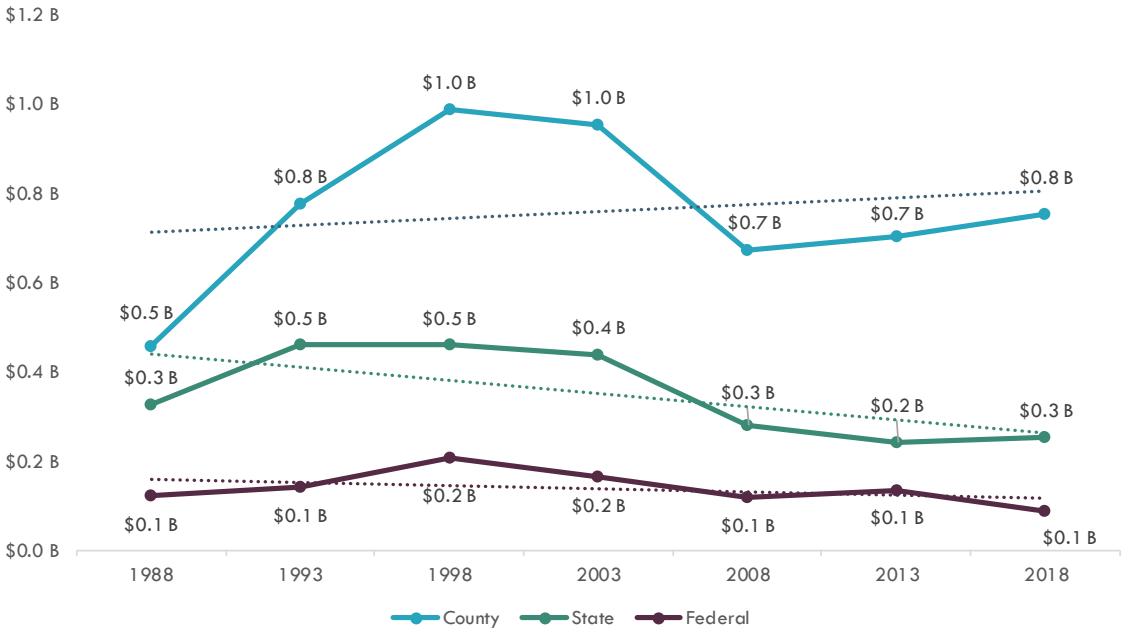
Counties use local revenue options that are applicable and feasible in their communities; however, options are limited in some counties:

- Some options are subject to **voter approval**, so ability to use them is not entirely in county control. Two counties attempted to levy a local option motor vehicle fuel tax, but neither passed.
- Some revenue tools are **only effective in certain locations**. Some counties do not use the commercial parking tax because paid parking lots are too rare in unincorporated areas to make the tax effective. In some counties, the local option gas tax would not be effective because counties have so few gas stations in unincorporated areas that the revenue would be negligible. This issue is exacerbated for counties planning under the Growth Management Act (GMA), which facilitates annexations of high-growth areas by cities. GMA requires that counties designate urban growth areas to reduce urban sprawl and direct growth to areas with adequate public facilities (typically next to existing cities or towns). These areas are almost always annexed, removing them from the counties' tax base. (RCW 36.70A.110).
- Some options have **limited eligibility.** The border area motor vehicle fuel tax is limited to counties with a transportation benefit district and located by the international border.
- Funding tools may **overlap with other taxing authorities.** Sound Transit regional transit authority (RTA) imposes high capacity transportation taxes through vehicle licensing fees, which affects the ability of counties within the RTA to enact transportation benefit district (TBD) vehicle licensing fees as voters would have to choose to pay both fees.[1]

[1] *If Initiative 976 is implemented, the TBD vehicle licensing fee option will be eliminated. Initiative 976 was passed in the 2019 election. At the time of this report, the injunction is currently stayed, pending State Supreme Court decision.*

Over 30 years, county investments have increased while state and federal investments have declined.

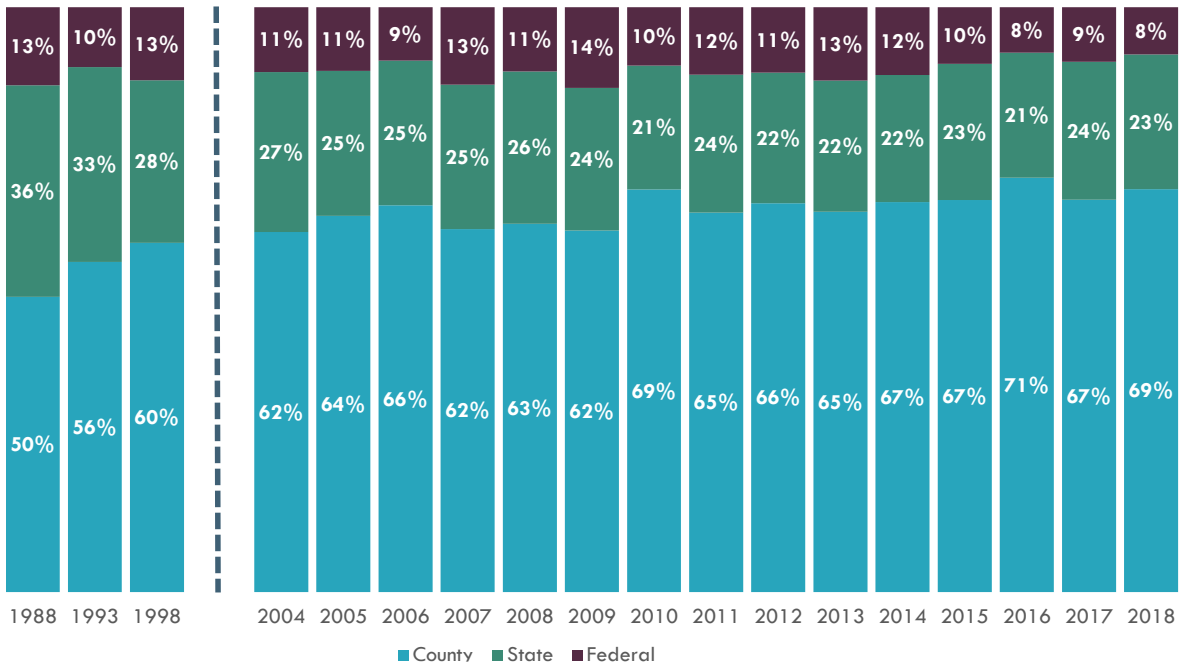
Exhibit 2. Federal, State, and County Transportation Revenues, Adjusted for Construction Inflation, in 2020$ (1988, 1993, 1998, 2003, 2013, 2018)



Notes: Adjusted with WSDOT June 2019 Cost Construction Index. Data labels are rounded.
Sources: WSDOT City Streets and County Roads Merged History, 1988-2018; WSDOT Cost Construction Index, June 2019; BERK, 2020.

As a percentage, the State contribution to county transportation funding has remained relatively constant over the last 15 years at around one-quarter of all county transportation revenues, ***but this share was higher 20 to 30 years ago*** when the State contributed around one-third of revenues.

Exhibit 3. Federal, State, and Local County Transportation Revenues as a Share of Total



Sources: WSDOT City Streets and County Roads Merged History, 1988-2018; BERK, 2020.

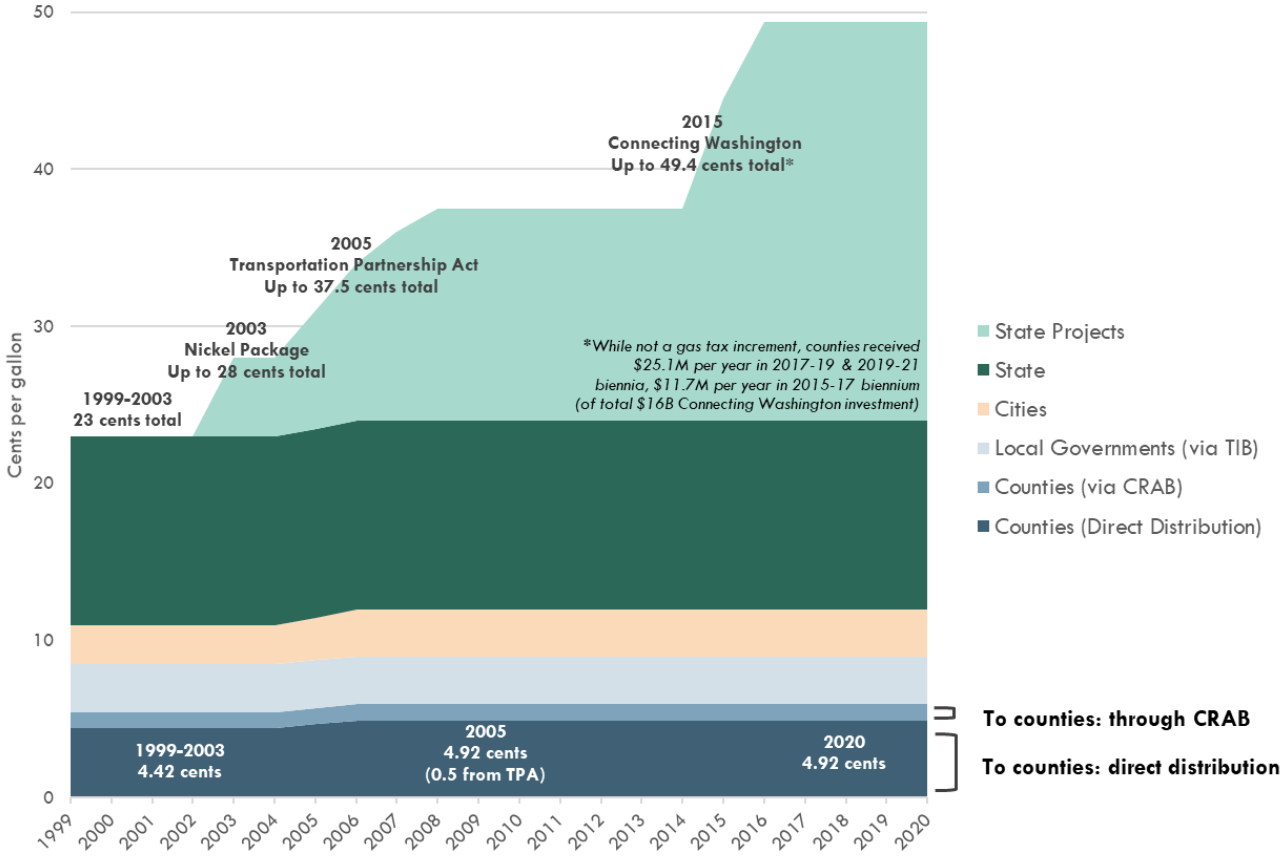
County Transportation Revenue Challenges

While counties are diverse with respect to population and transportation infrastructure, they face some common revenue challenges. County transportation funding is largely dependent on two key revenue sources: motor vehicle fuel taxes and county road fund property taxes. ***Counties face challenges related to both revenue sources; the way both taxes are structured limits counties' ability to collect revenues from them.***

State gas tax

Declining share of gas tax allocations. As the state gas tax rate distributed to counties has remained relatively flat, counties' share of state gas allocations has declined. Over the last 20 years, increases in state gas tax have mostly been directed toward specific state projects through the 2003 Nickel Funding Package, 2005 Transportation Partnership Act, and 2015 Connecting Washington Act. The county distribution, in cents per gallon, has remained relatively constant.

Exhibit 4. State Gas Tax Distribution by Recipient, 1999-2020 (cents per gallon)



Note: State Projects include all revenues from 2003 Nickel Funding Package,2005 Transportation Partnership Program (excluding direct allocations to counties and cities), and the 2015 Connecting Washington Act (CWA). The State has allocated some revenues from the Nickel Package for projects that affect county infrastructure. The State has also allocated specific amounts under CWA to cities and counties ($11.7 million to counties in 2015-17 biennium, $25.1 million to counties in 2017-19 and 2019-21 biennia). Because these distributions are not a dedicated gas tax rate, they are included under State Projects. TIB distributes funds to cities, counties, ports, and other special purpose districts via competitive grants. Counties are eligible for but not guaranteed TIB funding. CRAB distributes funds to counties via a formulaic allocation program (CAPP) and a competitive grant program (RAP).

Sources: RCW 46.68.090; JTC, 2019; BERK, 2020.

County Road Fund

Reduced tax base from annexations and incorporations. As counties may only levy road fund property taxes in unincorporated areas, counties contend with potential annexations and incorporations that can reduce their property tax base.

Over time, counties have lost high-revenue areas to incorporation and annexation while retaining lower-tax revenue areas, forcing them to provide the same services in those areas with fewer revenue dollars. GMA facilitated this annexation trend by requiring counties to designate UGAs where growth can occur and mandating comprehensive planning by cities within the urban growth area.[1]

Property tax one percent limit. Road fund property tax revenues are both constrained by the statutory maximum of $2.25 per $1,000 of assessed value and by the 1% property tax levy limit on counties' total property tax revenue. In most years, inflation exceeds 1%,[2] meaning that counties lose revenue in real terms, unless they have enough new construction to make up for inflation and population growth.

This may particularly challenge rural counties, which see less construction of new, high value properties than dense urban counties.

Property tax road fund diversions and shifts. Road revenues can be either diverted from county road funds to current expense funds during the budget adoption process, or revenue capacity may be shifted from the road levy toward current expense levy, decreasing road levy tax revenue capacity. Both mechanisms reduce the road levy invested in county roads. The property tax revenue 1% limit also applies to counties' current expense levy, which supports core governmental services including law enforcement, courts, public health, and social services. Because costs in these service areas also typically increase by more than 1% per year, many counties make the difficult decision to divert or shift funds away from county roads in order to preserve critical human services.

RISING COSTS

While facing revenue challenges, county transportation departments also face rising costs:

Increasing gravel costs: In the western US, gravel costs have increased by more than 40% since 2013 due to increased demand for construction inputs, leading to higher costs for raw materials, and restrictions on locations of gravel pits, leading to higher hauling costs.

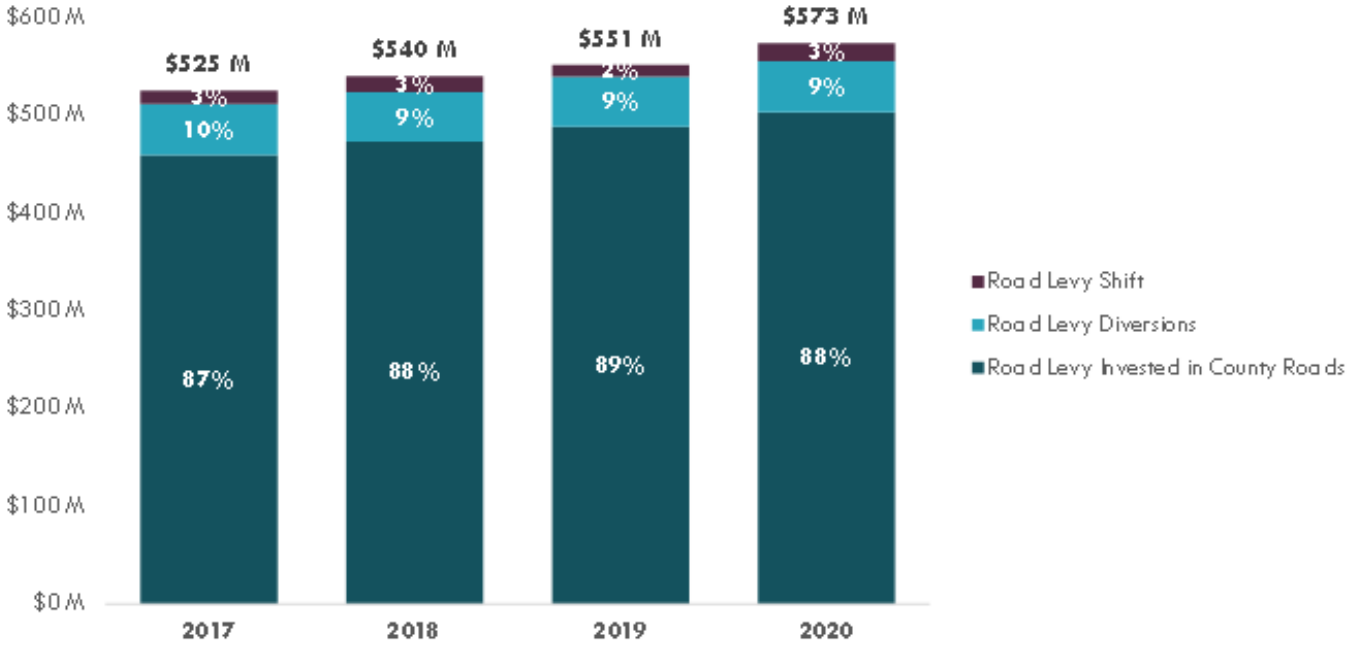
Fish passage barrier removal: While the federal court order on fish passage barrier removal currently only applies to state-owned barriers in Western Washington, many counties are preparing for future obligations by planning for these costs and replacing culverts.

Replacing bridges at the end of their lifespan: It is difficult for counties to fund these significant projects, especially when many grants are limited. Federal grants do not support short-span bridges, the Bridge Replacement Advisory Committee's (BRAC) maximum bridge replacement grant is $12 million, and counties have match requirements.

[1] RCW 35.13.005; RCW 35A.14.005

[2] Washington State Economic and Revenue Forecast Council, "Washington State Economic and Revenue Forecast: Volume XLII, No. 1," February 2020, https://erfc.wa.gov/sites/default/files/public/documents/publications/feb20pub.pdf.

Exhibit 5. County Road Fund Levy Diversions and Shifts (YOE$)



Sources: CRAB, 2020; BERK, 2020.

TRANSPORTATION FUNDING GAP

Across the state, counties experience significant gaps between current transportation funding and the necessary funding to minimize lifecycle costs and support roadways long term.

This study estimates the magnitude of funding gaps by determining road preservation costs based on cost-effective pavement management cycles, as well as estimating bridge preservation and replacement costs.

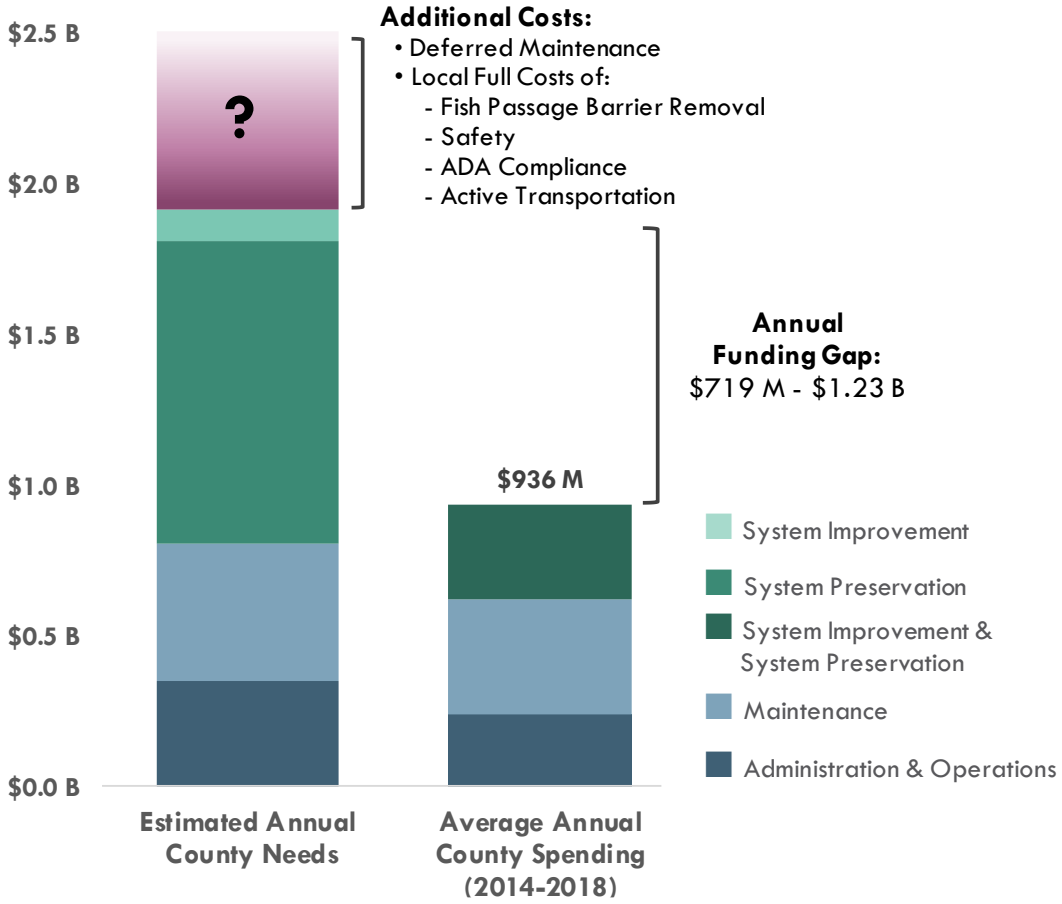
Comparing estimated costs to actual spending on county roads, ***we estimate that the annual funding gap for county transportation programmatic and capital needs is between $719 million and $1.23 billion.***

This is ***around half of estimated county needs*** for programmatic and capital expenses.

For the purpose of this study, we define **preservation** as activities that support the long-term condition of transportation assets and ensure ongoing maintenance costs are minimized over asset lifecycles.

We recognize that counties may define the terms maintenance, preservation, and capital differently.

Exhibit 6. Estimated Annual Funding Gap



Note: The WSDOT City Streets and County Roads Dataset does not provide expenditure data at a level of detail necessary to disaggregate system improvement and system preservation costs for historical annual county spending. Given this constraint, we combined system improvement and system preservation costs as "system improvement & system preservation" for average annual county spending.

Sources: WSDOT City Streets and County Roads Dataset, 2014-2018; Highway Performance Monitoring System, 2018; National Bridge Inventory, 2018; County Road Administration Board, 2020; Perteet, 2020; BERK, 2020.

This estimate includes programmatic costs (administration, maintenance, operations) and capital costs (preservation, system improvement). However, this funding gap does not tell the whole story. There are additional costs faced by counties that are challenging to fully quantify and annualize. ***This gap does not include costs of road deferred maintenance and full investment costs in fish passage barrier removal, safety, ADA compliance, and active transportation.***

When counties cannot invest sufficiently in preserving the existing system, lifecycle costs compound over time. We estimate that ***total road deferred maintenance costs – the costs for all counties to fully catch up to a place where they could follow recommended preservation cycles – are roughly between $4.7 billion and $6.3 billion, representing around five to six times total annual county transportation expenditures.***

For fish passage barrier removal, the Washington Department of Fish and Wildlife (WDFW) has estimated county costs of at least ***$4.7 billion.*** The extent that standards for active transportation, safety, and ADA are already embedded into programming and budgeting, and therefore into the baseline data we use to quantify needs, varies by county. We do not include them in the base funding gap due to our inability to fully include a disaggregated and annualized estimate.

SUMMARY OF RECOMMENDATIONS

Based on research, data analysis, and interviews, this study proposes the following recommendations, which are presented in more detail in the main body of the report:

Recommendation	New State Resources Required?	Statutory Change Required?
A. Increase support for preservation through new or focused funding, incentives, and services to reduce lifecycle costs.	Highly desirable, though advances can be made through focusing existing funding	Yes
B. Increase efficiencies to capture greater value with existing funding.	No	Yes
B1. Implement a federal funds exchange program to use federal funding most efficiently.	Revenue neutral, can be accomplished with existing resources	Yes
B2. Extend use of toll credits to federally funded local projects so more projects benefit from eliminated match.	No	Yes
B3. Collaborate across governments and levels of government to achieve best systemwide outcomes.	Desirable, but can be accomplished with existing resources	Depends
C. Ensure any state alternative to the gas tax preserves revenue sharing with counties and maintains requirements that funding be invested for transportation purposes.	No	No
D. Strengthen incentives not to shift or divert county road levy funds.	Yes	Yes
E. Expand or enhance county transportation funding options.	No	Yes
E1. Increase flexibility and clarity of the local option Motor Vehicle and Special Fuel Tax.	No	Yes
E2. Implement adjustments to Transportation Benefit District sales tax to help counties raise more revenues for transportation using an existing authority.	No	Yes
E3. Clarify rules and requirements surrounding local option tolls.	No	Yes
E4. Allow property tax rates to match economic conditions so revenues keep pace with expenditures.	No	Yes

Contents

Exhibits

1.0. Introduction

1.1. STUDY PURPOSE

Counties are essential contributors to Washington's statewide transportation system. County roads, bridges, culverts, pedestrian and cycling infrastructure, and other multi-modal facilities accommodate a range of regional traffic, providing key connections for commuting, freight transportation, emergency response, and regional accessibility. For many rural communities, the transportation connections provided by counties are vital to the local economy and day-to-day life.

However, this system is severely cost-constrained, and counties have been unable to invest appropriately in transportation networks. County expenditures for capital construction and preservation in 2014–2018 were $1.5 billion ($1.6 billion in 2020 dollars), which represents a 34% decline in purchasing power from the $1.6 billion spent in the 2004–2008 period ($2.5 billion in 2020 dollars) when considering construction inflation. Facing state and federal mandates for projects, aging and obsolete bridges and other infrastructure, and likely future obligations to address fish passage barriers, counties are committed to covering more responsibilities with fewer resources.

Years of county budget constraints have also contributed to significant maintenance and preservation backlogs. Deferred investment compounds the funding gap by increasing lifecycle costs. Without additional investment, bridges, roads, and other infrastructure will begin to fail, disrupting the flow of people and goods across the network. Addressing this through existing revenue sources may be challenging. As a share of total revenue, property taxes provided about half of available funding for county transportation in 2014–2018, an increase from 44% in 2004–2008. This shift is related to a reduction in the county share of funding from state and federal funds, which were reduced from 37% to 32% of total funds in the same periods. Counties are covering needs with limited local revenue tools, such as property taxes, that must fulfill other demands for services during a time when Washington's counties face significant structural fiscal challenges.

County revenues are constrained by the statewide 1% annual property tax increase limit, and incorporations have historically transferred tax-producing lands to cities, leaving a reduced county tax base. However, counties are still mandated to provide many services by state or federal law, with little opportunity to adjust level of services based on available revenues.

The purpose of this study is to provide information on current county transportation responsibilities, revenues, and expenditures; to estimate the funding gap between needs and current funding levels; and to provide recommendations to address county transportation funding needs.

1.2. STUDY PROCESS

This study uses research, data analysis, and interviews to describe current county transportation responsibilities, revenues, and expenditures; to estimate the funding gap; and to provide recommendations on potential funding options.

The study team conducted RCW research to **describe county transportation responsibilities** and funding sources. We used information from the County Road Administration Board (CRAB), Municipal Research and Services Center (MRSC), Joint Transportation Committee (JTC), State Auditor's Office (SAO), and Washington State Association of Counties (WSAC) to describe current funding sources and options.

To **analyze transportation revenues and expenditures**, we used county-reported aggregate level State Auditor's Office (SAO) and WSDOT City Streets and County Roads data. These datasets have limitations due to differences in how counties may assign line item revenues or expenditures to the BARS system; however, this is the best available statewide dataset.

To supplement the aggregate data analysis, this study also includes four **in-depth case studies** of counties across Washington. These case studies provide context and describe funding challenges that different counties experience, what needs they face, how costs are changing, and how they currently fund transportation. In addition to these case studies, we draw **insights from experiences of other counties** across the state to tell specific stories of transportation needs, funding, challenges, and recommendations.

1.3. ORGANIZATION OF THIS REPORT

The remainder of this report is organized as follows:

Chapter 2. **County Roads.** We first describe county transportation responsibilities within the statewide transportation system.

Chapter 3. **County Transportation Revenues.** We analyze county transportation funding from state, federal, and county sources over time and across rural and urban counties. We also describe structural revenue challenges counties face to fund transportation.

Chapter 4. **County Transportation Investments.** We describe types of county transportation investments and analyze the mix of expenditures over time and across rural and urban counties.

Chapter 5. **Funding Needs and Budget Gaps.** We estimate total county road funding needs by determining road preservation costs, adapting recommended pavement management cycles, and estimating bridge maintenance and replacement costs. We then compare to current spending to estimate an annual funding gap. We also describe impacts of deferred maintenance and county investments in fish passage barrier removal, safety, ADA compliance, and active transportation.

Chapter 6. **Conclusions and Recommendations.** We provide recommendations to address the funding gaps and meet future needs.

Appendix A. **County Transportation Funding Sources**

Appendix B. **County Classifications**

Appendix C. **Case Studies**

The following icons are used to designate insights or examples from specific counties and experiences in other states:

County Insights

Other State Insights

1.4. LIST OF TERMS AND ABBREVIATIONS

- CAPP – County Arterial Preservation Program
- CRAB – County Road Administration Board
- CWA – Connecting Washington Act
- DOL – Washington State Department of Licensing
- FHWA – Federal Highway Administration
- FMSIB – Freight Mobility Strategic Investment Board
- HPMS – Highway Performance Monitoring System
- JTC – Joint Transportation Committee
- OFM – Washington State Office of Financial Management
- RTIP – Regional Transportation Improvement Program
- RTPO – Regional Transportation Planning Organization
- MPO – Metropolitan Planning Organization
- NBI – National Bridge Inventory
- RAP – Rural Arterial Program
- RCW – Revised Code of Washington
- SAO – State Auditor's Office
- STIP – State Transportation Improvement Program
- TIB – Transportation Improvement Board
- TPA – Transportation Partnership Act
- WSAC – Washington State Association of Counties
- WSDOT – Washington State Department of Transportation
- WSTC – Washington State Transportation Commission

2.0. County Roads

2.1. COUNTY SERVICES

In Washington, county governments are subdivisions of the state that provide a broad range of services. Article XI of the State Constitution—County, City, and Township Organization—grants counties their political authority. Title 36 of the RCW articulates the state laws concerning counties and county government.

According to the WSAC, "virtually all programs and services that counties deliver are required by the constitution, laws, or rules of the state."[3] In the realm of governmental service delivery, counties are complex enterprises because they 1) play the role of state agent for certain services, and 2) provide regional and local services to both incorporated and unincorporated areas. In addition, counties deliver these services across large areas of urban, suburban, and rural land.

As **agents of the state**, counties provide felony-level criminal justice services through their prosecuting attorney, public defender, superior courts, juvenile detention, jail, and coroner. These services consume a large portion of a county's general fund and special revenue funds. As **regional providers**, counties may provide emergency management, regional transportation planning, parks services, and human services. Counties also provide **local government services** for residents living in the unincorporated areas including law enforcement by the sheriff, and construction and maintenance of roads and bridges.

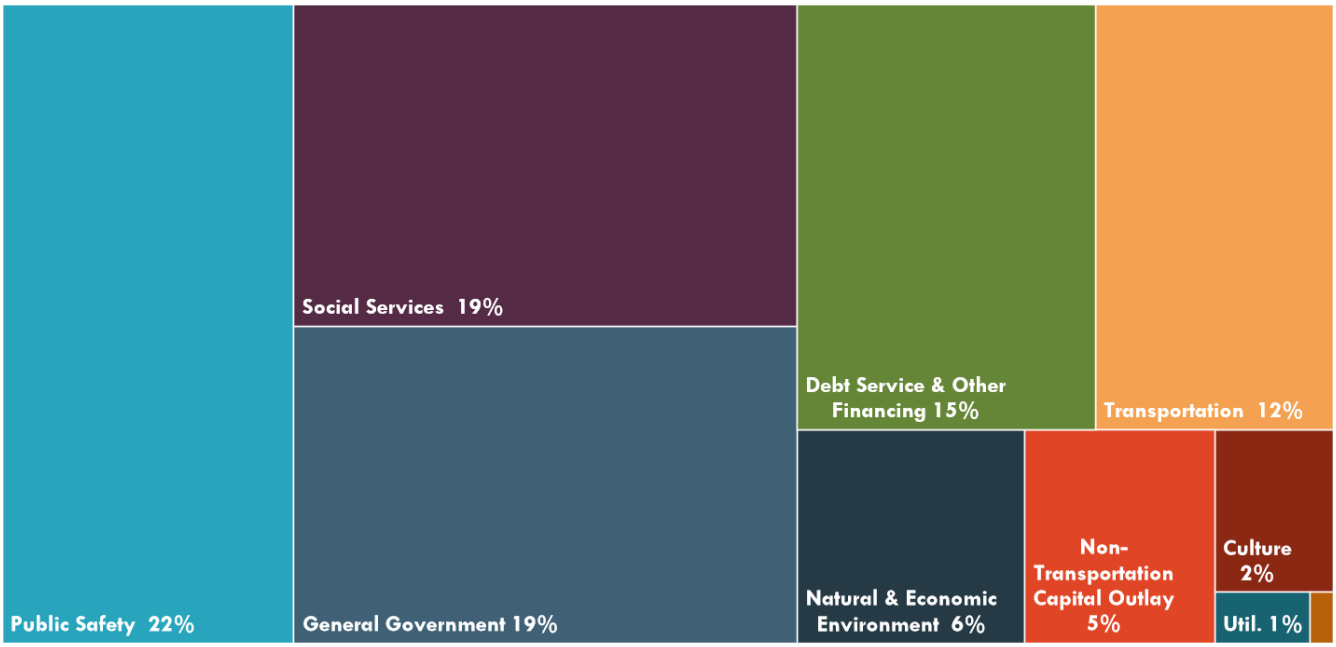
Exhibit 7 shows this distribution by expenditure of governmental funds (non-proprietary funds) across all counties.[4] Broadly, a jurisdiction's funds are divided into two categories—governmental funds and proprietary funds. Governmental funds support core government services, such as public safety and social services. The general fund is one type of governmental fund, but the category also includes special revenue funds (in which revenues are dedicated to a specific service, such as emergency medical service) debt service funds, capital funds, and permanent funds (in which resources are held in perpetuity).

While transportation is one of the largest categories of expenditures across all funds, counties also spend a substantial portion of revenues on public safety, social services, and general government. Transportation projects compete for dollars with other essential programs, including the county court system, sheriff, family and youth services, and more.

[3] WSAC Fiscal Sustainability Report, 2015. http://www.wacounties.org/index-2015fs.html

[4] Proprietary funds include enterprise funds and internal service funds. Enterprise funds are government operations that charge users fees in exchange for services. For example, a publicly owned airport may be an enterprise fund, as it charges landing fees to support the costs of maintaining its facilities and paying staff. Internal service funds also operate on a fee basis but provide service to other government departments. Examples might include facilities, maintenance, or IT departments.

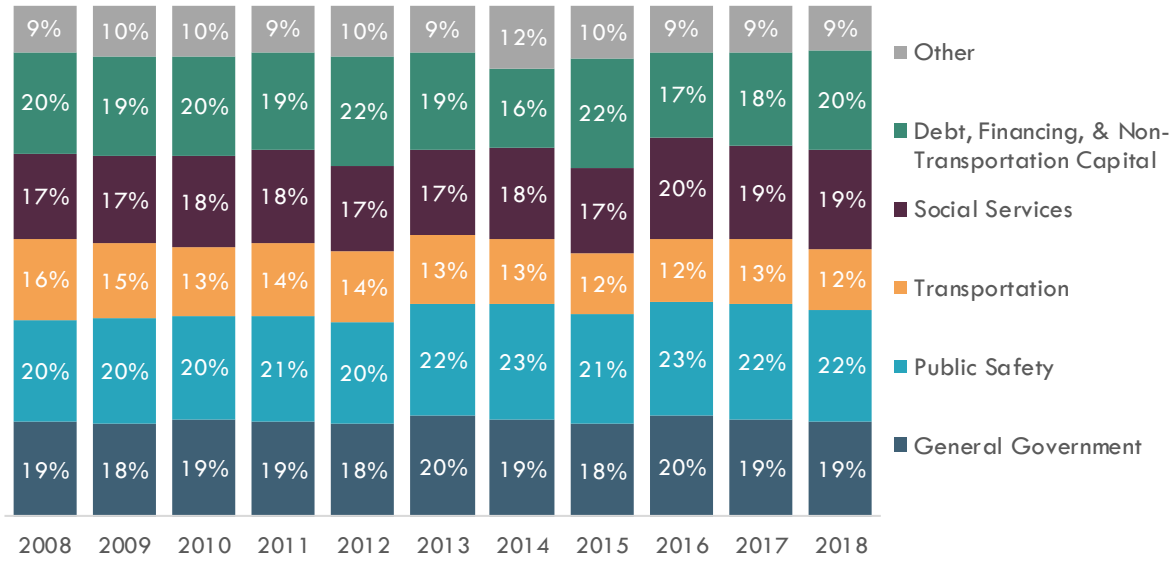
Exhibit 7. County Expenditures in Washington: Governmental Funds Only, 2018



Note: Includes governmental funds (non-proprietary funds); includes debt service, capital projects, depreciation. Transportation includes capital outlay expenditures in transportation.
Sources: SAO Financial Intelligence Tool (FIT), 2018, General Fund and Special Revenue Fund Expenditures; BERK, 2020.

The share of transportation expenditures has decreased from around 16% to 12% over the last 10 years, shown in Exhibit 8. Note that this chart summarizes data across all counties, and there are nuances in each county's context.

Exhibit 8. County Expenditures in Washington: Governmental Funds, 2008-2018



Note: Includes governmental funds (non-proprietary funds); includes debt service, capital projects, depreciation. Transportation includes capital outlay expenditures in transportation.
Sources: SAO Financial Intelligence Tool (FIT), 2018, General Fund and Special Revenue Fund Expenditures; BERK, 2020.

Counties have limited tools for funding services. They include:

- Taxes.
- Intergovernmental revenues, which consist of transfers from other governments, including grants, loans, shared revenues, and fees for service.
- Permits, fees, charges, fines, and forfeitures.

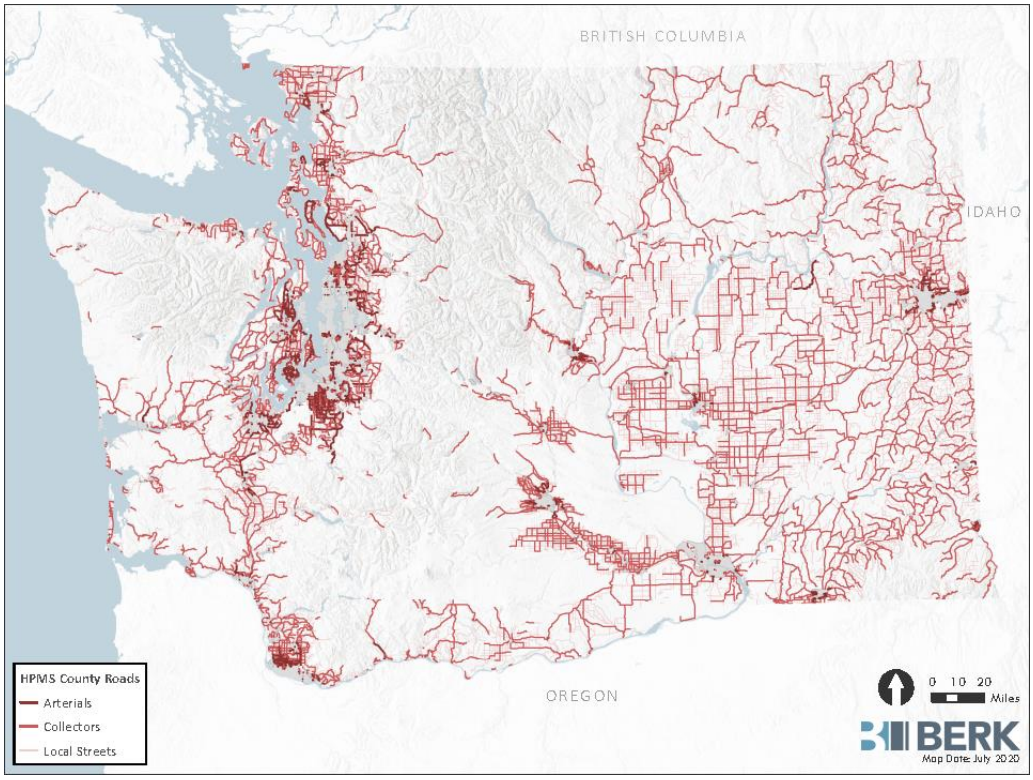
Tax dollars make up the largest share of county revenues and generally are the most flexible revenue source for counties. Personal and real property tax and retail sales and use tax are the largest tax revenue sources for Washington counties.[5] Property and sales tax revenues account for nearly half of county revenues—with property taxes alone comprising more than a third of revenues for county governmental funds.[6] We discuss county transportation funding challenges in **Section 3.5.**

2.2. THE COUNTY ROAD SYSTEM

Washington State's highways, roads, and streets facilitate transportation across the state, from dense urban areas to rural farmland and forests. Covering more than 63,000 centerline miles, these facilities are critical to the movement of people and goods across the state. Ownership of these roadways is shared between the federal government, Tribal Nations, Washington State Department of Transportation (WSDOT), 39 counties, and 281 cities and towns. Under state statute, WSDOT roadways are termed "highways" or "state routes," county facilities are known as "county roads," and city roadways are "streets." This report uses these definitions and uses the term "roadways" to refer to all three systems collectively. County roads are mapped in Exhibit 9.

[5] The Municipal Research and Services Center (MRSC), A Revenue Guide for Washington Counties, last updated Dec. 2019.
[6] SAO Financial Intelligence Tool (FIT), "Total Revenues, All County Governments, 2015-2018," 2020.

Exhibit 9. County Roads



Sources: HPMS, 2018; BERK, 2020.

The Highway Performance Monitoring System (HPMS) identifies over 39,000 centerline miles of county roads in Washington State. This includes nearly 79,000 lane miles, about 59% of Washington's total system. (A mile of four lane street accounts for one "centerline mile" and four "lane miles.") Counties additionally manage more than 3,350 bridges, representing 45% of the state's total bridges.[7] Exhibit 10 summarizes the centerline miles, total lane miles, vehicle miles traveled, and share of miles traveled for Washington's city, county, and state roadways.

Exhibit 10. City Streets, County Roads, and State Highways in Washington State

	CENTERLINE MILES	LANE MILES	SHARE OF SYSTEM	ANNUAL VEHICLE MILES TRAVELLED	SHARE OF VEHICLE MILES TRAVELED
City streets	17,200	36,000	27%	16,000	27%
County roads	39,200	78,700	59%	10,000	16%
State highways	7,100	18,700	14%	35,000	58%

Sources: WSDOT, HPMS, 2018.

[7] "The County Road System;" Washington State Association of County Engineers (WSACE) presentation to the JTC; December 17, 2019.

Washington State contains a variety of land and community types, and the state's counties reflect this diversity. They range from high-density urban counties to rural counties with remote farmland, forest, and mountain regions. The three most populous counties—King, Pierce, and Snohomish—are home to over 50% of the state's population (3.9 million people). In contrast, nearly half of the state's counties (17 counties) have populations of fewer than 50,000 residents.[8]

However, population densities and roadway types can vary dramatically even within counties. Snohomish County is the state's third most populous county with 800,000 residents. Yet 91% of the county's land area is classified as forested, rural, or farmland; and over a third of its roadway miles are in rural areas.[9] Due to the "exponential"[10] nature of city streets, counties with a large proportion of rural land may still maintain significant urban road systems. In Benton County, just 7% of the land area is in incorporated communities or urban growth areas, yet 50% of the roadways are classified as urban.[11] A single county can be responsible for maintaining high-traffic arterials and highways, remote rural roads, and city-type streets in unincorporated areas.

2.3. COUNTY ROADWAY RESPONSIBILITIES

While state statutes use the general term "county roads" to refer to the transportation facilities under county control, counties are responsible for far more than just pavement. State law specifically assigns counties ownership over all roadways outside incorporated cities that are not designated as state highways.[12] The Revised Code of Washington clarifies that "roadways" can include:[13]

- Bridges and trestles.
- Drainage and engineering features, such as bulkheads, culverts, ditches, gutters, and retaining walls.
- Bicycle and pedestrian infrastructure, including pathways, sidewalks, and trails.
- Traffic signals, signage, and lighting along roadways.
- Facilities related to the ferriage of vehicles, including docks and wharves.

Counties are responsible for the design, construction, alteration, repair, improvement, and maintenance of all roadway facilities under their jurisdiction. County road facilities are multimodal—they are used by cars, buses, trucks, bicycles, pedestrians, farm vehicles, and more.

In areas where county roads have pedestrian facilities, the county is responsible for ensuring compliance with the Americans with Disabilities Act (ADA) and Washington State law. This includes the construction and maintenance of curb ramps as part of all sidewalks, paths, or other pedestrian access ways.[14]

Since 2001, state law has permitted counties to use transportation revenues to fund the removal of diadromous fish passage barriers that are part of county-owned facilities. While the State of Washington is under court order to remove fish passage barriers from state-owned roadways by 2030,

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[8] Washington State Office of Financial Management, 2019.
[9] Snohomish County, 2020; HPMS, 2018.
[10] This refers to the way in which pavement miles increase as an urban area grows. Because urban and suburban streets "double back" in areas that already have roads, pavement miles increase exponentially as an area's population density increases.
[11] Benton County Comprehensive Plan, 2017; HPMS, 2018.
[12] Revised Code of Washington (RCW) 36.75.010v.
[13] RCW 36.75.160-170, RCW 36.75.240, RCW 36.82.070, RCW 36.82.145-148, RCW 36.88.010-015.
[14] RCW 35.68.075.

courts have not yet determined the responsibility of local governments, including counties, with respect to fish barrier removal. In anticipation of future court decisions, Washington's counties have already begun preparing for a potential mandate to remove such barriers. Many counties with fish passage barriers are already planning for these needs and evaluating costs required. More information on fish passage barrier removal is in **Section 5.4.**

Though they are generally not responsible for roadways outside of unincorporated areas, counties may maintain certain state and city-owned facilities if they have an agreement with another jurisdiction to do so. The conditions under which this occurs are:[15]

- The state and county enter into an agreement for the county to assist in the improvement or maintenance of state highways.
- The county elects to fund the improvement of a state highway within its jurisdiction.
- The county funds the maintenance or repair of a city street or bridge, where the street or bridge is vital to the operation of the county road system.
- The county funds the maintenance or repair of a city street that is continuous with a county road and located in a city with a population of less than 1,000.

Though they are not analyzed in this report, some Washington counties also operate public transit systems, airports, and ferry systems. These systems may add additional operational complexities and funding challenges for counties.

2.4. ASSET MANAGEMENT

A foundational understanding of asset management is necessary to evaluate the best way to fund county 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 may be four or more times the cost of repairing it, and often higher. Exhibit 11 describes pavement lifecycle conditions.

[15] RCW 36.75.030-035, RCW 36.75.200-205, RCW 36.75.240.

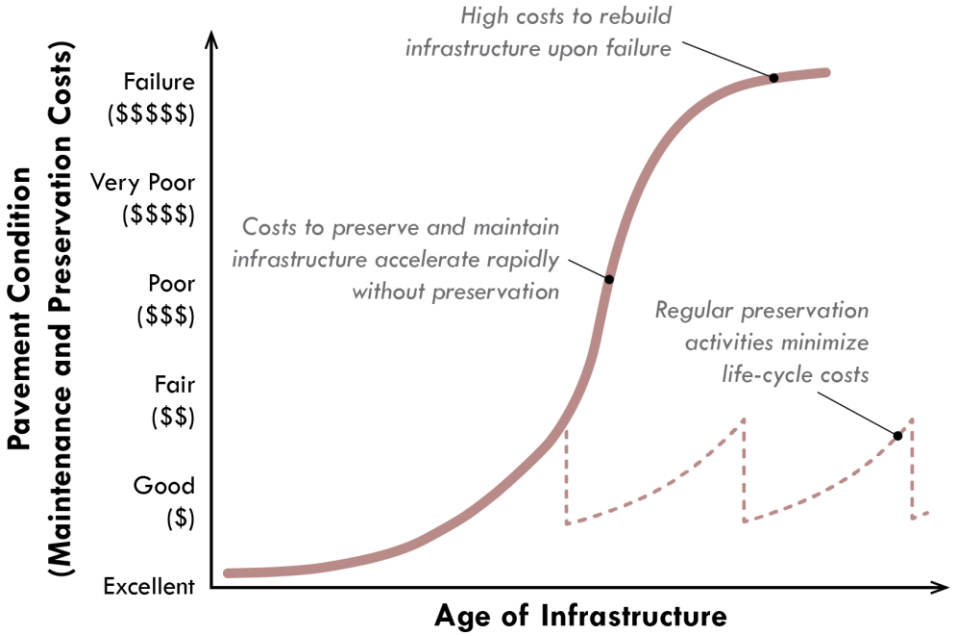
Exhibit 11. Descriptions of Pavement Lifecycle Conditions

Sources: WSDOT, 2018; BERK, 2020.

Exhibit 12 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, counties face high costs to rebuild infrastructure.

Exhibit 12. 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, 2020.

Proper asset management has many long-term benefits to counties, 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.
- Roads 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.

2.4.1. Asset Management Process and Current Practice in Counties

The County Road Administration Board (CRAB) requires counties to implement a pavement management system (PMS) to be eligible to receive funds through the County Arterial Preservation Program (CAPP). Currently, all 39 counties of Washington either maintain their own PMS or participate in CRAB's shared statewide Mobility Pavement Management System (MPMS). CRAB provides administrative support to counties to participate in MPMS, including software access and training.

Counties are required to update the condition of their paved roadways in the County Road Log each year, and CRAB reviews this information for compliance with the PMS requirement annually. While counties are required to use a PMS for the management of their collector and arterial roads, the requirement does not apply to local access roads.[16] Upon surveying their collector and arterial roads, counties rate them with a pavement surface condition score (PSC), using criteria from the State's *Pavement Surface Condition Rating Manual*.[17] While criteria can vary from county to county depending on their PMS criteria, a PSC of 40 or lower means a roadway "must" be rebuilt, while PSC between 40 and 60 means that rehabilitation "should" be considered.[18]

RATING PAVEMENT CONDITION

With CRAB's PMS, roads are rated with a pavement condition rating using criteria from the State's *Pavement Surface Condition Rating Manual*.

For **Adams County**, the PMS considers four core elements: longitudinal cracking, transverse cracking, alligator cracking, and patching.

County staff have noted that these criteria are better suited to evaluate Hot Mix Asphalt (HMA) roads typically used in urban and suburban areas and do not account for **underlying deficiencies** on most of the rural county's roads which use Bituminous Surface Treatments (BSTs).

The structure of the CRAB system provides strong **incentives for counties to use a PMS**:

- Counties must use a PMS in order to access state CAPP funds. CAPP dollars are in high demand

[16] Washington Administrative Code (WAC), 136-70-040.
[17] Northwest Pavement Management Association, 1992.
[18] CRAB, 2020.

among county road divisions because they are restricted to pavement preservation uses and cannot be diverted for county current expenses or traffic law enforcement.

- Operating a statewide system lowers the costs of using a PMS for smaller counties by allowing them to share software, training, and administrative costs with other counties.

Counties also benefit from in-house expertise. All counties in Washington must have a county engineer, meaning that they have dedicated staff to manage county road maintenance. Additionally, most counties have their own road work teams, capable of addressing a broad range of preservation and maintenance needs.

Given these advantages, counties are in a relatively strong position to track, prioritize, and plan pavement preservation projects. When compared with Washington cities, Washington counties have greater access to pavement management tools and in-house expertise. However, using these systems does not guarantee that counties have the funding necessary to adequately maintain their roadways over their lifecycle. The next section will expand on the financial challenges counties face in managing their roads.

2.5. SUMMARY

County responsibilities for roads come with many considerations, including how to adequately maintain aging facilities, 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 transportation asset management. When counties cannot invest enough in preserving the existing system, lifecycle costs compound over time.

3.0. County Transportation Revenues

County transportation revenues may come from a mix of state, local, and federal sources. From 2014 through 2018, county transportation revenues were around $932 million per year, on average, in 2020 dollars. This chapter analyzes the mix of revenues at an aggregate level (**Section 3.1**) and how this mix has changed over time, then describes state, federal, and local funds in more detail (**Sections 3.2, 3.3, 3.4**). Additional detail on these funding sources may be found in **Appendix A.**

State, federal, and local resources may be restricted, which means that their use may be limited to transportation purposes, or unrestricted. At the state level, some revenues are restricted to specific purposes by state law or program requirements. For example, the State Constitution limits use of the state gas tax to highway purposes.[19] Some federal and state grants may only be used for capital investments, and in some cases grant funding may be restricted to specific projects.

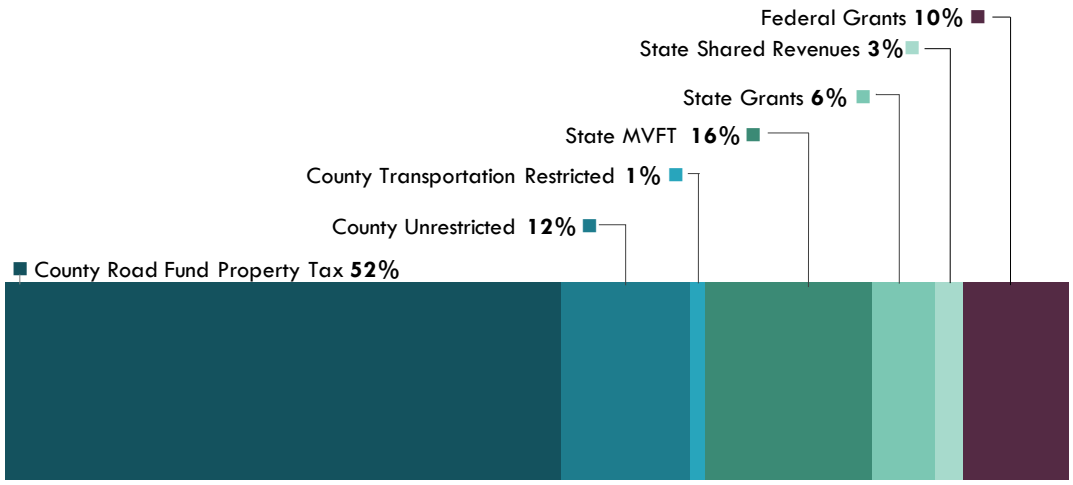
Over half of county transportation revenues come from the County Road Fund property tax, which specifically funds county roads. However, counties are authorized to ***divert*** revenues to the current expense fund or ***shift*** levy rate capacity to the current expense fund (described in **Section 3.5.4**).

Some local funds, such as real estate excise tax (REET), may be used for transportation or other purposes. This means that the amount used for transportation depends on each community's context and priorities at a certain time.

3.1. COUNTY TRANSPORTATION FUNDING ANALYSIS: OVERALL MIX

Exhibit 13 shows the breakdowns of county transportation funding sources from federal, state, and county sources over the last five years. The chart shows an average from 2014 through 2018 of aggregated WSDOT data across all 39 counties. **County sources make up 65%** of all county transportation funding, while **state sources provide 25%**, and **federal sources provide 10%.**

Exhibit 13. County Transportation Funding Sources, 2014-2018 Average



Note: Data presents a five-year average for 2014-2018. County Road Fund property tax includes diverted Road Fund property tax, as reported in WSDOT dataset.

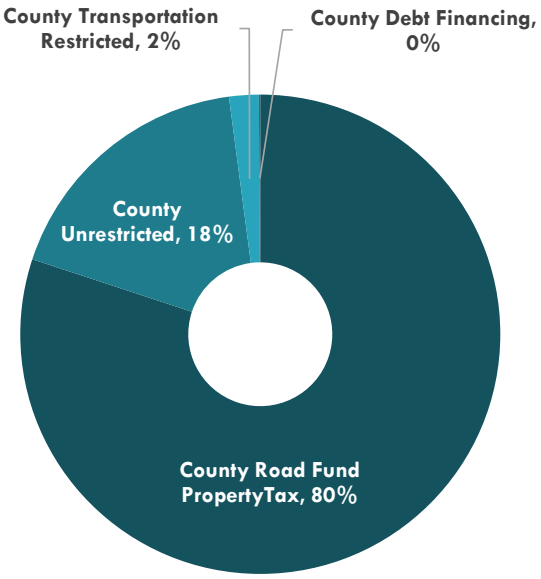
Sources: WSDOT City Streets and County Roads Dataset, 2014-2018; BERK, 2020.

[19] Art. II, Section 40, 18th Amendment.

Exhibit 14 shows the portion of county transportation funding that came from transportation-restricted sources compared to unrestricted sources for the same time period (2014-2018). Of the 65% of funding that came from local county resources, 80% was Road Fund property tax. However, some of this property tax money was diverted to other uses through a levy diversion. (This topic is described further in **Section 3.5.1.)**

Unrestricted funds, such as REET or retail sales and use tax, are not limited to transportation. This means that these funds compete with other local needs, and the amount allocated to transportation can vary in any given year.

Exhibit 14. County Investment in County Transportation Funding



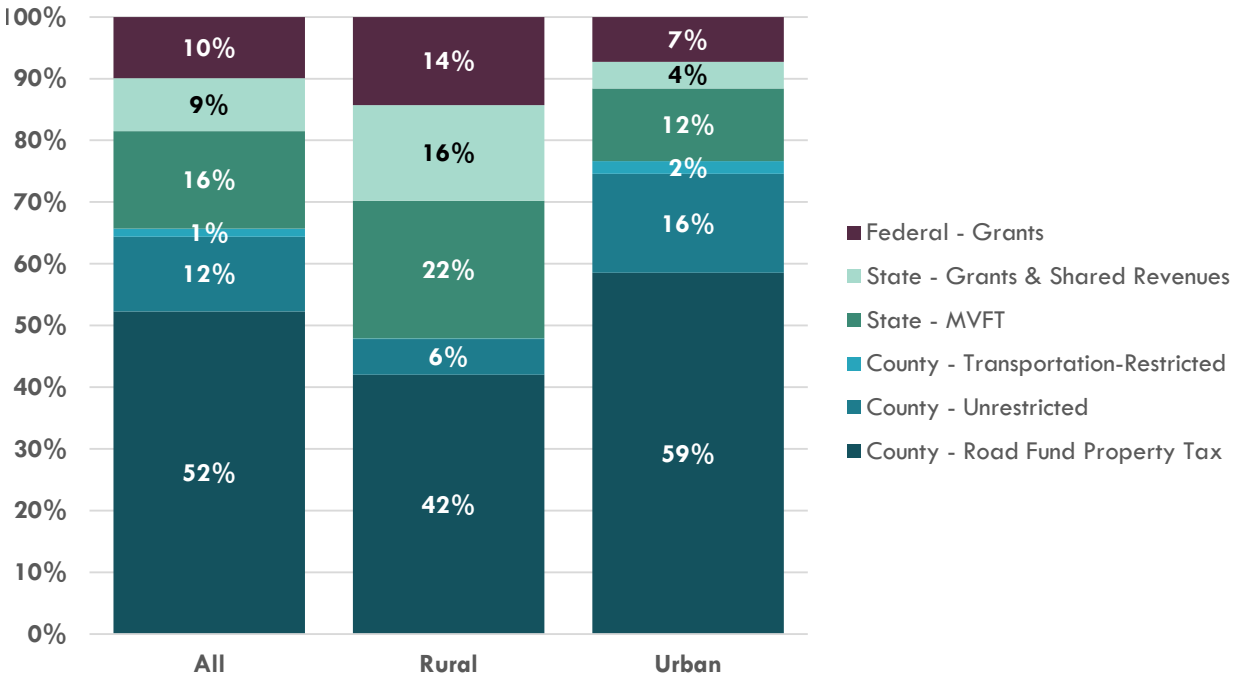
Note: Data presents a five-year average for 2014-2018. County Road Fund property tax includes diverted Road Fund property tax, as reported in WSDOT dataset.

Sources: WSDOT City Streets and County Roads Dataset, 2014-2018; BERK, 2020.

Exhibit 15 compares county transportation funding sources **between rural and urban counties,** as an average from 2014 through 2018. Rural counties tend to rely more on the state gas tax, state grants, and federal grants, while urban counties tend to rely more on the Road Fund property tax. Urban counties may have larger property tax bases as greater building density affects property tax assessments. Rural counties may rely on the federal timber sales and Secure Rural Schools programs.

Exhibit 16 compares county transportation funding sources **across regions,** as an average from 2014 through 2018. Counties in the eastern part of the state are more reliant on state gas taxes and state grants and shared revenues, while counties on the western side of the state are more reliant on Road Fund property tax. Counties in the Puget Sound region are heavily reliant on County funding sources, at 81% of funding sources on average.

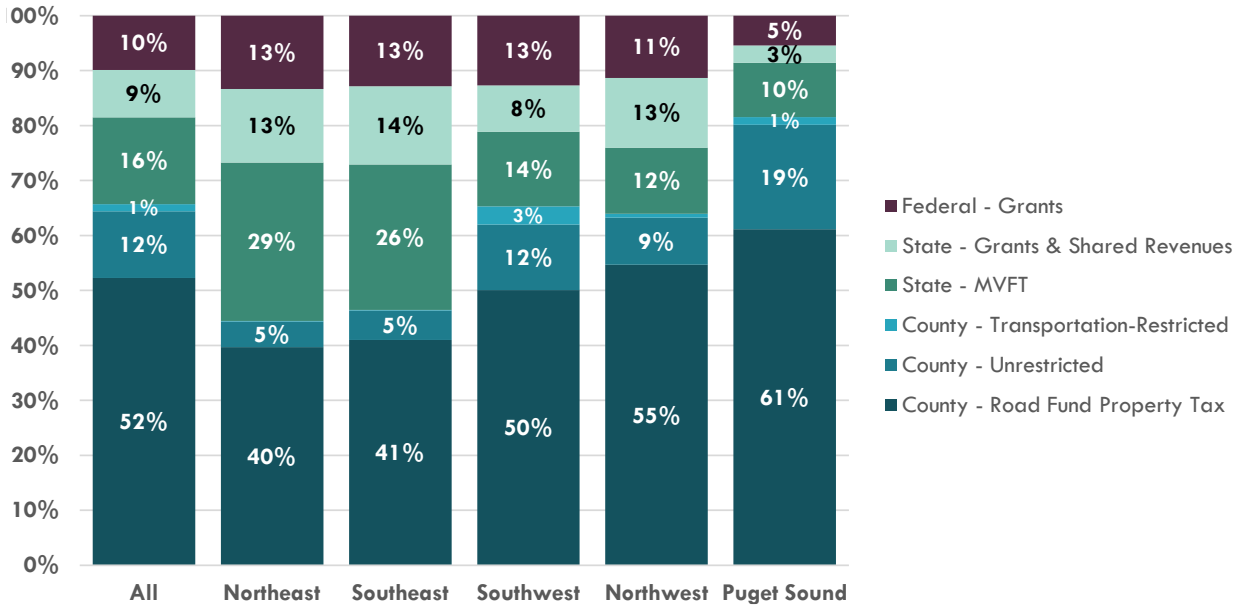
Exhibit 15. County Transportation Funding Sources, 2014-2018 Average, Rural & Urban Counties



Note: Data presents a five-year average for 2014-2018. County Road Fund property tax includes diverted Road Fund property tax, as reported in WSDOT dataset. Rural and urban classification is based on Office of Financial Management's classification system, which defines rural counties by population density (< 100 persons per square mile) or land size (<225 square miles). See Appendix B for further detail.

Sources: WSDOT City Streets and County Roads Dataset, 2014-2018; BERK, 2020.

Exhibit 16. County Transportation Funding Sources, 2014-2018 Average, by Region



Note: Data presents a five-year average for 2014-2018. County Road Fund property tax includes diverted Road Fund property tax, as reported in WSDOT dataset. Region classification is based on the region classification used in the 2010 WSAC County Road Preservation Needs Report. See Appendix B for further detail.

Sources: WSDOT City Streets and County Roads Dataset, 2014-2018; BERK, 2020.

Transportation Revenues Over Time in Absolute Dollars

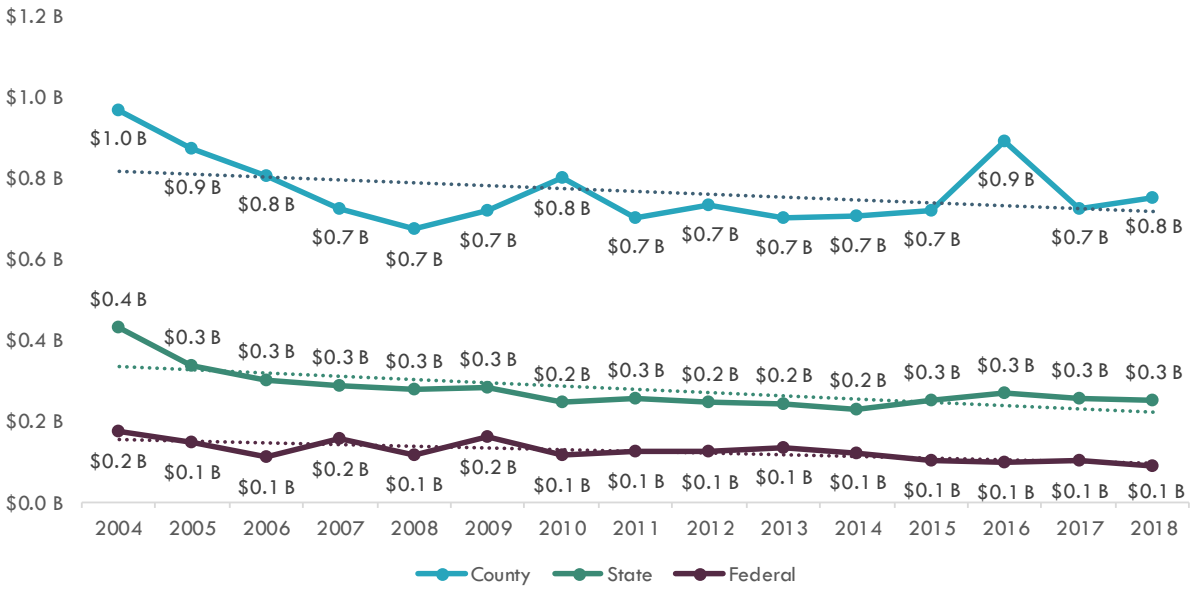
Over the last 15 years, state and federal investment in county transportation funding has declined in inflation-adjusted dollars.

Exhibit 17 shows changes in federal, state, and local county transportation revenues over the last 15 years, adjusted for inflation to 2020 dollars using the WSDOT Construction Cost Index. Construction costs are rising, so adjusting revenues for inflation shows the impact that these trends have on transportation investments in real terms. State investment has remained relatively steady, and federal investment has slightly declined during this time. The county investment has generally remained within $0.7 to $0.9 billion per year (in 2020 dollars).

Exhibit 18 shows funding trends from federal, state, and county resources in five-year increments over the last 30 years, from 1988 to 2018, in 2020 dollars. Over this 30-year time period, county investments have increased while state and federal investments have slightly declined.

Note that data labels are rounded in Exhibit 17 and Exhibit 18.

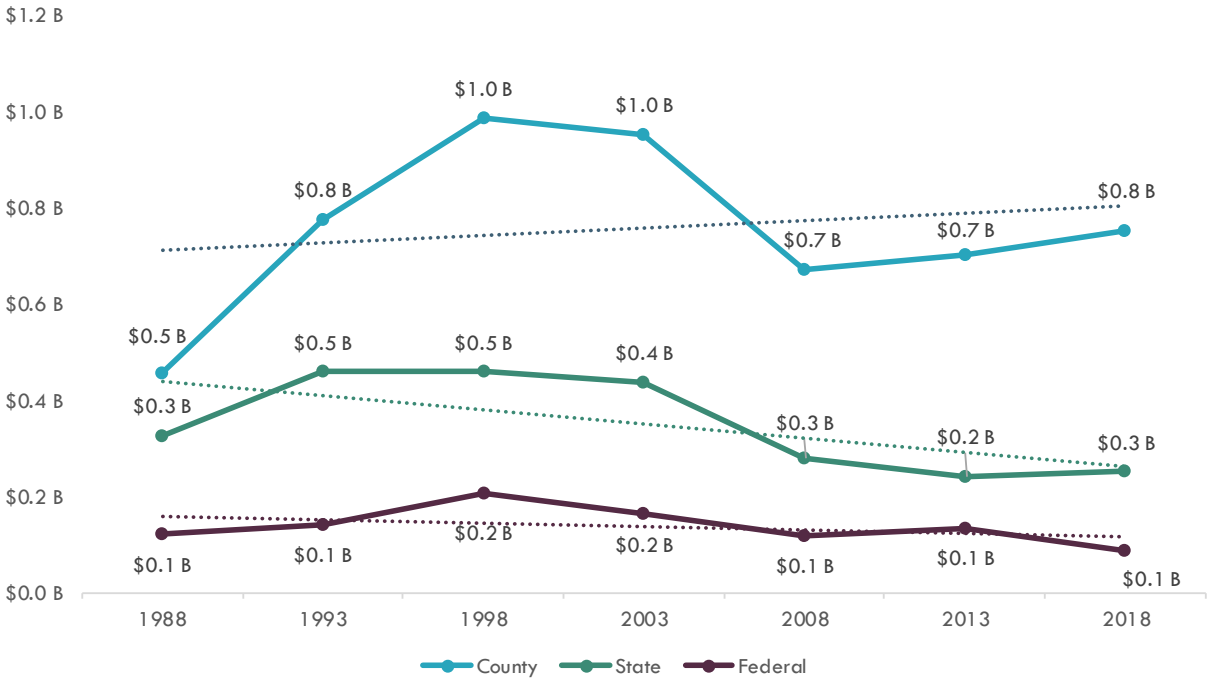
Exhibit 17. Federal, State, and County Transportation Revenues Adjusted for Construction Inflation, in 2020$ (2004-2018)



Note: Adjusted with WSDOT June 2019 Cost Construction Index, created by WSDOT from Global Insights Construction Forecast. Data labels are rounded.

Sources: WSDOT City Streets and County Roads Merged History, 2004-2018; WSDOT Cost Construction Index, June 2019; BERK, 2020.

Exhibit 18. Federal, State, and County Transportation Revenues, Adjusted for Construction Inflation, in 2020$ (1988, 1993, 1998, 2003, 2013, 2018)



Note: Adjusted with WSDOT June 2019 Cost Construction Index, created by WSDOT from Global Insights Construction Forecast. Data labels are rounded.

Sources: WSDOT City Streets and County Roads Merged History, 1988-2018; WSDOT Cost Construction Index, June 2019; BERK, 2020.

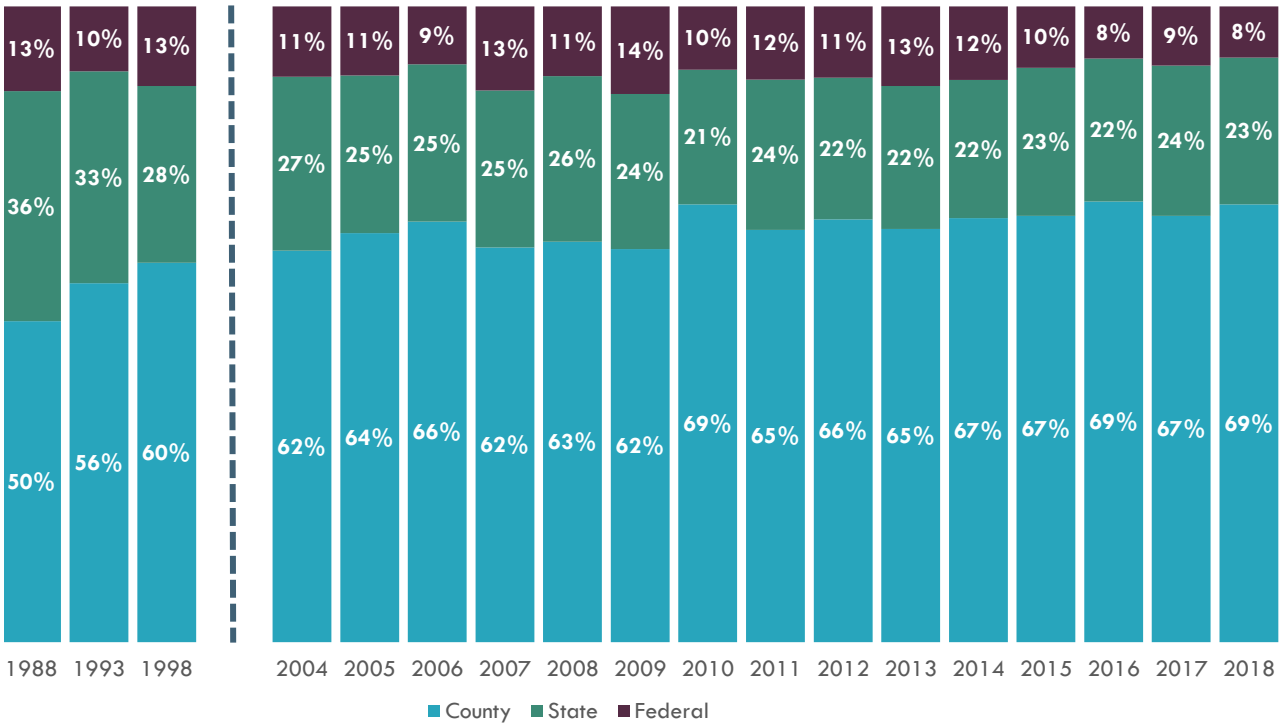
Transportation Revenues Over Time in Percentage Share

Counties rely on local funds for most of current available transportation revenues; **around 70% of county transportation revenues are locally generated in recent years. This represents an increase from 50-60% in the 1980s and 1990s.**

Exhibit 19 shows the relative distribution of federal, state, and local funding from 2004-2018, as well as data points from 1988, 1993, and 1998.

The State contribution to county transportation funding has remained relatively constant over the last 15 years at around one-quarter of all county transportation revenues**, but this share was higher 20 to 30 years ago when the State contributed around one-third of revenues.**

Exhibit 19. Federal, State, and Local County Transportation Revenues as a Share of Total



Note: Percentages presented above may not align precisely to Exhibit 14, which uses a more detailed version of the WSDOT City Streets and County Roads Dataset, due to differences in reporting.

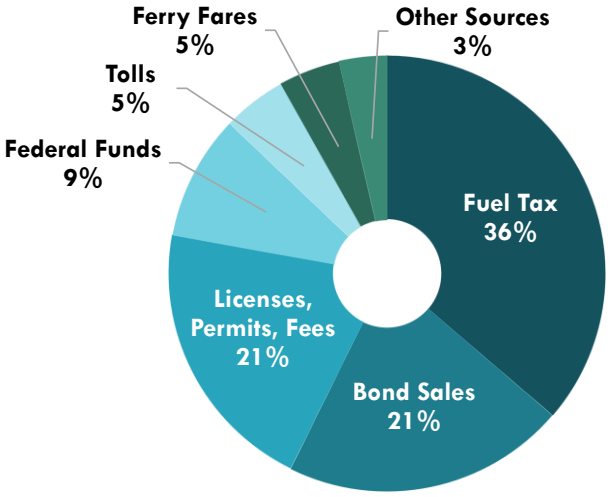
Sources: WSDOT City Streets and County Roads Merged History, 1988-2018; BERK, 2020.

3.2. STATE FUNDS

The 2019-21 State transportation budget appropriates a total of **$9.98 billion,** 52% for capital and 48% for operating purposes. This funding is distributed to state agencies, with WSDOT receiving **$6.89 billion** and the rest distributed to the Washington State Patrol, Department of Licensing, Joint Transportation Committee, House, Senate, and other state agencies.

Of the **$6.89 billion** in WSDOT's transportation revenue, **36%** of revenue comes from the gas tax, while **21%** comes from bond sales and **21%** from vehicle licenses, permits, and fees. This is followed by federal funds, tolls, ferry fares, and other sources (which includes car tax, vehicle sales tax, and local funds).

Exhibit 20. WSDOT Revenue Sources, 2019-2021



Note: "Other" refers to rental car tax, vehicle sales tax, and local funds.

Sources: WSDOT 2019-2021 Enacted Budget Book, 2019; BERK, 2020.

The State faces many competing funding priorities, and transportation revenues are challenged to cover growing costs. The motor vehicle fuel tax is a key revenue source, as seen in Exhibit 20. Falling demand for gasoline has resulted in declining revenues as vehicles become more fuel efficient. The State has explored potential alternatives to the gas tax and conducted a road usage charge pilot project from 2018-2019 with 2,000 participants who tested a road usage charge (RUC) system with four mileage reporting options and shared feedback. In January 2020, the Washington State Transportation Commission (WSTC) submitted their final report recommending a phased transition to a RUC.[20]

In the 2020 legislative session, SB 6586 was proposed to create an initial RUC program for electric and hybrid vehicles to begin in 2024. Under SB 6586, the WSTC and DOL would develop an RUC plan by December 2021 with different mileage reporting options and recommended fee rates to minimize administrative costs.

3.2.1. Flow of State Transportation Dollars to Counties

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

- **Direct distributions** are direct allocations through the state Motor Vehicle Fuel Tax (MVFT), funded by the 23-cent base MVFT and the 2005 Transportation Partnership Act MVFT. In addition, the state MVFT funds the CAPP, which distributes revenue to counties on a formulaic basis. Counties also receive direct transfers from the state Motor Vehicle and Multimodal Accounts, funded by the 2015 Connecting Washington Act gas tax.
- **Local project appropriations** are direct budget appropriations (earmarks) to specific projects.

[20] Washington State Transportation Commission, Road Usage Charge Assessment Final Report, 2020. https://waroadusagecharge.org/final-report/.

- **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 CRAB, Freight Mobility Strategic Investment Board (FMSIB), Transportation Improvement Board (TIB), WSDOT, and other agencies.

Direct Distributions

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

All counties receive a share of state collected MVFT. The State distributes these funds using a "10-30-30-30"[21] allocation formula that considers county population, annual road costs, and financial need.[22] The MVFT has been levied in Washington since 1939. In 1999, the legislature rolled up all prior MVFT acts into a single 23-cent rate.[23] 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 counties also changed over time.

Exhibit 21. County Distribution of Motor Vehicle Fuel Tax Rate

ENACTED	TOTAL GAS TAX RATE/GALLON	DESCRIPTION & COUNTY DISTRIBUTION
1999 (rolled up rate since 1939)	23 cents	Roll up of all prior MVFT acts. 4.42 cents per gallon distributed to counties.
2003	5 cents	Nickel Package. No local distribution.
2005	9.5 cents	Transportation Partnership Program, rate phased in 2005-2008. 0.5 cents per gallon distributed to counties.
2015	11.9 cents	Connecting Washington Act. MVFT phased in 2015-2016, specific amounts distributed to counties.

Sources: JTC Transportation Resource Manual, 2019.

Motor Vehicle Fuel Tax (MVFT or "gas tax"). The State collects a gas tax of 49.4 cents per gallon, and the county portion is distributed based on population, need, and resources. Counties together receive **4.92 cents per gallon** in direct allocations. This includes 4.42 cents (19.2287%) of the 23-cent 1999 gas tax and 0.5 cents (8.3333%) of the 9.5-cent Transportation Partnership Account (TPA) gas tax.

- Counties composed entirely of islands (Island County and San Juan County) receive a refund on the state portion of the MVFT to compensate for their lack of state highways (the state portion of the

[21] "10-30-30-30" refers to the weighting of different criteria in the distribution formula. Ten percent of the allocation is based on an equal distribution to all counties, 30% is based on county population (unincorporated population is weighted more heavily than incorporated population), 30% is based on county financial need (considering the county's own-source road fund revenues), and 30% is based on the county's costs of road replacement and annual maintenance.
[22] RCW 46.68.120, distributed per RCW 46.68.122; "Financial need" is based on the county's own-source road fund revenues.
[23] RCW 82.38.030.

MVFT funds state highways). This is called the Capron refund. A portion of the refund is dedicated for ferry operations.

- The state gas tax also supports state highways, city streets, ferry operations, and competitive funding programs, such as TIB grants. 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 further in the years ahead.
- 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 the current 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.
- Counties are required to spend at least 0.42% of their MVFT-allocated funds on bicycle, equestrian, and pedestrian trails, unless 0.42% of their MVFT revenue would be equal to $3,000 or less.

Connecting Washington Act. Starting in 2015, under the Connecting Washington Act, the State transfers a portion of funds from the State Motor Vehicle Account and the State Multimodal Account to counties. This amount is set by *RCW 46.68.126* and is proportioned evenly between counties and cities. Funds are distributed among counties according to the same formula as for the direct MVFT allocations.

County Arterial Preservation Program (CAPP). The CAPP helps counties to preserve existing paved arterial road networks. The program is funded by 0.45 cents per gallon of the state gas tax, and CRAB distributes CAPP funds to eligible counties based on their share of total county road arterial lane miles. All 39 counties participate in CAPP. The program generates approximately **$30 million** per biennium.[24]

In the 2019-21 budget, counties receive **$319.4 million** from MVFT direct distributions (including TPA funds) and **$25.1 million** from Connecting Washington Act transfers from the Motor Vehicle and Multimodal Accounts. Additionally, counties are expected to receive approximately **$31.6 million** in CAPP funds. Combined state direct distributions to counties are **$ 376.1 million** in the 2019-21 biennium, **3.8%** of the total transportation budget.

Local Project Appropriations

The state legislature may appropriate funds directly for specific county transportation projects. These appropriations are included in the State Transportation Budget and are administered by WSDOT.

State Competitive Programs

Counties may apply for state funding for transportation projects or programs via several competitive grant and loan programs. One state competitive grant program is open only to counties:

Rural Arterial Program (RAP). The RAP is funded by the state gas tax at 0.58 cents per gallon. CRAB, which administers the program, allocates grants competitively within five state regions. The program focuses on maintaining rural roads for commercial purposes, such as agricultural transport, as well as local use and recreation. In the 2019-2021 biennium, counties will receive **$41 million** in RAP funding.

[24] CRAB, 2020.

Transportation Improvement Board (TIB). 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 administers competitive grant programs for local transportation projects. While most TIB programs target city street projects, historically about 24% of TIB funds have gone to county projects.[25]

Counties may also receive grant funding from the following programs, which also support cities and other jurisdictions:

- Department of Commerce Community Economic Revitalization Board (CERB) grants
- Department of Commerce Public Works Trust Fund loans
- Freight Mobility Strategic Investment Board (FMSIB) grants
- WSDOT Local Programs: Safe Routes to Schools, Pedestrian and Bicyclist Program

3.3. FEDERAL FUNDS

Federal funding flows to states and local governments through two main channels:

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

The State receives federal funds 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) has reviewed and recommended distributions of federal highway funds between the state and local jurisdictions in the past. This group most recently met in 2016, after the most recent reauthorization of the FAST Act. [26] [27]

FEDERAL GRANT RESTRICTIONS

The federal functional class of a roadway affects whether counties can receive federal funds for projects on that road. In rural areas, projects on **minor collectors** and **local access roads** are **not eligible** to receive federal grant funds.

This poses a challenge for counties when a minor collector or local access road is deficient or damaged. Staff at **Chelan County** cited the example of local access roads that are used by both agricultural vehicles and wine industry tourists, including some on electric bicycles.

The current roads were not built to accommodate the size of today's agricultural vehicles, nor for vehicles to share the road with cyclists. The result is multiple vehicle types on roads that are too narrow for them to share safely, creating dangerous conditions.

The County is unable to address these deficiencies with current funds—the roads are ineligible for federal grants and replacing roads is so costly that even replacing a limited number of miles could deplete the road fund.

Source: Interview with Eric Pierson, Chelan County Engineer, July 21, 2020.

[25] JTC Transportation Resource Manual, 2019.
[26] WSDOT, https://www.wsdot.wa.gov/sites/default/files/2009/01/14/LP_FAST-Memo-Governor-2016.pdf.
[27] WSDOT, https://www.wsdot.wa.gov/LocalPrograms/ProgramMgmt/FedTransAct.htm.

Federal funding programs include:

- Congestion Mitigation and Air Quality Improvement Program.
- Highway Safety Improvement Program.
- National Highway Freight Program.
- National Highway Performance Program.
- Passenger Ferry Grant Discretionary Program.
- State of Good Repair Grants.
- Surface Transportation Block Grant Program.

Rural forest counties may receive funds from the federal government directly via the **US Forest Service timber sales** and **Secure Rural Schools (SRS) programs**. Traditionally, revenue from timber sales on federal lands provided funding for schools and roads in rural communities. After shifts in federal policy in the 1980s reduced these revenues for rural counties, the federal governments established the SRS program to support schools, roads, and other essential services in these counties.

Because government agencies are exempt from property tax, counties with large areas of state and federal land do not receive road fund revenues from these properties. But those counties are still responsible for maintaining roads in and around these properties. To address this discrepancy, some state and federal agencies provide counties with **payments in lieu of taxes.** Agencies may include:

- Washington State Department of Natural Resources.
- Washington State Department of Fish and Wildlife.
- US Forest Service, via the Secure Rural Schools program.
- US Bureau of Land Management, via the Taylor Grazing Act.

Federal funds are passed along to counties through several mechanisms:[28]

- **Federal pass-through programs**: recipients are selected by metropolitan planning organization (MPO), regional transportation planning organization (RTPO), and county leads through regional priority competitive programs. Programs include the Surface Transportation Program (STP) and Transportation Alternatives (TA).
- **Federally managed programs**: projects and programs are selected by WSDOT through statewide competitive programs. Programs include the Local Bridge Program and the Highway Safety Improvement Program (HSIP).
- **Federal discretionary programs**: grantees are selected federally through nationwide competitive programs.

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

[28] WSDOT, https://www.wsdot.wa.gov/LocalPrograms/ProgramMgmt/funding.htm.

3.4. LOCAL FUNDS

Most county transportation funding comes from local sources (Exhibit 13). These include both unrestricted local funds and transportation-restricted funds. A detailed summary of transportation revenue sources and restrictions on uses, along with statute references, is found in **Appendix A.**

3.4.1. Local Unrestricted Funds

Local unrestricted funds are general revenues that can be used for any county service or are restricted only to broad categories of expenditures (such as capital facilities). In general fundraising order of magnitude or applicability to counties, these include:

- **Property tax** (current expense levy)
- **Retail sales and use tax**
- **Real estate excise tax (REET) 1** – *may be used for capital projects and limited maintenance.*
- **REET 2** – *may be used for capital projects and limited maintenance, and for affordable housing services through 2026; only available to the 28 counties that are fully planning under the Growth Management Act (GMA).*
- **REET 3** – *restricted to counties that do not levy the 0.5% local option sales tax.*
- **Lodging tax**
- **Other excise taxes** – *includes the admission tax, leasehold excise tax, and timber excise tax.*
- **Unlimited tax general obligation (UTGO) bonds** – *Can only be used for capital purposes. Must be approved by 60% of voters. Paid via excess property tax levies.*
- **Limited tax general obligation (LTGO) bonds** – *Can be used for any county spending purposes, but debt service must be paid from existing revenue sources.*

With these sources, transportation services compete for these dollars with other county priorities, including public safety, social services, economic development, and parks.

LIDS AND RIDS

Local improvement districts (LIDs) and road improvement districts (RIDs) are both improvement districts that local governments can use to fund infrastructure projects. Property owners whose properties will benefit from the new infrastructure fund the district via increased property taxes over a period of time. Governments often issue bonds to fund the infrastructure project upfront, then pay off the bonds over time with the district revenues.

Counties are authorized to form LIDs to fund construction or improvement of a wide range of public facilities, including roadways, utilities infrastructure, parks, recreational facilities, and more. Though counties may use LIDs to fund road projects, as of 2018, none do.

RIDs are a type of LID, with the limitation that funds must be used for construction or improvement of county roads, state highways, or associated infrastructure.

RIDs and LIDs may not be used for preservation or maintenance of existing facilities, only for new construction or improvements.

In 2018, **11 counties** in Washington State had RID funds on the books, though revenues varied greatly.[1] While **Benton County** had revenues of $160,000 across four LIDs, the median RID revenue among these counties was **under $3,000**. One RID bond fund in **Jefferson County** had annual revenues of just $73.

In many cases, RID dollars do not represent "active" revenues for counties, but rather a source to pay off debt for capital projects. Benton County's RID revenues, for example, directly pay debt service on bonds that were issued a decade or more ago. In most cases, the projects they built are already completed and the revenues cannot be used for current expenses.

[1] *SAO, 2018.*

3.4.2. Local Transportation Restricted Funds

Transportation restricted funds are county funding sources that are dedicated for transportation purposes. In general fundraising order of magnitude or applicability to counties, these include:

- **Property Tax Road Fund Levy** – *Limited to a maximum rate of $2.25 per $1,000 of assessed property value.*[29] *Can only be levied in unincorporated areas.*
- **Local Improvement District (LID)** – *Counties are authorized to use the state's LID processes to raise revenue for capital projects, though most county LIDs take the form of RIDs.*
- **Road Improvement District (RID)** – *Counties are authorized to form RIDs, which fund roadway improvement via special property tax assessments*
- **Transportation Impact Fees** – *Counties are authorized to charge impact fees under the Growth Management Act (GMA) and the Local Transportation Act (LTA). Most counties that use impact fees do so under GMA, which provides broader authority for jurisdictions to collect fees for multiple services within a project (e.g., transportation improvements and parks construction).*
- **Transportation Benefit District (TBD)** (Sales and Use Tax and/or Vehicle Licensing Fee) – *Implementing a TBD sales tax requires voter approval. Implementing a TBD vehicle licensing fee of greater than $50 requires voter approval. While five counties have formed TBDs, none currently impose a sales tax or vehicle licensing fee.*

TIME RESTRICTIONS ON IMPACT FEES

One major challenge counties face in using transportation impact fees is the time restriction on spending revenues. Counties must use impact fee revenues collected under the Location Transportation Act (LTA) **within 6 years** and revenues collected under the Growth Management Act (GMA) **within 10 years.**

One county engineer shared that his county will soon be forced to return **$148,000** in impact fees to developers because the county was unable to secure sufficient matching funds from other sources to complete the project within the required timeframe.

The restrictive timelines are particularly **challenging for rural counties,** where growth is gradual and impact fee revenues accrue more slowly.

Source: Interview with Eric Pierson, Chelan County Engineer, July 21, 2020.

WHAT IS VALUE CAPTURE?

"Value capture" refers to strategies where the public sector can recover a portion of public transportation investments that result in increased land values. As land increases in value, a portion of the appraisal is captured by the public sector to invest in transportation. In Washington, road improvement districts (RIDs) have been used by around a dozen counties. Transportation impact fees are used by several counties. Tax increment financing (TIF), a method of redistributing property tax within designated areas to finance infrastructure within those areas, has been ruled unconstitutional in Washington.

Sources: FHWA, Value Capture: Capitalizing on the Value Created by Transportation, 2020; MRSC, Tax Increment Financing in Washington, 2020.

[29] Counties may levy a total of $4.05 in unincorporated between the current expense levy and road fund levy. If the current expense levy rate is below $1.80, the road fund levy rate may exceed $2.25, up to a combined maximum rate of $4.05.

- **Border Area Motor Vehicle Fuel Tax** – *Can be levied by TBDs in counties with an international border crossing. Currently, Whatcom County is the only county with an international border crossing and with a TBD (Points Roberts TBD), and they do levy this.*
- **Local Option Motor Vehicle Fuel Tax (Local Option MVFT)** – *With voter approval, counties may levy a local option fuel tax equal to up to 10% of the state fuel tax. Two counties have attempted to levy the tax and failed to receive the required voter approval.*
- **Commercial Parking Tax** – *not currently used by any counties.*
- **Local Options for High Occupancy Vehicle Systems** – *not currently used by any counties.*

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.[30]

There are some important limitations on the ability of counties to use these local tools:

- Some options are subject to **voter approval**, so the ability to use them is not entirely in county control. Enacting these tools requires **political will and political capital**, reducing political capital available for other purposes. Two counties attempted to levy a local option MVFT, but neither passed.
- Some tools **are only effective in certain locations**; for example, counties might not use the commercial parking tax because paid parking lots are too rare in unincorporated areas to make the tax effective.
- Some options have **limited eligibility**; for example, the border area motor vehicle fuel tax is limited to counties with a TBD and located by the international border.
- Funding tools may **overlap with other taxing authorities**. For example, Sound Transit regional transit authority (RTA) imposes high capacity transportation taxes through vehicle licensing fees, making it difficult for counties within the RTA to enact TBD vehicle licensing fees as voters would have to choose to pay both fees.[31]

LOCAL OPTION MVFT

County transportation staff in some counties shared that the local option gas tax would not be effective because counties have so few gas stations in unincorporated areas that the revenue would be negligible. This is exacerbated for counties planning under GMA, which facilitates annexations of high-growth areas by cities. GMA requires that counties designate urban growth areas to reduce urban sprawl and direct growth to areas with adequate public facilities (typically next to existing cities or towns); these areas are almost always annexed, removing them from the counties' tax base. (RCW 36.70A.110).

Other counties cited tax avoidance—the idea that drivers would cross county lines to jurisdictions without the local tax in order to avoid paying—as a concern in implementing the tax.

Exhibit 22 summarizes existing local transportation funding options available for counties, including who pays, applicability, current use, and fundraising magnitude.

[30] The fee had been levied by King, Douglas, Pierce, and Snohomish counties, and was shared with cities.
[31] If Initiative 976 is implemented, the TBD vehicle licensing fee option will be eliminated. Initiative 976 was passed during the 2019 election. At the time of this August 2020 report, the injunction is currently stayed, pending State Supreme Court decision.

Exhibit 22. Existing Local Transportation Funding Options for Counties (2018)

Revenue Sources	Burden	Voted	Magnitude	Applicability		
				Applicability	Eligibility/History	Participation*
Local Sources: Transportation-Restricted						
County Road Fund Property Tax	Property owners in unincorporated areas	No	$$$$	Must have properties with AVs	*All counties*	39 counties
Local Improvement District or Road Improvement District	Property owners benefiting from improvement	No	$	Must have capital improvement project with benefitting properties	*Median annual revenue is <$3k; some attempts not approved in court*	11 counties with RID funds**
Transportation Impact Fees *(GMA or LTA)*	Property owners benefiting from improvement	No	$$	Must have new development requiring transportation system improvements		6 counties
Border Area Motor Vehicle Fuel Tax	Individuals or businesses purchasing fuel in the county	No	$	Must be located by international border	*1 county eligible*	1 county***
Commercial Parking Tax	Individuals parking in a commercial parking lot	No	*N/A*	Must have commercial parking lots	*Consider cost of implementation with number of commercial lots*	*None*
Transportation Benefit District – Sales and Use Tax	Individuals purchasing goods within the taxing district	Yes	*N/A*	Must have retail transactions	*5 counties have established TBDs; none are funded*	*None*
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	*N/A*	Must have individuals or businesses with vehicles registered in district		*None*
Local Option Motor Vehicle and Special Fuel Tax	Individuals or businesses purchasing fuel in the county	Yes	*N/A*	Revenues must be shared with cities in county	*2 counties attempted; did not pass*	*None*
Local Option Taxes for High Occupancy Vehicle Systems *(MVET, rental car tax, employer tax)*	Vehicle owners, rental car users, employees, or consumers, depending on type of tax	Yes	*N/A*	Regional Transportation Investment Districts and King, Pierce, Snohomish counties eligible	*3 counties eligible*	*None*
Local Sources: Non-Restricted						
Retail Sales & Use Tax	Individuals purchasing goods within unincorporated portions of the county	No, up to 1%. Yes, simple majority above 1%.	$$$$	Must have retail transactions	*All counties*	39 counties
Real Estate Excise Tax 1 (REET 1)	Property Owners/ Purchasers	No	$$$	Must have property sales	*All counties*	39 counties
Real Estate Excise Tax 2 (REET 2)	Property Owners/ Purchasers	No, if required to plan under GMA. Yes, if voluntarily planning under	$$$	Must have property sales. Must be planning under GMA	*GMA counties*	19 counties
Additional REET 3	Property Owners/ Purchasers	No, but subject to referendum.	$$	Must have property sales, and county must not implement 0.5% sales tax	*1 county eligible*	1 county
Local Debt Financing						
Limited Tax General Obligation (LTGO) Bonds Unlimited Tax General Obligation (UTGO) Bonds	Taxpayers	No, cannot exceed 1.5% of AV Yes	$$$$	Must have properties with AVs		4 counties issued in 2018

**Number of counties collecting revenue in 2018 according to SAO and WSDOT data.*

***Number of counties with any reported revenue under a fund labeled RID. Zero counties had LID funds used for roads in 2018.*

****Points Roberts TBD is a partial county TBD using the Border Area MVFT.*

******May be eliminated if I-976 is implemented.*

Legend		
Magnitude		
Magnitude ranking based on median revenue collected by counties in 2018.	**$**	<$200k
	$$	>$200k, <$500k
	$$$	>$500k, < $1.5m
	$$$$	>$1.5m

Sources: SAO, 2018; WSDOT, 2020; BERK, 2020.

3.5. COUNTY TRANSPORTATION REVENUE CHALLENGES

While counties across the state are diverse in population and transportation infrastructure, they face some common revenue challenges. Given limitations on other local options, as described in the previous section, county transportation funding is largely supported by two key revenue sources: county road fund property taxes and motor vehicle fuel taxes. The following sections detail structural challenges to these core sources:

- **Declining share of gas tax allocations.** As the portion of the state gas tax rate to counties has largely remained flat, counties' share of state gas allocations has declined over time (**Section 3.5.1**).
- **Reduced tax base from annexations and incorporations.** As counties may only levy road fund property taxes in unincorporated areas, counties must contend with potential annexations and incorporations that reduce their property tax base (**Section 3.5.2).**
- **Property tax one percent limit.** Road Fund property tax revenues are both constrained by the statutory maximum of $2.25 per $1,000 of assessed value and by the 1% property tax levy limit on counties' total property tax revenue (**Section 3.5.3).**
- **Property tax road fund diversions and shifts.** Road revenues can be either diverted or shifted toward current expense revenues through road fund diversions or levy shifts (**Section 3.5.4**).

3.5.1. Declining Share of Gas Tax Allocations

The gas tax is a significant revenue source at both the state and county levels. For county roads, state gas tax allocations make up around 16% of revenue (Exhibit 13). However, **counties' share of state gas tax revenue has declined over time.**

- In 1973, counties received 32.6% of gas tax revenue distributed to the state motor vehicle fund.
- In 1977, counties received 22.8% of gas tax revenues in the motor vehicle fund.
- In 1999, the county share fell to 19.2% of the 23-cent base gas tax, where it remains today.

Since 1999, the State has implemented additional gas taxes, including the 5-cent per gallon "nickel" Transportation Account tax, a 9.5-cent tax through the Transportation Partnership Act (TPA), and an 11.9-cent tax through the Connecting Washington Act (CWA).

- From these taxes, the only direct county allocation is 0.5 cents from TPA, bringing total county direct allocation to **4.92** cents per gallon, just under **10% of the state's total tax** of 49.4 cents per gallon.
- Including RAP and CAPP funds, which are distributed to counties on competitive and formulaic bases, respectively, counties receive 5.95 cents per gallon, or **12% of the total.**

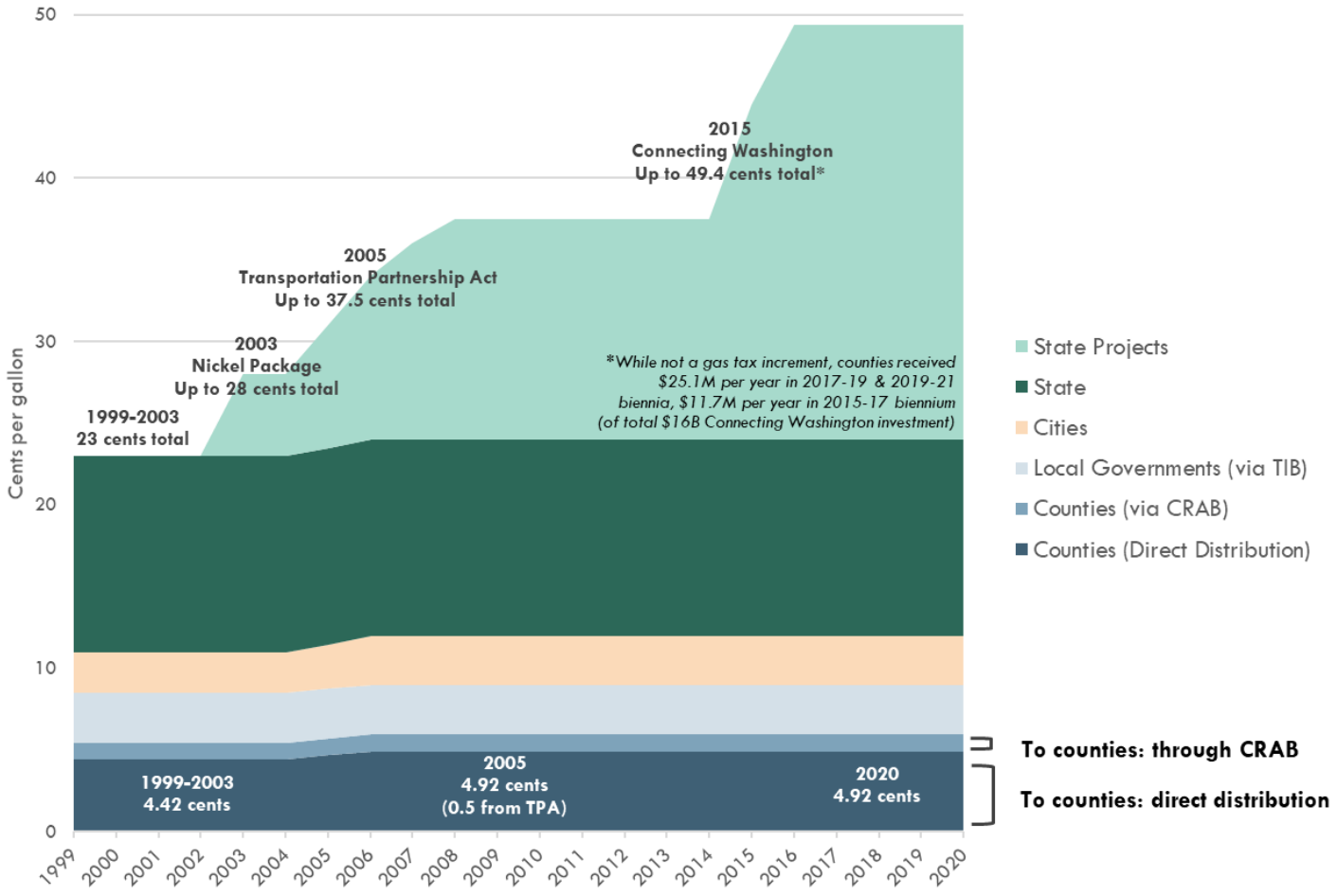
When considering the full state gas tax—not just revenues distributed to the motor vehicle fund—the decline in the county portion is even more dramatic:

- In 1973, counties received **24.9%** of all state gas tax revenues.
- Since 2016, counties' direct share of the total revenues has been just **12.1%.**[32]

[32] This does not include funds that the State allocates to counties through Connecting Washington.

Exhibit 23 shows the amount of state gas tax received by various types of jurisdictions in cents per gallon. Over the last 20 years, increases in state gas tax have mostly been directed toward specific state projects through the 2003 Nickel Funding Package, 2005 TPA, and 2015 CWA. **While the total gas tax rate has more than doubled since 1999, the portion directly dedicated to counties and other local governments has remained mostly flat.** The only increases directly allocated to counties were the additional half-cent distribution in the 2005 TPA gas tax and the CWA distribution of $25.1 million per year in 2017-19 and 2019-21 and $11.7 million per year in 2015-17, distributed among all 39 counties.

Exhibit 23. State Gas Tax Distribution by Recipient, 1999-2020 (cents per gallon)



Note: State Projects include all revenues from 2003 Nickel Funding Package,2005 Transportation Partnership Program (excluding direct allocations to counties and cities), and the 2015 Connecting Washington Act (CWA). The State has allocated some revenues from the Nickel Package for projects that affect county infrastructure. The State has also allocated specific amounts under CWA to cities and counties ($11.7 million to counties in 2015-17 biennium, $25.1 million to counties in 2017-19 and 2019-21 biennia). Because these distributions are not a dedicated gas tax rate, they are included under State Projects. TIB distributes funds to cities, counties, ports, and other special purpose districts via competitive grants. Counties are eligible for but not guaranteed TIB funding. CRAB distributes funds to counties via a formulaic allocation program (CAPP) and a competitive grant program (RAP).

Sources: RCW 46.68.090; JTC, 2019; BERK, 2020.

While some funds are dedicated to county projects as part of the Nickel Package, TPA, and CWA, most revenues have been dedicated to state projects and to capital improvements. This revenue structure, combined with increasing costs (see **Section 5.1**), has limited counties' ability to keep up with necessary preservation and maintenance work. In particular, the turn away from cost sharing and towards a local responsibility model has challenged the ability of small and rural counties—which have lower road fund property tax revenues—to maintain their road systems.

Exhibit 24 shows the county share of state gas tax revenues as a percentage from 1973 through 2020. As the total statewide distribution has increased in cents per gallon, the county amount has remained relatively constant, meaning the county share has decreased. From the 1970s through the early 2000s, the county share was **between 22-25%.** With the introduction of the 2003 Nickel Package, 2005 TPA, and 2015 CWA, which directed gas tax increases to specific state projects, the county share of gas tax dropped and is currently **around 12%.**

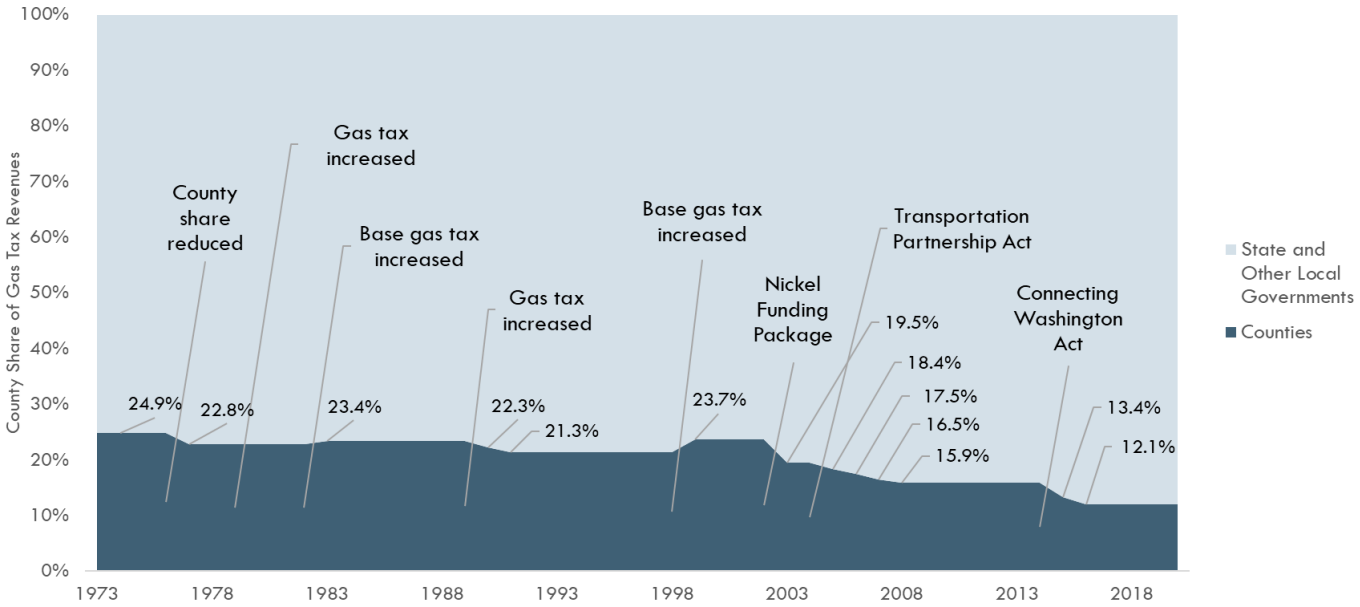
STATE GAS TAX RATE: CENTS VS. PERCENT

In 1977, the State switched from a **cents-per-gallon** gas tax rate to a **percentage-based rate.** This statute (RCW 82.36.025) required the Department of Motor Vehicles to calculate the tax rate in cents per gallon twice per year by "by multiplying twenty-one and one-half percent times the weighted average retail sales price of motor vehicle fuel, per gallon, sold within the state in the third month of such fiscal half-year."

The statute set a maximum rate in cents per gallon, which started at 12 cents per gallon in 1977 and rose over the years. **Exhibit 24** reflects the county share of the maximum possible gas tax rate.

In 1983, the State returned to a cents-per-gallon gas tax rate.

Exhibit 24. County Share of State Gas Tax Revenues, 1973-2020



Note: The county share of gas tax revenues typically falls as the overall gas tax increases, because the county share is a percentage of the "base" gas tax and most increases are add-on taxes, of which counties do not receive a dedicated portion. When the base gas tax increases, the county share increases because counties are entitled to a portion of the base tax revenue. The county share also falls when the State reduces the share of the base gas tax revenue allocated to counties.

Sources: RCW Archive, 1973-2019; BERK, 2020.

3.5.2. Reduced Tax Base from Annexations and Incorporations

Maintaining county roads falls into the category of local services, because, by definition, county roads are located in unincorporated areas. Thus, the default funding sources for county road funds are property and retail sales taxes in unincorporated areas. However, this categorization is challenging for counties, because many residents of incorporated areas also use county roads, with this traffic contributing to needed infrastructure investment.

Additionally, **some counties have lost unincorporated land area**, and thus **part of their tax base**, over time. In unincorporated areas, counties collect property taxes via both the current expense levy and the county road levy. Together, these funds have a maximum rate of $4.05, far exceeding the $1.80 maximum in incorporated areas. Counties split sales tax revenues with cities in incorporated areas. In unincorporated areas, counties may collect all the revenue from the 1% maximum local sales tax. Yet in incorporated areas, cities retain 85% of the local sales tax revenue, reducing the county's effective maximum sales tax rate to 0.15%. Thus, counties collect substantially less revenue in incorporated areas than in unincorporated areas.

With citizen approval, cities in Washington State may annex unincorporated areas, and communities in unincorporated communities may elect to incorporate. Because of the tax revenues allocated to cities (85% of the local sales tax and up to $3.375 in property tax levies), cities are incentivized to annex areas with high property values or with high volumes of retail sales. When they do so, counties lose a substantial portion of their revenue in that area. Over time, **counties may lose high-revenue areas to incorporation or annexation**, and **retain lower-tax revenue areas**, forcing them to provide the same services in those areas with fewer revenue dollars. There is not a one-to-one relationship between the revenues collected from a certain area and the cost of providing services in that area. Cities are aware of this distinction and consider the potential revenue gains and potential cost increases when choosing whether to pursue or support an annexation. As a result, the areas that counties lose to annexation tend to have higher revenue-generating abilities and lower service costs than the areas than remain unincorporated.

THE IMPACT OF ANNEXATION

- In 2010, residents of Panther Lake, an unincorporated portion of **King County**, voted to annex their community into the City of Kent. As a result, the King County Road Fund—which covers all unincorporated areas of the county—lost approximately **$2.2 billion** in assessed value.[1] The annexation, plus the drop in property values due to the Great Recession, led to a combined loss of more than $6.5 billion in assessed value.
- To preserve its revenue, the County Road Fund had to increase its property tax rate. However, the drop in assessed value was so steep that even after increasing the levy rate to the statutory maximum of $2.25, total revenues fell by more than **14%** between tax year 2011 and tax year 2012.[2] [3]
- The loss of the Panther Lake assessed value forced the County to dramatically increase the tax burden for the remaining unincorporated residents, while the property tax rate cap meant that the Road Fund's revenues could not be made whole, limiting the County's ability to provide services.

[1] *King County, "Annual Growth Report," 2008.*

[2] *The property tax bill in a given tax year is based on the assessed value of the property as of January 1 of the prior year. Because the Panther Lake annexation went into effect in July 2010, tax year 2012 (reflecting assessed value on January 1, 2011), was the first year that the King County Road Fund was impacted.*

[3] *King County Assessor's Office, "Comparison of 2011 and 2012 Assessed Valuations and Taxes," 2012.*

3.5.3. Property Tax One Percent Limit

County governments in Washington are highly reliant on property and sales tax revenues in order to provide services. These core revenues sources are limited by a state statutory maximum. Counties may levy a property tax rate of no more than $1.80 per $1,000 of assessed value in incorporated areas, and no more than $4.05—including the county road fund levy—in unincorporated areas (this means a $2.25 per $1,000 assessed value statutory maximum for county road fund). This contrasts with a maximum rate of $3.60 for the state government and $3.375 for cities.[33]

Additionally, counties (and other taxing jurisdictions) may not increase their total revenue from property taxes by more than 1% year over year, not including the value of newly constructed properties.[34] In most years, inflation exceeds 1%,[35] meaning counties lose revenue in real terms, unless they have enough new construction to make up for inflation and population growth. This may **particularly challenge rural counties**, which see less construction of new, high value properties than dense urban counties.

3.5.4. Property Tax Road Fund Diversions and Shifts

Road Fund Diversions

Counties in Washington State are authorized **to divert revenues from their county road levy** collections to the current expense fund at their discretion.[36] If a county chooses to use this option, the levy rates for both funds remain unchanged, but the county may use revenues from the road levy for purposes other than those typically authorized for county road funds. This is completed through a Board of County Commissioners resolution during the budget adoption process and does not require voter approval. County assessors are not required to indicate to taxpayers on their property tax bill that a portion of the road levy is being diverted to current expense funds, so many taxpayers may be unaware of the diversion entirely.

LEVY DIVERSION VS. LEVY SHIFT

- A road **levy diversion** is a diversion of road levy dollars to the current expense fund. This is completed during the budget adoption process and carries restrictions to maintain RAP eligibility. Levy rates for current expense and road funds do not change.
- A road **levy shift** means the county transfers revenue capacity from the road levy to the current expense levy. This is completed during the annual levy of taxes. This decreases road levy tax revenue capacity.

To retain eligibility for the state's RAP grant funding, counties may only use these diverted funds for traffic law enforcement in unincorporated areas.[37] This restriction does not apply if a county's population is less than 8,000 or the county expended road levy funds on other governmental services only after voters authorized a levy lid lift for the road fund for such purposes. Given that public safety is a major category of expenditures for counties (see Exhibit 7), this option may incentivize counties to shift dollars away from preservation of capital facilities and subsidize their law enforcement costs from the road fund.

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[33] RCW 84.52.043.
[34] RCW 84.55.010v; The statute restricts revenues to no more than 1% greater than the levy in highest of the most recent three years—in most cases, this will be the prior year.
[35] Washington State Economic and Revenue Forecast Council, "Washington State Economic and Revenue Forecast: Volume XLII, No. 1," February 2020, https://erfc.wa.gov/sites/default/files/public/documents/publications/feb20pub.pdf.
[36] RCW 36.33.220.
[37] WAC 136-25-030.

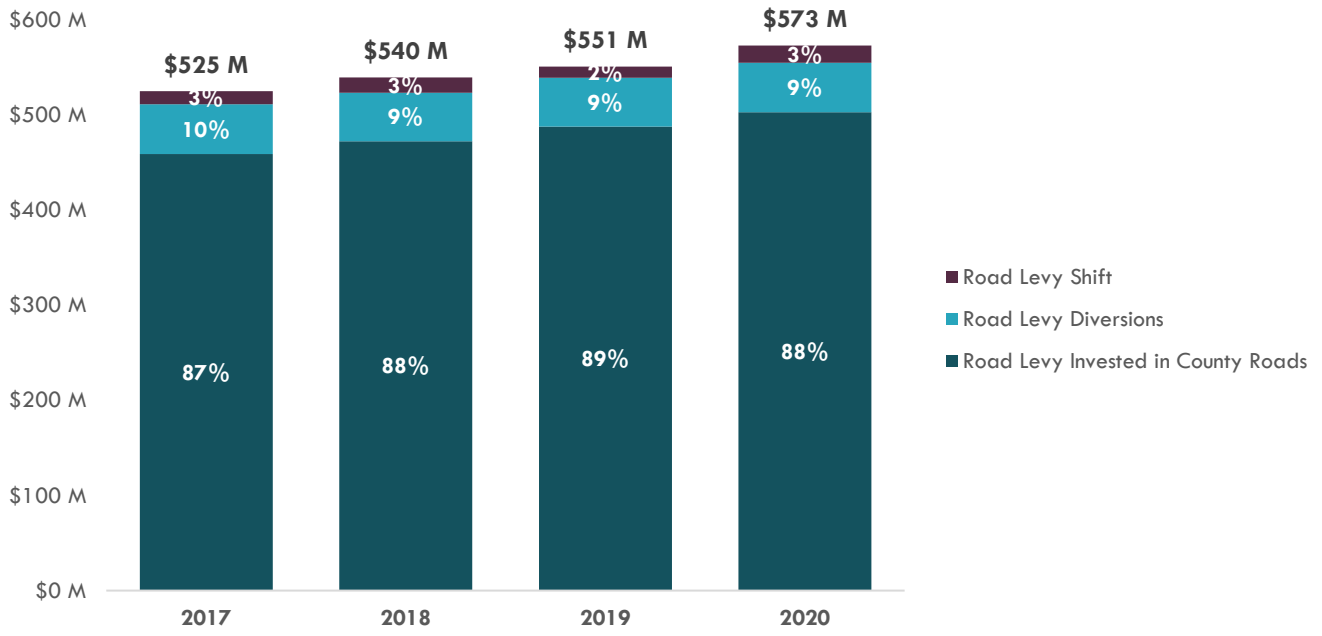
Levy Shift

Counties in Washington are also authorized **to shift revenue capacity from their county road fund** to the current expense fund. To implement this option, a county identifies the total dollar amount it would like to shift from the road fund to current expense fund. It then translates that dollar amount into a levy rate decrease for the road fund and levy rate increase for the current expense fund. The rate decrease for the road fund will always be greater than the increase for the current expense fund, because the road fund is only levied on properties in unincorporated areas, while the current expense fund is levied on all properties in the county. Thus, a levy shift reduces the tax burden in unincorporated areas and increases it in incorporated areas.

Counties may increase the current expense levy from the original $1.80 per $1,000 of assessed value up to $2.475 per $1,000 of assessed value, as long as the combination of current expense and road levies does not exceed $4.05 and no other taxing district has a reduced levy resulting from the shift.[38] Given the dual restrictions of the $1.80 rate limit and the 1% revenue growth limit, plus the many competing service priorities, counties may delay roadway preservation and shift levy capacity to their current expense fund to support services.

Exhibit 25 shows county road fund levy diversions and shifts as a share of total road fund levies (prior to any diversions or shifts) from 2017 through 2020.

Exhibit 25. County Road Fund Levy Diversions and Levy Shifts (YOE$)



Sources: CRAB, 2020; BERK, 2020.

Road fund diversions and road levy shifts across counties statewide have remained relatively consistent from 2017 to 2020 at around 9%-10% and 2%-3% of total road fund levies (prior to any diversions or shifts). As shown in Exhibit 26, the number of counties statewide using diversions and shifts has also been stable across the four-year period. Over the past three years, 27 counties have utilized diversions, with

[38] RCW 84.52.043.

24 counties using them for traffic law enforcement (TLE) activities and 3 counties using them for non-TLE activities. The number of counties statewide using shifts has ranged from 11 to 15 across the four-year period.

Exhibit 26. County Road Fund Levy Diversions and Levy Shifts

Number of Counties	2017	2018	2019	2020
Using Diversions for TLE Activities	27	24	24	24
Using Diversions for Non-TLE Activities	3	3	3	3
Using Levy Shifts	11	15	12	13

Note: TLE stands for traffic law enforcement. As stated above, most counties may only use a road levy diversion to help pay for traffic law enforcement within unincorporated areas or they will lose their eligibility for RAP funding.

Sources: CRAB, 2020; BERK, 2020.

4.0. County Transportation Investments

This chapter describes categories of transportation expenses (**Section 4.1**) and then analyzes the distribution of expenditures across these categories **(Section 4.2).**

4.1. COUNTY TRANSPORTATION EXPENSES

County transportation expenses involve strategic asset management to maintain and expand transportation facilities to meet capacity needs as determined by the community.

For the purposes of this study, we analyze and describe transportation expenditures using the following categories. We acknowledge that different counties may define and categorize their transportation expenses differently.

- **Programmatic expenditures,** which relate to day-to-day management and operations of local transportation departments.
- **Capital expenditures,** which refer to long-term construction and management of transportation networks.

4.1.1. Programmatic Expenditures

Programmatic expenditures are the regular, ongoing expenses needed to run transportation agencies and provide base functions and services to the community. These activities may include regular road repair, road cleaning, snow removal, and other similar activities. Programmatic costs also include administrative and overhead costs, as well as other miscellaneous work related to these regular activities. Programmatic expenditures of county transportation budgets typically include the following sub-categories:

- **Administration and Operations.** These are expenses involved with the day-to-day costs of running transportation systems and programs, including goods and services, staff costs, office management, and other programs. These costs may not directly relate to individual transportation projects, but they are necessary to maintain a county's transportation system.
- **Maintenance.** Maintenance costs involve regular work performed to maintain the condition of a transportation system over time, including both routine and preventative maintenance. These activities sustain the condition of the transportation system or respond to specific situations to restore the function of the system. 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.

MAINTENANCE VS. PRESERVATION

Maintenance and preservation both involve keeping transportation assets in good condition to support their ongoing function in the system.

Maintenance refers to more routine, regular activities to keep a system in a state of good repair, such as spot fixes of pavement.

Preservation includes activities that support the long-term condition of transportation assets and ensure ongoing maintenance costs are minimized over asset lifecycles, such as regular seal coats for pavement.

Note that traffic policing expenditures are not considered in this analysis. Traffic policing includes regular activities by Sheriff's departments such as traffic control and speed limit enforcement to maintain public safety on county roads. 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.

4.1.2. Capital Expenditures

Capital expenditures are the costs to purchase or construct transportation-related assets and prevent their deterioration over time. These expenses are typically associated with larger projects, and external financing and funding may be used for capital spending.

Major budget items that would typically involve capital spending of some kind include:

- **System Preservation.** Preservation investments are needed to follow asset management practices, keep infrastructure in a state of good repair, minimize lifecycle costs, and optimize investments over the full lifecycle.
- **System Improvement.** These investments enhance the existing system through new construction or purchases and are coordinated to meet concurrency requirements, address insufficient levels of service, enhance other functions of the system, or otherwise improve the ability for the system to meet needs.
- **Deferred maintenance.** This refers to investments needed to bring elements of the system up to a state of good repair when desired maintenance or preservation investments have not been made.

CONCURRENCY

Under the *Growth Management Act* (RCW 36.70A.070(6)), counties are required to respond to growth through system expansion with adequate transportation improvements. County comprehensive plans must incorporate standards to maintain transportation concurrency with development. Concurrency requirements ensure that transportation impacts of new developments are accommodated with available capacity at the time of development.

Note that debt service expenditures are not considered in the analysis to avoid double counting county spending on capital projects. Debt service payments are related to debt taken out by counties to fund larger county transportation projects. Borrowing is usually linked to larger capital projects that cannot be financed through other means. Debt payments are made on expenses already captured in the analysis.

The WSDOT City Streets and County Roads dataset classifies county transportation expenditures in the following categories for consistent reporting across the state.

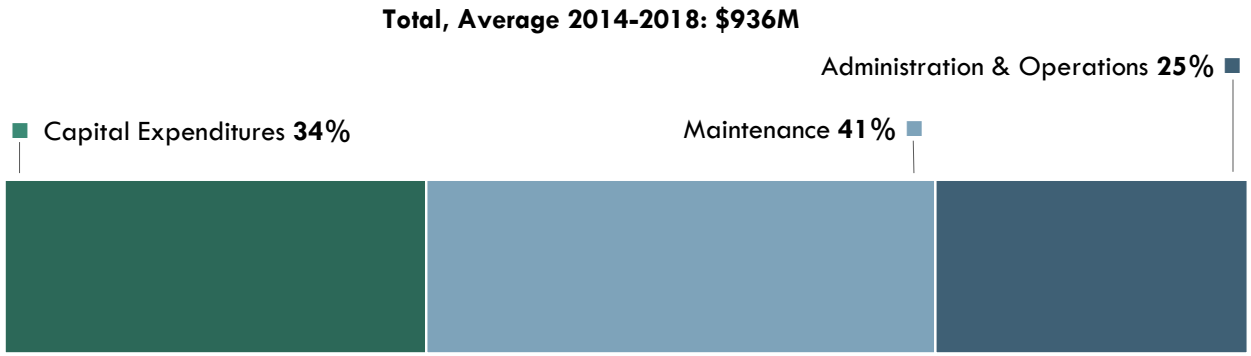
Budget Categories from WSDOT City Streets and County Roads Dataset	This Study
Capital Expenditures/Expenses	Capital (may be Preservation or System Improvement)
Roads/Streets and Other Infrastructure: Improvements and New Construction Projects	Capital (may be Preservation or System Improvement)
Roads/Streets Construction – Preservation Projects	Capital (may be Preservation or System Improvement)
Roads/Streets Ordinary Maintenance	Programmatic (Maintenance)
Roads/Streets General Administration and Overhead	Programmatic (Administration & Operations)
Roads/Streets Operations	Programmatic (Administration & Operations)
Roads/Streets Extraordinary Operations	Programmatic (Administration & Operations)

Sources: WSDOT, 2020; BERK, 2020.

4.2. COUNTY TRANSPORTATION EXPENDITURE ANALYSIS

Exhibit 27 shows county transportation expenditures by expense categories, based on WSDOT categorizations. The chart shows an average of aggregated WSDOT data across all 39 counties over the five-year period of 2014-2018.

Exhibit 27. County Transportation Expenditures



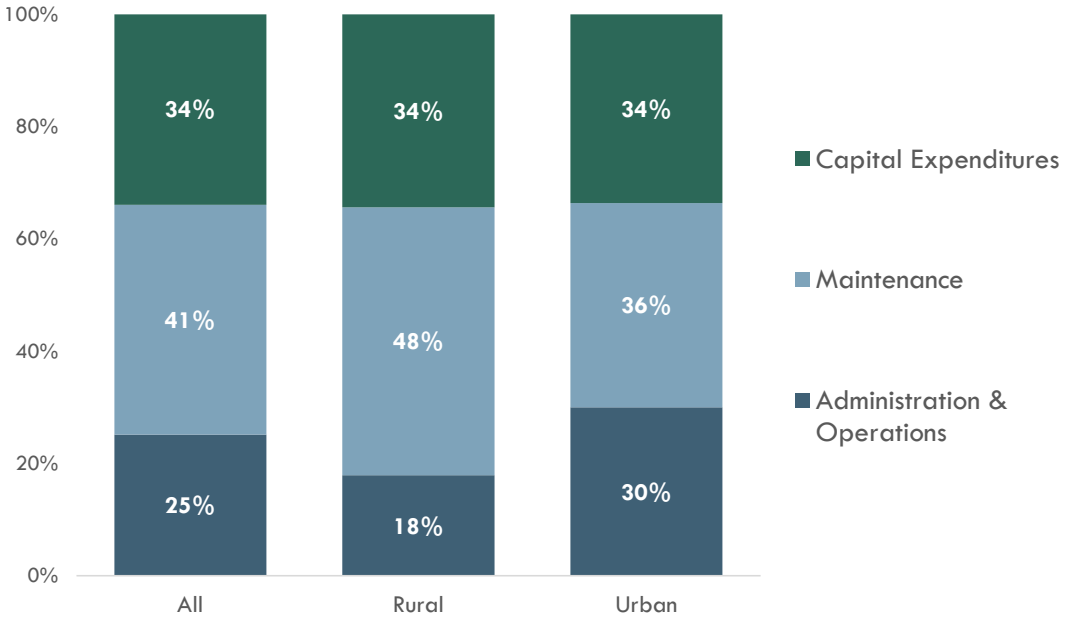
Sources: WSDOT City Streets and County Roads Dataset, 2014-2018; BERK, 2020.

Programmatic expenditures comprise **66%** of county transportation expenses, on average, according to compiled budget data, while capital expenditures comprise **34%** of county transportation expenses, on average. Expenditures for administration and operations are in line with administration and operations spending for city streets ($235 million for counties and $222 million for cities).

Exhibit 28 shows the breakdown of expenses across rural and urban counties, on average, from 2014 to 2018. Rural counties spend more heavily, as share of total expenses, on maintenance and less heavily, as a share of total expenses, on administration and operations than urban counties. The percentage spent on capital expenditures is similar between rural and urban counties.

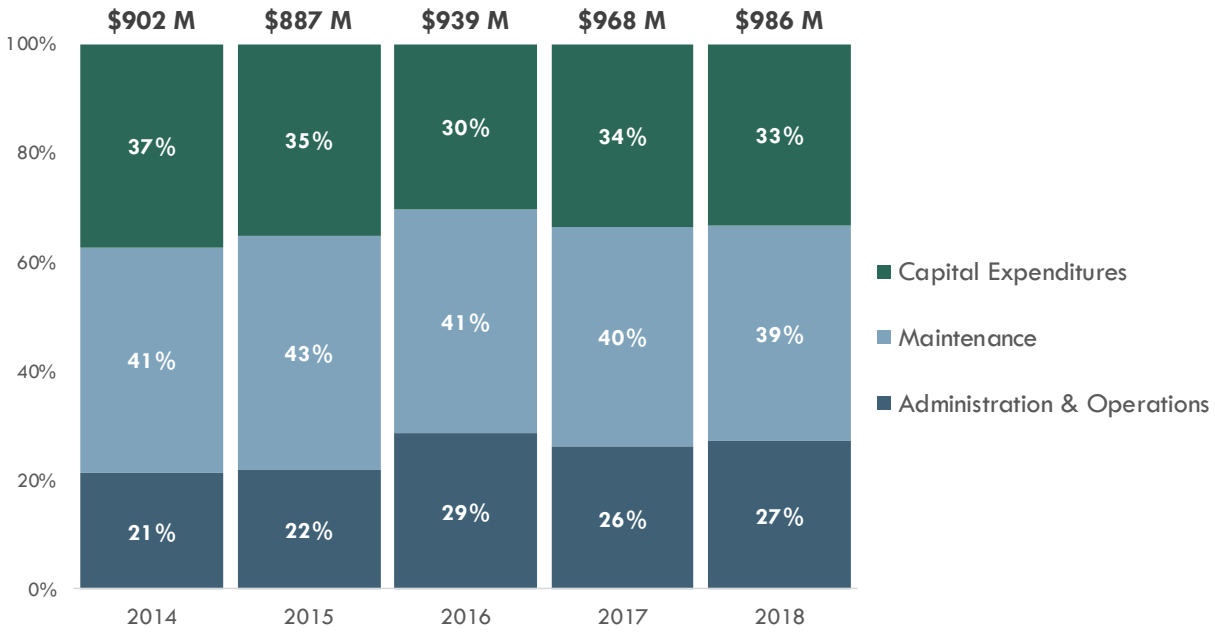
Exhibit 29 shows the mix of county transportation expenditures in rural and urban counties as an average from 2014 to 2018. The breakdown between programmatic and capital expenditures has remained relatively consistent over this time, shown in Exhibit 29.

Exhibit 28. County Transportation Expenditures, Rural & Urban Counties



Sources: WSDOT City Streets and County Roads Dataset, 2014-2018; BERK, 2020.

Exhibit 29. County Transportation Expenditures Over Time



Sources: WSDOT City Streets and County Roads Dataset, 2014-2018; BERK, 2020.

5.0. Funding Needs and Budget Gaps

5.1. RISING COSTS

While facing structural revenue challenges described in **Section 3.5**, county transportation departments also face rising construction, environmental, and other costs.

5.1.1. Rising Gravel Costs

Washington counties maintain thousands of miles of gravel roads in rural and remote areas. For some counties—such as Adams County, which maintains more than 1,100 miles of gravel roads—the gravel road mileage exceeds the paved road mileage.

Over the last 10 years, dramatically rising gravel costs have limited counties' abilities to maintain these roads. In the western US, gravel costs have increased by more than 40% since 2013. This is due to two factors:

- **Increased demand for construction inputs**, leading to higher costs for raw materials. One county engineer shared that his county's cost to crush gravel has increased from $3 per ton to $8 per ton over the last 10 years.
- **Restrictions on the locations of gravel pits**, leading to higher hauling costs. Another county engineer cited environmental regulations as increasing the costs of gravel. Rather than using local pits located near projects, the county must pay for the gravel to be hauled over long distances.

MAINTAINING ROADS IN RURAL WASHINGTON

Rural counties face a unique set of maintenance and preservation challenges. These include:

- **Repeated maintenance** on former dirt roads. Frequent chip sealing is required on roads that were never designed as paved roads.
- **Grading gravel roads.** As gravel costs have risen dramatically over the last 10 years, the costs of maintaining unpaved roads have been greatly impacted.
- **Snow plowing.** Counties that experiences snowy winters must carry out regular plowing. **Okanogan County** spends up to **$2 million per year**, about 17% of its road fund operating budget, on plowing.
- **Lack of paved shoulders.** Many rural roads were built without paved shoulders. As freight trucks have increased in size, county roads are sustaining more shoulder and edge-of-pavement damage.

5.1.2. Environmental Regulations and Costs

While environmental regulations are critical to the well-being of Washington's people, land, and resources, in many cases they represent an unfunded mandate for county road funds. In interviews, county officials cited compliance with state and federal environmental regulations as a cost driver. Areas of concern for counties include:

- **Removing fish passage barriers.** While courts have not yet held counties responsible for removing fish passage barriers, there is broad legal agreement that they will eventually do so.[39] Preparing for this eventuality has put strain on road fund budgets. One county cited the example of a culvert that washed out. Under State Department of Fish and Wildlife regulations, the County had to

[39] Gall, Shelia and Carl Schroeder. 2018. "U.S. Supreme Court deadlock on culverts case: Ninth Circuit decision remains the law." *Association of Washington Cities*. https://wacities.org/advocacy/News/advocacy-news/2018/06/13/u.s.-supreme-court-deadlock-on-culverts-case-ninth-circuit-decision-remains-the-law

replace the original 4-foot culvert with a more than 20-foot structure. The County paid for the replacement directly from the road fund, at a cost of more than $130,000.[40]

- **Lack of local gravel pits.** State environmental regulations restrict the placement of gravel pits. Where counties previously could crush gravel in local pits for use in unpaved road maintenance, they now must pay for gravel to be hauled over long distances. This has contributed to the dramatic increase in gravel costs over the last 10 years.
- **Protecting critical species.** Requirements to mitigate impacts to critical species can stall or end road projects. One county shelved a road project midway through because the land was impacted by a critical species and no mitigation site was available. Because the project was funded by a grant and the funds were required to be spent within a specific timeline, the project was halted and never completed.[41]

5.1.3. Costs to Replace Aging and Deficient Bridges

A significant challenge for some counties is to **fully fund the costs of replacing bridges** at the end of their lifespan. Bridge replacement projects may be $20 or $30 million projects, while many road fund budgets are under $30 million. Grants to support these projects are also limited. Federal grants do not support short-span bridges. The Bridge Replacement Advisory Committee's (BRAC's) maximum bridge replacement grant is $12 million. And counties also need to provide a local match for federal grants. New bridges constructed on non-fish bearing waters must also comply with new environmental regulations intended to improve fish passage, further increasing costs of bridge construction.

NORTH FORK BRIDGE IN SKAGIT COUNTY

The North Fork Bridge is a 726-foot county-owned bridge that crosses the Skagit River at Best Road west of the town of Conway.

Built in 1959, the bridge is now **functionally obsolete** and is **fracture critical**. Overweight loads planning to cross the bridge must be reviewed on a case-by-case basis.

County staff estimated that the cost to replace the bridge will be at least **$30 million**. The best funding avenue, the state Bridge Advisory Committee, caps grants at $12 million, so the County will need to secure **$18 million**—more than half its annual budget—from other sources to replace the bridge.

5.2. PROGRAMMATIC AND CAPITAL NEEDS AND GAPS

Substantial portions of county transportation budgets are devoted to sustaining existing transportation systems, with costs to manage transportation departments and invest in regular maintenance and preservation activities to keep roads in good condition. Gaps between optimal and actual budget allocations to sustain the system can degrade the capacity and function of systems and increase lifecycle maintenance costs as noted in **Section 2.4.** Understanding the nature and magnitude of these gaps is essential to determine the amount of county funding needed.

This study considers these general categories of costs:

- **Programmatic costs,** which are related to regular maintenance and administrative overhead associated with managing a transportation system (**Section 5.2.1**).

[40] Interview with Josh Thomson, Okanogan County Engineer. July 10, 2020.
[41] Interview with Scott Lindblom, Thurston County Engineer. July 2, 2020.

- **Capital costs**, which include activities necessary to maintain facilities in good repair, prevent major depreciation, and minimize lifecycle costs and investments to enhance the existing system through new construction or purchases (**Section 5.2.2**).
- **Additional costs**, which are expenditures not captured, or not fully captured, in our base funding needs estimate: deferred maintenance, ADA compliance, fish passage barrier removal, safety, and active transportation. Our base gap does not include these additional costs due to limitations in our ability to disaggregate and annualize these costs. We provide estimates where available and qualitatively describe the impacts of these additional costs in **Sections 5.3 and 5.4**.

We then compared needs estimates with actual investments by county governments to evaluate the base gap in county funding statewide in **Section 5.2.3**.

5.2.1. Programmatic Needs: Administration, Operations, and Maintenance

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

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

For this analysis, we estimated these costs using historical programmatic expenditures over the last nine years. Programmatic expenditure data was sourced from WSDOT City Streets and County Roads data and inflation-adjusted to 2020 dollars. Upper and lower bounds for programmatic cost estimates are based on a 10% plus or minus percentage range around the initial estimated amount. This approach of presenting estimates as a range of probable costs based on a percentage above and below initial estimates is consistent with WSDOT Planning Level Cost Estimation methodology.[42]

5.2.2. Capital Needs: System Preservation and System Improvement

Capital investments include expenditures to maintain the current system in a state of good repair and to expand the capacity and function of the system to meet ongoing needs.

Roadway Preservation Needs

For this analysis, we identified the amount and location of roadways using the federal **Highway Pavement Management System** (HPMS) data, which provides information about condition and safety of highways in the state and presents an inventory of other roadways as well. HPMS includes data on the location and length of roadways, along with a general functional classification for roadway segments and limited pavement condition information.

Our estimates for roadway preservation costs are based on estimated unit costs for preservation over the entire lifecycle of the infrastructure. We identified costs per mile based on prototype preservation projects, with estimates assumed to vary according to the functional class of the roadway or size of the roadway, geography by WSDOT region, and urban or rural locations. Costs were generally calculated

[42] Murshed, Ph.D., P.E., D., & McCorkhill, P. (2012, December). *Planning Level Cost Estimation.* Retrieved from Washington State Department of Transportation: https://www.wsdot.wa.gov/mapsdata/travel/pdf/PLCEManual_12-12-2012.pdf

based on the following 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, calculated by area.

Urban or rural locations for each roadway are based on WSDOT designations, unlike the urban or rural classifications for counties presented earlier in this report based on OFM designations.[43] The following is our approach to using WSDOT designations of urban or rural roadways:

- **Urban areas.** For locations within an Urban Growth Area or "urbanized area" (calculated from WSDOT 2013 boundaries), the cost of surface treatments was calculated by road class and WSDOT region on a per-mile basis. Based on expected cycles of up to 18–20 years, these costs were annualized and calculated for each road segment in the system.
- **Rural areas.** For locations outside of urban areas, the cost of surface treatments was calculated by WSDOT region for county roads on a per-mile basis and annualized based on expected treatment cycles. We assumed lower maintenance costs for major county roads than comparable city roads, given different levels of traffic and expected infrastructure needs.

Cost estimates for urban and rural roadways are summarized in Exhibit 30. We multiplied these cost assumptions with the total length in centerline miles of roadways in communities to determine expected average yearly preservation costs.

Exhibit 30. Annualized Preservation Costs per Centerline-Mile for Urban Roadways, by WSDOT Region and Functional Class

WSDOT Region	Annualized Preservation Costs Per Centerline-Mile		
	Arterial	Collector	Local
North Central	$116,103	$52,571	$30,802
Olympic	$135,267	$59,080	$33,096
South Central	$119,741	$53,910	$31,982
Southwest	$128,122	$55,633	$31,767
Northwest	$137,139	$60,165	$32,295
Eastern	$114,092	$52,047	$30,373

Sources: Perteet, 2020; BERK, 2020.

[43] WSDOT designates each roadway as rural or urban, rather than designating entire counties as rural or urban.

Exhibit 31. Annualized Preservation Costs per Centerline-Mile for Rural Roadways, by WSDOT Region and Functional Class

WSDOT Region	Annualized Preservation Costs Per Centerline-Mile	
	Collector	Local
North Central	$21,416	$2,156
Olympic	$23,394	$2,317
South Central	$22,542	$2,239
Southwest	$22,379	$2,224
Northwest	$22,782	$2,261
Eastern	$21,088	$2,126

Sources: Perteet, 2020; BERK, 2020.

We annualized these costs based on a recommended schedule of these projects over the lifecycle of the roadway and combined them to provide an estimated annual cost.

A concern with this methodology voiced in discussions with local agencies is that many local transportation and public works departments may not apply regular preservation treatments to local roads, focusing preservation activities on maintaining the condition of major routes instead. Without a comprehensive assessment of these policies on a community-by-community basis, the final estimates of preservation costs use full preservation of local roads as an upper bound to the estimate, with no preservation of local roads as the lower bound.

Bridge Preservation Needs

Estimating 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 limit the weight the structure can bear, which can restrict the function and utility of the bridge in the transportation network.

Two statewide data sources were used in our analysis of expected bridge preservation costs: entries in the 2018 **National Bridge Inventory** (NBI) and available information from the **County Road Administration Board** (CRAB) on short-span bridges with spans of 20 feet or less, which are not included in the NBI.

To estimate bridge preservation costs, we analyzed two types of expenditures: regular preservation activities during the lifecycle of the bridge and replacement or major refurbishment of the bridge after the end of its functional lifetime:

- For **regular bridge preservation**, we estimated unit costs of preservation projects based on the size of the bridge deck and the construction material used (e.g., primarily concrete or steel), and determined annual costs by bridge.
- For **system-wide bridge replacement costs**, we based our estimates on age data, as well as condition data from the NBI. Bridges were assumed to require replacement or major refurbishment if they were outside of their expected lifetime and/or in poor condition. Costs for replacement were calculated as a range between a cost per unit area based on bridge materials and listed replacement/rehabilitation costs in the NBI.

SHORT-SPAN BRIDGES

In addition to bridges included in the NBI, the transportation network also includes "short-span bridges" of less than 20 feet in length. Short-span bridges are not included in the NBI due in part to their ineligibility for funding under the federal Highway Bridge Replacement and Rehabilitation Program (HBRRP). Although these smaller bridges are not included in the federal inventory, there are a considerable number located along state and local routes, and these bridges can be expensive for counties to replace. Many of these bridges also serve as fish passage barriers.

For this analysis, we assumed that both regular bridge preservation and system-wide bridge replacement costs were considered preservation, even the expansion of existing bridge capacity during rehabilitation or replacement. Preservation costs in this analysis were assumed to be the same across different geographies. Our cost estimates used for this analysis are in Exhibit 32.

Exhibit 32. 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

Source: Perteet, 2020.

We used a range of replacement costs based on high and low replacement/rehabilitation costs by bridge in the NBI. Calculations of bridge preservation and replacement for short-span bridges were coordinated similarly, but as a condition classification comparable to the NBI field is not provided, the calculation only assumes that bridges are replaced at the end of their expected lifetimes.

System Improvement

It is difficult to determine "need" when considering system improvement investments. Improvement plans are developed by regional and local agencies, based both on the **need to address deficiencies** in levels of service and **constraints in available funding**. However, each county may have **different standards** for levels of service and different constraints on funding, complicating our ability to establish a consistent, statewide approach.

To assess overall need for system improvement across counties, we calculated estimates based on listed capital projects in the State Transportation Improvement Plan (STIP) from 2020. Although these figures represent a "constrained" view of need in the state given local funding limitations, they identify which

investments were prioritized given these limitations, and are a useful bound for estimating regular system improvements necessary to keep pace with previous improvements.[44] Because the STIP is a six-year examination of costs, we projected the identified funding levels as described below.

To provide bounds for these estimates, we reflected needs and constraints in the estimates in two ways. Given that the STIP includes data from both four- and six-year TIPs, we removed estimates of capital expenditures identified as extending beyond the first four years of the timeline and determined the funding level over the four-year period to be a standard level of capital funding required to address needs. A high-end estimate assumed that all relevant projects listed in the STIP would be required over a four-year period. These low- and high-end estimates were then annualized to derive projected annual system improvement needs.

We also reviewed available Regional Transportation Improvement Plans (RTIPs), Regional Transportation Plans, and other documents requested from each of the state's RTPOs to determine the difference between the low-end estimate and the projected needs over the four- or six-year periods covered by each RTIP. Documentation from some jurisdictions highlighted that there were considerable additional needs beyond what was provided in TIPs. Without higher-level measures of levels of service and comparable project lists developed by each jurisdiction, however, it is challenging to compile a consistent statewide listing of project needs beyond what is provided as part of the STIP.

5.2.3. Estimated Funding Gap

Based on our estimates of programmatic and capital costs, we calculated a general estimate of current needs versus current spending. Exhibit 33 summarizes average county transportation expenditures from 2014 to 2018, as well as the total estimates of need by category, in 2020 dollars. Exhibit 34 presents a graphical comparison of these figures.

It is important to note with the figures in Exhibit 33 and Exhibit 34 that the divisions of costs into these categories is based on assumptions about current expenditures. However, actual projects and costs may extend across multiple categories.

[44] For example, capital projects on local access roads are not eligible for federal grant funding, so are not considered reasonably likely to be funded and thus are excluded from the STIP.

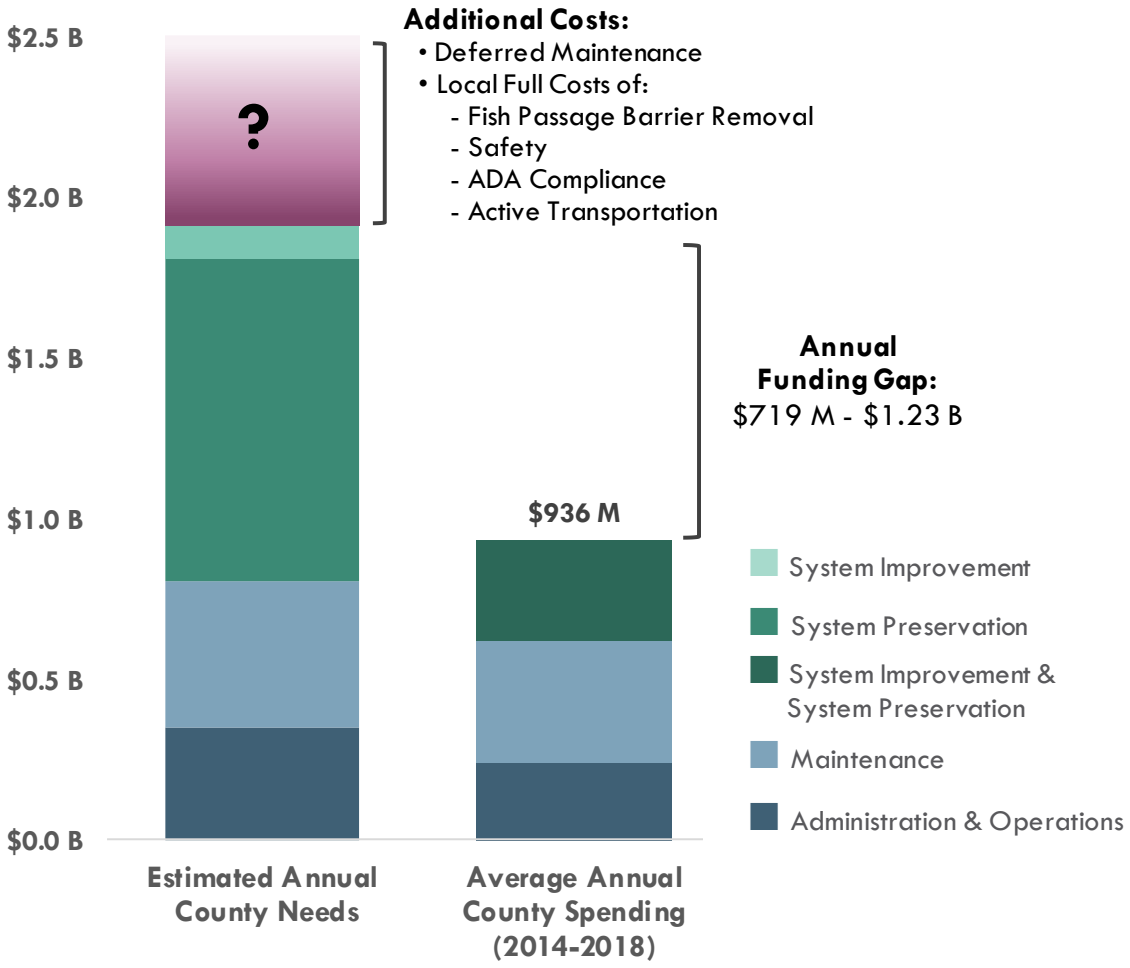
Exhibit 33. Estimated County Needs, Current Spending, and Annual Funding Gap

Expenditure	Estimated Annual County Needs	Average Annual County Expenditures, 2014-2018	Estimated Annual Gap
Programmatic Costs			
Administration & Operations	**$311 M - $380 M**	**$235 M**	
Maintenance	**$412 M - $504 M**	**$383 M**	
SUBTOTAL	***$723 M – $884 M***	***$619 M***	
Capital Costs			
System Preservation	**$849 M – $1.16 B**	System Preservation and System Improvement costs are included in the subtotal below	
Roadways	$318 M - $373 M		
Bridges	$530 M - $791 M		
System Improvement	**$83 M – $119 M**		
Roadways	$77 M - $112 M		
Bridges	$6 M - $7 M		
SUBTOTAL	***$932 M - $1.28 B***	***$318 M***	
TOTAL	**$1.66 B – $2.17 B**	**$936 M**	**$719 M - $1.23 B**

Note: Due to rounding, numbers presented above may not add up precisely to the totals provided.

Sources: WSDOT City Streets and County Roads Dataset, 2014-2018; Highway Performance Monitoring System, 2018; National Bridge Inventory, 2018; County Road Administration Board, 2020; Perteet, 2020; BERK, 2020.

Exhibit 34. Comparison of Estimated Annual County Needs and Actual Average Annual Expenditures



Note: The WSDOT City Streets and County Roads Dataset does not provide expenditure data at a level of detail necessary to disaggregate system improvement and system preservation costs for historical annual county spending. Given this constraint, we combined system improvement and system preservation costs as "system improvement & system preservation" for average annual county spending.

Sources: WSDOT City Streets and County Roads Dataset, 2014-2018; Highway Performance Monitoring System, 2018; National Bridge Inventory, 2018; County Road Administration Board, 2020; Perteet, 2020; BERK, 2020.

We estimate that the annual funding gap for county transportation programmatic and capital needs is between $719 million and $1.23 billion. We present this gap as a range to account for the level of uncertainty inherent when forecasting statewide county transportation needs.

However, the funding gap presented does not tell the whole story. As illustrated in Exhibit 34, counties face additional costs that are challenging to fully quantify and annualize. Due to limitations in our ability to disaggregate and annualize specific costs, ***this base annual funding gap does not include costs of deferred maintenance and full investment costs in fish passage barrier removal, safety, ADA compliance, and active transportation.*** These additional costs are further described in **Sections 5.3 and 5.4.**

5.3. DEFERRED MAINTENANCE

Deferred maintenance is challenging to evaluate as historical spending does not capture the backlog. Our estimates of programmatic and capital needs assume there is sufficient funding to maintain a state of good repair across the system. At ideal funding levels, counties would maintain roads using sound **asset management** principles. However, budget gaps and competing priorities can delay projects necessary to meet ideal asset management targets.

As an order of magnitude estimate, total road deferred maintenance costs for all counties are roughly between $4.7 billion and $6.3 billion— around five to six times total annual transportation expenditures across all counties.

While our cost estimates account for current gaps between mainenance and preservation levels and the investment level required to maintain the lowest lifecycle costs, it is challenging to quantify cumulative impacts of deferred projects:

- Gaps between optimal and actual maintenance and preservation funding in previous years have left a **backlog of projects**. These need to be addressed to bring the system to a state of good repair.
- **Costs compound over time** as preservation and preventative maintenance activities are deferred and facility conditions degrade. Delays in asset preservation increase maintenance costs (e.g., increases in spot repairs required to keep the system functioning) as well as preservation costs (e.g., a full reconstruction rather than a routine seal coating may be required when preservation is deferred and the condition of the road declines).
- **Levels of service can decline** as required maintenance is deferred. This can include poor-quality roads impacting traffic flow or bridges in poor condition requiring weight limitations.

Deferred cost estimates for **bridge preservation** are included in **Section 5.2.2.** To capture an order of magnitude estimate of deferred **road preservation** costs, we used CRAB's County Road Log, which includes pavement surface condition (PSC), location, and lengths of all county roadway segments.

DEFERRED MAINTENANCE AND DEFERRED PRESERVATION

For this study, we use the commonly used term **"deferred maintenance"** to refer to delayed investments that reduce the effective lifetime of assets. Different counties may use these terms differently. We acknowledge that the two terms technically refer to different types of activities.

Deferred maintenance will result in a system in poorer condition in the short-term, and likely a degradation in levels of service. An example is a delay in filling potholes.

Deferred preservation will increase costs for both preservation and maintenance in the future and reduce the effective lifetime of these assets by contributing to a fundamental degradation of the asset. An example is delaying a seal coat treatment on a roadway.

Although in common usage "deferred maintenance" describes what are technically preservation activities, we use this term for these preservation activities.

We used these high-level assumptions:

- Roadways with PCS above 80 follow ideal preservation costs outlined in Section 5.2.2.
- Roadways with PCS between 20 and 80 have deferred maintenance needs between ideal preservation cycles and full reconstruction (i.e., removing and replacing the pavement and base structure).
- Roadways with PSC below 20 require full reconstruction.

Recognizing that needs and costs vary across urban and rural counties, we used OFM's county classification (**Appendix B**) and WSDOT roadway designations (**Section 5.2.2**) to estimate preservation and reconstruction costs per mile in Exhibit 35.

Exhibit 35. Annualized Preservation and Reconstruction Costs per Mile

Cost Estimate Type	Rural	Urban	Source
Preservation	$74,000	$107,000	Ideal preservation costs, averaged across regions and functional class (see Section 5.2.2)
Reconstruction	$790,000	$2,200,000	Sample of county road reconstruction projects in the STIP

Note: Costs per mile above are rounded to two significant digits.

Sources: Perteet, 2020; WSDOT Statewide Transportation Improvement Program, 2020; BERK, 2020.

We applied these cost estimates to roadway segments with a PSC between 20 and 80 using a linear relationship between cost and PSC level to estimate the total deferred maintenance cost in Exhibit 36.

Exhibit 36. Estimated County Deferred Maintenance Costs

Geography	Estimated Deferred Maintenance Gap
Rural Counties	$1.5 B - $2.0 B
Urban Counties	$3.2 B – $4.3 B
All Counties	**$4.7 B- $6.3 B**

Sources: CRAB, 2020; Perteet, 2020; WSDOT Statewide Transportation Improvement Program, 2020; BERK, 2020.

We estimate that total road deferred maintenance costs for all counties are roughly between $4.7 billion and $6.3 billion, representing around ***five to six times*** total annual county transportation expenditures, on average.[45]

IMPACTS OF DEFERRED MAINTENANCE

Thurston County dedicates around **$5 million** annually to pavement preservation activities, but the County Engineer estimates the County would need to spend **$10 million** to maintain its roads in their current condition. By investing less now, the County will ultimately spend more in the long run, as road require more intensive (and expensive) repairs.

In **Okanogan County**, prior to 2008, the Public Works Department chip sealed 100 miles of paved roadway per year. After revenues fell during the Great Recession, the County temporarily paused preservation work and now chip seals 65 miles of roadway per year. This extended the preservation cycle from a **6-year cycle** to a **10-year cycle,** increasing the likelihood of undertaking more expensive road repair and replacement work in the future. While chip sealing a mile of road costs **$33,000**, rebuilding that same mile if it is beyond repair costs **$1 million.**

[45] We report these estimates as ranges based on a minus 10% to plus 20% range around the initial estimated amount to account for uncertainty. This approach of presenting estimates as a range of probable costs based on a percentage above and below initial estimates is consistent with WSDOT Planning Level Cost Estimation methodology.
Murshed, Ph.D., P.E., D., & McCorkhill, P. (2012, December). Planning Level Cost Estimation. Retrieved from Washington

5.4. ADDITIONAL COUNTY INVESTMENTS

The extent to which county investments to meet standards for fish passage barrier removal, active transportation, safety, and ADA are already embedded into programming and budgeting, and therefore into the baseline data we used to estimate the annual funding gap, varies by county. Because these costs are impossible to fully capture and annualize, we describe these investments in the following sections and provide cost estimates where available.

- **Fish passage barrier removal** is not included the funding gap as a completed inventory is still needed for a full picture of city and county investments. However, WDFW has estimated the cost to counties as at least **$4.7 billion (Section 5.4.1).**
- While baseline engineering for **safety** is included in many preservation or system improvement costs, we do not have a full inventory of safety needs by local jurisdiction. However, in 2019, 30 counties submitted Local Road Safety Plans to WSDOT's County Safety Program, requesting **$79 million** in funding (**Section 5.4.2**).
- While **ADA investments** have long been integrated into the preservation and system improvement costs our model relies on, we do not include the investment required to fully implement ADA Transition Plans as they may include costs other than transportation, such as access to government buildings and services (**Section 5.4.3**).
- While **pedestrian and bicycle infrastructure** is included in some projects based on standards set by local jurisdictions, there are other additional system improvement projects that would promote active transportation that are not captured by our estimates (**Section 5.4.4**).

5.4.1. Fish Passage Barrier Removal

A major cost driver expected in future transportation budgets is management and replacement of culverts and other structures on fish-bearing stream channels.

Federal Court Injunction

In 2001, 21 Tribal Nations 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 court decision, upheld by the US Supreme Court in 2018, requires the State to address culverts that present a barrier to fish migration. This work, involving around 800 fish barriers, must be completed by 2030. WSDOT estimates that the State bears a $3.1 billion unfunded need to address compliance with the 90% habitat requirement of the court injunction by 2030 and to address non-significant barriers that reach their end of service life during that time period.[46]

State Department of Transportation.

[46] WSDOT, *Draft Unfunded Needs List*, 4/17/2020.

Impacts to Counties

Although the Federal Court order focuses on State-owned culverts and other fish barriers in Western Washington,[47] the scope of this decision means that other city and county agencies may also face ongoing obligations to remove fish barriers on stream channels. There are typically multiple barriers on fish-bearing streams, many of which are managed by different stakeholders. A 2012 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. WDFW construction standards for new stream-crossing structures are stricter than for existing ones, so counties now pay more to replace a damaged culvert (even one that is considered passable in WDFW's inventory) to meet those requirements. Final outcomes in restoration that support fish 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 counties with fish passage barriers are **already planning for these needs** and evaluating costs required. Additional inventories and cost estimates are needed to evaluate the full scope of the issue, but fish barrier removal will impose significant additional costs on counties beyond the gaps already identified. This can present significant challenges to meet needs with available transportation funding.

Inventory and Costs

WDFW has been coordinating statewide inventories of fish passage barriers, with the location of over 19,000 barriers publicly released to date.[48] The State has provided grant support for fish passage barrier removal through the Brian Abbott Fish Barrier Removal Board (FBRB), established in 2014 and administered by WDFW and the Recreation and Conservation Office. Additional inventories and cost estimates will be needed to evaluate the full scope of the issue, but ongoing barrier removal will impose additional costs on county transportation budgets.

WDFW is still carrying out inventories of fish passage barriers. As of March 2020, WDFW provided preliminary estimates of the full costs of reconstructing culverts across the entire state, including outside of the court injunction area. ***WDFW estimates that counties face at least $4.7 billion in costs to address fish passage barriers.***[49] 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.

FISH PASSAGE BARRIER REMOVAL IN THURSTON COUNTY

Since 2017, Thurston County's Board of Commissioners has dedicated $2 million per year for fish passage improvement projects. The County has consulted the Squaxin, Chehalis, and Nisqually Tribal Nations in selecting projects.

One such project is the Hunter Point Road project, which replaced a culvert with an 80-foot prefabricated bridge in 2018. The next year, the County saw the first salmon in more than 100 years swim up the creek under the bridge.

As of 2020, the County has completed eight fish passage projects, funded by county real estate excise tax (REET) dollars and federal and state grants. The projects have freed up seven miles of previously blocked fish habit.

More information is in the Thurston County case study in Appendix C.

[47] Map of court injunction area: https://www.wsdot.wa.gov/Projects/FishPassage/CourtInjunction.htm
[48] WDFW, *Barrier Estimate for SOS Report, 3/27/2020.*
[49] WDFW, *Barrier Estimate for SOS Report, 3/27/2020.*

Looking Ahead

As the State pursues funding to meet its court order for fish passage barrier removal, some counties are already coordinating fish passage barrier removal projects, often in collaboration with Tribal Nations. Long-term efforts will involve a comprehensive, collaborative approach across jurisdictions and funding support to counties.

5.4.2. Investments in Safety

While local agencies do not specifically estimate costs of all safety needs, many counties have submitted road safety plans to WSDOT's City and County Safety Programs, the purpose of which is to reduce fatal and serious injury crashes on city streets and county roads.

The County and City Safety Programs take place every two years on alternating years. Each project must have a schedule for work that begins prior to the next call for projects. Since 2014, 37 counties and 50 cities have developed a Local Road Safety Plan. To incentivize using this funding, while federal safety funds require a 10% match, WSDOT waives this match for construction and matches with toll credits if agencies can obligate those funds within a certain time period.

In 2019, 30 counties submitted plans as part of applications for federal Highway Safety Improvement Program funding with WSDOT's County Safety Program. In total, counties requested **$79 million** in projects, while WSDOT's County Safety Program has $25 million available per year.[50]

For this study, we consider three broad categories of safety investments. Some are embedded into our funding needs and funding gap estimate, while others cannot be disaggregated:

- **Preservation.** Our calculations to estimate preservation costs incorporate safety costs.
- **System improvement projects.** Our calculations for system improvement projects include safety costs.
- **Specific projects to address system safety gaps.** Aside from identified preservation and system improvement expenditures, we do not include specific projects to address system gaps in the funding needs and funding gap estimate.

Exhibit 37 summarizes whether these costs are included in our funding gap estimate.

Exhibit 37. Types of Safety Investments

Types of Safety Investments	Inclusion in Base Funding Gap Estimate
Preservation	Included
System improvement projects	Included
Specific projects to address system gaps	Not included

Source: BERK, 2020.

[50] WSDOT Local Programs, 2020.

5.4.3. Investments in ADA Compliance

The Americans with Disabilities Act of 1990 (ADA) requires local and state governments to prevent discrimination against people with disabilities and mandates accessibility improvements to ensure that all users of the transportation system can access services. Title II of the ADA specifically includes roadways and pedestrian infrastructure as well as public buildings, parks, and other facilities.

Under ADA requirements, all public agencies are required to identify, inventory, and evaluate current access deficiencies through a self-evaluation. These self-evaluations highlight barriers to access and obligate the agency to pursue remedial action. Agencies with more than 50 employees are also required to retain their self-evaluations for three years to ensure compliance.

Agencies with more than 50 employees are required to develop a Transition Plan (or "Program Access Plan") to detail how to make their facilities more accessible, including a schedule to achieve compliance. This requires transportation projects to incorporate ADA-compliant features, as well as additional projects to address obstacles to accessibility beyond currently scheduled transportation projects.

ADA compliance in current capital projects (preservation and improvement) generates additional costs associated with improved facilities for access, such as improved signals, curb cuts, and removal of barriers. Accessible features are essential and mandatory components of contemporary standards, and without commensurate increases in funding, they compete with other scarce resources and reduce the extent of jurisdictions' other transportation preservation or system improvement investments.

Although ADA Transition Plans are necessary with mandated content under the Act, not all jurisdictions have implemented or updated ADA Transition Plans or have included a comprehensive estimate of the cost of compliance in public reporting. It is unclear how much of this estimated cost would be folded into existing capital projects or draw upon other funding sources (e.g., Safe Routes to Schools), so the actual distribution of costs beyond expected preservation and system improvement projects is unknown.

ADA TRANSITION PLANS

Pierce County released its 2019 ADA Transition Plan, which indicated the need for $96 million in investments to address barriers with pedestrian signals, curbs, driveways, and sidewalks.

Source: Pierce County, Americans with Disabilities Act Transition Plan for Public Rights-of-Way, 2020.

For this study, we consider four broad categories of ADA compliance costs. Some are embedded into our needs estimate, while others cannot be disaggregated:

- **Preservation.** The calculations we use to estimate preservation costs incorporate general ADA compliance costs (e.g., curb cuts or accessible signals).
- **System improvement projects.** Cost estimates for system improvement projects assume that projects are ADA-compliant and fully internalize costs of accessibility under ADA requirements. Other improvement projects identified for safety and accessibility in the STIP and RTIPs may also be incorporated into these estimates.
- **Specific projects to address system accessibility gaps.** Aside from identified preservation and system improvement expenditures, ADA Transition Plans may have a schedule for other improvements beyond existing system improvement estimates. We do not include these costs.
- **Full implementation of ADA Transition Plans.** ADA Transition Plans may include other costs beyond transportation, such as access to government buildings and services. We do not include these costs.

Exhibit 38 summarizes types of ADA compliance investments and whether these costs are included in our funding needs and funding gap estimate.

Exhibit 38. Types of ADA Compliance Investments

Types of ADA Compliance Investments	Inclusion in Base Funding Gap Estimate
Preservation	Included
System improvement projects	Included
Specific projects to address system gaps	Not included
Full ADA Transition Plan implementation	Not included

Source: BERK, 2020.

5.4.4. Investments in Active Transportation

Active transportation, including walking, biking, and other types of non-motorized transportation, is becoming a greater focus with the management of the transportation system by transportation-related agencies across the state. Pedestrians and cyclists using the existing transportation system are at risk of fatal and serious injuries from traffic crashes, and active transportation investments can improve safety. Providing environments that are walkable and bikeable can also increase access to local destinations, including for those that may not necessarily be able to drive. Finally, active transportation with complete networks can make the current transportation system more efficient, reducing traffic and parking demands in certain situations.

WSDOT provides grants that support local active transportation projects. The two primary sources of funding are:

- Safe Routes to Schools Program ($71 million for 215 projects for 2005-2017)
- Pedestrian and Bicyclist Program ($72 million for 158 projects for 2005-2019)[51]

For counties, active transportation is managed through local pedestrian and bicycling plans. For some agencies, active transportation may be the standard, and multimodal corridors may be the norm. However, specific perspectives on needs and commensurate levels of service vary from community to community. As a result, our system improvement estimates include partial accounting of active transportation needs at the local level.

[51] WSDOT, *Pedestrian and Bicycle & Safe Routes to School Programs 2019–2021 Prioritized Project List and Program Update*, 2018.

6.0. Conclusions and Recommendations

6.1. CONCLUSIONS

Our analysis found that counties face **structural revenue challenges** to two key revenue sources, the county road fund property tax and the state gas tax, including:

- Declining share of gas tax allocations.
- Reduced tax base from annexations and incorporations.
- Property tax one percent limit.
- Property tax road fund diversions and shifts.

Meanwhile, county transportation departments face **rising costs** related to:

- Deferred maintenance costs.
- Increasing gravel costs.
- Environmental regulations and costs.
- Costs to replace bridges at the end of their lifespan.

We estimate that the annual base funding gap for county transportation programmatic (administration, operations, maintenance) and capital (preservation, system improvement) needs is **$719 million to $1.23 billion.** This is **around half of estimated county needs** for programmatic and capital expenses.

Beyond this base funding gap, there are additional costs we cannot fully disaggregate and annualize:

- **Deferred maintenance.** As an order of magnitude estimate, total road deferred maintenance costs for all counties are roughly between **$4.7 billion and $6.3 billion**—around five to six times annual transportation expenditures across all counties.
- **Fish passage barrier removal.** WDFW has estimated the cost to counties as at least **$4.7 billion.**
- **Safety investments:** While we cannot fully disaggregate the full cost of safety investments, in 2019, 30 counties requested **$79 million** in road safety funding through WSDOT's County Safety Program.
- **ADA investments.** We cannot fully disaggregate costs of ADA investments in transportation projects.
- **Active transportation.** We cannot fully disaggregate costs of active transportation investments in transportation projects.

Without changes, counties will be unable to invest fully in roadway and bridge preservation, fish passage barrier removal, ADA access, safety, and active transportation. Deferred maintenance will grow, leading to deteriorating road conditions, potential safety hazards, and escalating catch-up costs.

6.2. RECOMMENDATIONS

Based on our findings, we recommend the following actions for state policymakers. As we discuss under Option E, we recommend that counties continue to implement funding options that are feasible in their communities. Additional options will require new state resources or state statutory changes.

Exhibit 39. Summary of Recommendations

Recommendation	New State Resources Required?	Statutory Change Required?
A. Increase support for preservation through new or focused funding, incentives, and services to reduce lifecycle costs.	Highly desirable, though advances can be made through focusing existing funding	Yes
B. Increase efficiencies to capture greater value with existing funding.	No	Yes
B1. Implement a federal funds exchange program to use federal funding most efficiently.	Revenue neutral, can be accomplished with existing resources	Yes
B2. Extend use of toll credits to federally funded local projects so more projects benefit from eliminated match.	No	Yes
B3. Collaborate across governments and levels of government to achieve best systemwide outcomes.	Desirable, but can be accomplished with existing resources	Depends
C. Ensure any state alternative to the gas tax preserves revenue sharing with counties and maintains requirements that funding be invested for transportation purposes.	No	No
D. Strengthen incentives not to shift or divert county road levy funds.	Yes	Yes
E. Expand or enhance county transportation funding options.	No	Yes
E1. Increase flexibility and clarity of the local option Motor Vehicle and Special Fuel Tax.	No	Yes
E2. Implement adjustments to Transportation Benefit District sales tax to help counties raise more revenues for transportation using an existing authority.	No	Yes
E3. Clarify rules and requirements surrounding local option tolls.	No	Yes
E4. Allow property tax rates to match economic conditions so revenues keep pace with expenditures.	No	Yes

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

Our analysis found a significant gap in funding preservation for county transportation infrastructure and facilities. Delayed investments lead to deteriorating road conditions and higher lifecycle costs. As is true with state highways and city streets, if counties cannot afford to maintain roads in a state of good repair, deferred maintenance grows, further increasing lifecycle costs, deteriorating service quality, and increasing concerns about safety.

We recommend increased funding for county road preservation through focused funding and incentives. Several options exist:

- **Increase CAPP resources and create more incentives for increased road preservation.** CAPP is funded by the MVFT and distributed to counties according to a formula based on county road arterial miles if the counties use a PMS. CAPP funding is desirable because it is currently restricted to road preservation uses and cannot be diverted for other county expenses. Without changing the existing distribution, we recommend increasing the funding available through CAPP and tying that additional distribution and its uses to pavement condition:
  - Counties with road conditions below a specified pavement surface condition (PSC) must use the additional distribution on preservation. This would focus state money on investments that are most cost effective.
  - Counties with roads in good condition (above a specified PSC) would be allowed to use this distribution for any transportation purpose, as is the case with current CAPP monies.

INCENTIVIZING PRESERVATION IN OTHER STATES

California's Local Streets and Roads Program distributes $1.5 billion annually from the Road Maintenance and Rehabilitation Account (RMRA) to cities and counties through a distribution formula. RMRA distributions include a restriction on the use of funds based on whether the local agency's average pavement condition index (PCI) meets or exceeds 80 (good – excellent). Below 80 PCI the funds are restricted to pavement rehabilitation, but if the local agency maintains their pavement at or above 80 PCI they have flexibility to fund transportation needs based on local priorities.

Source: California Transportation Commission, 2017, Local Streets and Roads Program.

- **Incentivize investments with a sliding match scale.** Additional funding for preservation grants should be available to counties regardless of their size. Match requirements should utilize a sliding scale with low or no match for small counties and higher match requirements as county fiscal capacity rises. Incentivizing greater funding participation from counties with higher fiscal capacity creates a multiplier effect that produces more miles of resurfacing in each project. Requiring low or no match from low tax base counties ensures they can access the grants without funding hardships.

B. Increase efficiencies to capture greater value with existing funding.

B1. Implement a federal funds exchange program to use federal funding most efficiently.

Federal resources are critical for funding state and local transportation projects. Federal funds administrators should work carefully with local and regional government agencies to use federal aid more efficiently, particularly with regard to relatively smaller projects (less than approximately $500,000) in which the design and construction management requirements that come with the use of federal funds create a disproportionate burden. In 2011, the Transportation Research Board stated, "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."[52] 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."[53]

Federal reporting requirements are costly and time-consuming. Small-scale projects 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. These requirements include an environmental review process; compliance with a federal law requiring that federal public works projects pay local prevailing wages; 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, reporting on these requirements is difficult to meet cost-efficiently on relatively small projects or by relatively small agencies. Because reporting requirements take longer and may require additional personnel on-site, contractors often bid higher amounts on federal projects.

The GAO compared two similar projects in Florida, one using only local funds and one with federal funds. The project using federal funds cost twice as much ($299,000 compared to $135,000) and took three times as long (38 months compared to 11 months) to complete than the local project, as illustrated in Exhibit 40.

[52] NCHRP Synthesis 414, Effective Delivery of Small-Scale Federal-Aid Projects, National Academies of Science, 2011
[53] GAO-14-113; GAO, "Federal-Aid Highways: Federal Highway Administration Could Further Mitigate Locally Administered Project Risks," January 2014.

Exhibit 40. 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.

This example aligns with what we heard in interviews with counties.

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 less resourced counties. 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.

Options for Consideration

The use of federal dollars by local agencies 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 use them as strategically as possible.** This approach would seek to use federal funds on state-managed projects and large projects that can absorb the higher overhead associated with federal requirements. State resources, which come with fewer requirements, would be used to fund local projects that would have made less efficient use of federal dollars.

BANKING FEDERAL FUNDS

One idea we heard in county interviews was an interest in banking forward federal funds for a project, rather than needing to use funds immediately. Currently, counties need to use federal funds within a limited amount of time, so they find a project that fits. Under banking, counties could save up federal funds, pursue other funds and matches, and apply these pooled resources to a project.

- **Establish a federal funding exchange program to allow local agencies to trade already-distributed federal resources for state funds**. In this case, state funds would be used to capitalize defederalization of participating local projects. The use of state funding is revenue neutral to the State, 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 a federal funding exchange often entails a discount in other states, we recommend setting fees, if any are to be applied, 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 (RTPAs) less than 200,000 population.[54] RTPAs can elect to participate. California Senate Bill 137, passed in 2019, extends fund exchanges to bridge and Highway Safety Improvement Program projects.[55]
- **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.[56]
- **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 eligible, and cities above population of 5,000 except for cities in metropolitan planning organizations with population over 200,000 are eligible.[57]

[54] Chapter 18, Local Assistance Program Guidelines, CALTRANS.
[55] California Legislature, Senate Bill 137, 2019.
[56] 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*
[57] Oregon Department of Transportation, *https://www.oregon.gov/ODOT/LocalGov/Documents/Fund-Exchange-Overview.pdf*

B2. Extend use of toll credits to federally funded local projects so more projects benefit from eliminated match.

Toll credits are a federal aid matching strategy. Under *United States Code, Title 23, Section 120(i)*, states may substitute certain previous toll-financed investments for state matching funds on current federal aid projects.[58] Toll credits do not generate new money, but instead serve as a "soft match" substitute for the non-federal share of most highway and public transportation projects. States and MPOs may earn toll credits based on the amount of toll revenue used by a toll authority for building, improving, or maintaining highways, bridges, or tunnels that serve interstate commerce.

Currently, in Washington, only WSDOT and Washington State Ferries (WSF) use state tolls and ferry fares as an offset to federal match requirements. The amount of toll credits earned by the State is based on the amount of toll revenues expended by toll authorities.[59]

- WSF is a toll authority, and ferry fare box revenues qualify for eligible toll credits, up to the amount of capital expenditures by WSF in a year.
- Expenditures on the Tacoma Narrows Bridge project also qualify as eligible toll credits since the toll revenues will be used to pay for debt service for bonds issued on this project.

TOLL CREDITS IN OTHER STATES

28 out of 52 states plus D.C. and Puerto Rico use toll credits.

Toll credit usage can vary across states, given the amount of FHWA approved toll facilities. Certain states such as New Jersey have accumulated more credits than they can use. As of 2019, New Jersey had $5.3 billion in toll credits. Historically, these credits have been largely used for transit system projects such as for bus acquisitions, light rail infrastructure improvements, and bus and rail preventative maintenance. Meanwhile, states such as Kentucky are facing funding gaps when their toll credits run out. Kentucky's toll credit usage averaged around $122 million over the past decade and was primarily used for highway or bridge projects.

Sources: FHWA, *"What is a toll credit?";* Kentucky Infrastructure Coalition, *"Transportation Infrastructure Funding Assessment and Economic Impact Analysis for the Commonwealth of Kentucky"*, 2017; Texas A&M Transportation Institute, "*Use of Federal Toll Credits and Transportation Development Credits by States and Regional Planning Entities,"* 2013.

We recommend that the State extend the use of toll credits to federally funded local projects so more projects benefit from an eliminated match. The federal policy already allows the State to use toll credits on any federally funded projects, including local projects.

[58] FHWA, Federal-aid Matching Strategies, https://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_aid/matching_strategies/toll_credits.aspx
[59] WSDOT, 2020-2023 Statewide Transportation Improvement Program (STIP).

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

Users expect city streets, county roads, and state highways to function as an interconnected system, but the need to keep funding separate has created silos that may prevent the leveraging of government buying power and other efficiencies in managing this infrastructure. For example, smaller units of government tend to buy smaller units of price elastic services and commodities. Cooperative bidding for pavement services, for example, can save up to 40 percent of resurfacing costs as paving costs less per ton of asphalt in higher quantities.

Many opportunities exist to collaborate across levels of government and jurisdictional boundaries to achieve more efficient and effective use of resources.

- **Promote an expectation that different levels of government share equipment, commodities, and bidding to break down silos.** Some examples include:
  - **Increase efficiencies in road preservation by compensating county road crews for work in small 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 and crack sealing is highly efficient, costing about a third less than individual small-scale projects. Counties also have skilled crews that seal many road miles. The State should work with counties to standardize the practice of tapping the efficiency, equipment, and skills of county crews for small city preservation. Counties benefit from revenue generated as a service provider and the additional work helps retain and develop skilled staff. The system also benefits from reduced unit costs and less duplication of skills and equipment.
  - **Co-purchase efficient asphalt paving contracts with WSDOT.** A TIB study in 2002 determined that WSDOT pays about 40% less per ton of asphalt than small governments in the same locations, mostly due to economies of scale. Larger quantities of asphalt cost less per ton. Cooperative contracting on nearby projects among all levels of government provides an opportunity to buy greater quantities of asphalt at local cost per ton. Not all projects can produce economies of scale, but where possible, cooperative purchasing should be a standard practice between the State, counties, and cities.
  - **Foster policies and cultural expectations to allow low cost rental and acquisition of lower usage equipment and supplies across levels of government.** Washington has several good examples of leveraging efficiencies between state and local government. The Washington State Department of Enterprise Services has well developed purchasing contracts available to local governments. WSDOT operates highway shops statewide and often has equipment that is not readily available to local governments. The State and local agencies should exchange commodities and less utilized equipment at a low cost rather than duplicate them to increase efficiencies.

C. Ensure any state alternative to the gas tax preserves revenue sharing with counties and maintains requirements that funding be invested for transportation purposes.

As the State considers potential new transportation revenues in future legislative sessions, we recommend that any new statewide transportation revenue source should ***preserve the sharing of revenues with counties***.

As vehicles become more fuel efficient and consumers use less gas, the State has considered an alternative to the gas tax. The State conducted a road usage charge pilot project from 2018-2019 and in January 2020, the Washington State Transportation Commission (WSTC) submitted its final report recommending a phased transition to a road usage charge.[60] If such a charge is implemented as a replacement to the gas tax, we recommend ***ensuring that revenues are shared with counties and that their use is restricted to 18th Amendment purposes.***

D. Strengthen incentives not to shift or divert county road levy funds.

As discussed in **Section 3.5.4**, counties in Washington State can shift or divert revenues from their county road funds and use them for purposes other than those typically authorized. In many cases, this money is shifted away from capital facilities to public safety.

Counties provide a broad range of services, some mandated, and some provided by the county in its role as a regional service provider. Mandated criminal justice expenditures including courts, jails, and medical examiners are provided by counties as agents of the State and make up a large share of general fund expenses. In recent years, the State has issued new rules around defender services and courts without providing additional or adequate funding to comply with these new rules. This leaves counties with difficult decisions about service delivery and often results in road funds being diverted from transportation to pay for state mandated services.

We do not recommend eliminating this option entirely as levy diversions and levy shifts provide counties with flexibility and local authority in how to use their funds. Instead, we propose ***using incentives to encourage counties to invest these funds*** in their transportation system. To this end, we recommend ***augmenting existing CAPP resources with additional funds designed to*** disincentivize road levy shifts and diversions through a graduated scale; counties that do not use levy shifts and diversions would receive a higher additional increment than counties that use levy shifts or diversions.

E. Expand or enhance county transportation funding options.

In **Section 3.4**, we describe local transportation funding options for counties. Transportation services compete for unrestricted dollars like REET, lodging tax, or other taxes with other important county priorities. Many counties already use transportation-restricted options that are applicable and politically feasible given their local context. All counties use a road fund property levy, around a dozen have used an RID, and half a dozen counties use transportation impact fees.[61] We recommend that counties continue to use any local options that are viable in their communities. At the same time, our study finds that several existing county transportation options are not applicable or feasible to all counties.

[60] Washington State Transportation Commission, Road Usage Charge Assessment Final Report, 2020. https://waroadusagecharge.org/final-report/.
[61] More information on RIDs and impact fees is in Section 3.4.1.

Evaluation of Potential Alternative Local Options

Considering potential alternative options for counties, we evaluated transportation funding sources using the criteria below. All these options would require state action to implement.

- **Order of Magnitude.** What is the fundraising strength of this revenue option?
- **Growth.** How is this revenue source expected to grow or decline in the future?
- **Applicability.** How widely applicable is this option, considering current restrictions on eligible expenditures and jurisdictions that may use this?
- **Stability.** How stable is this revenue source?
- **Equity.** How much does the revenue option align the burden of who pays the tax/fee/charge with who potentially benefits?
- **Ease of Administration.** How operationally or administratively feasible is the option? How easy is it to implement?
- **Political Feasibility.** How politically feasible is the option?

USING LOCAL OPTIONS

We heard in some interviews that there may be options or resources that not all counties are aware of:

- A portion of state sales tax can be returned to rural counties if it is requested for local economic development projects. (RCW 82.14.370)
- REET may be used for infrastructure. (See Appendix A)
- Non-GMA counties may use LTA impact fees. (See Appendix A)

The local options we evaluated include existing funding tools with adjustments to make them more accessible to county use as well as potential new tools that counties could use to fund transportation. A brief description of each funding tool evaluated is below, and the evaluation is summarized in Exhibit 41:

- **E-bicycle or Bicycle Sales and Use Tax.** This option evaluates a councilmanic 1% sales and use tax on bicycles sold in the county. The revenues collected under this tax would be dedicated to transportation. Note that if sales happen in incorporated areas, counties would not benefit from this revenue.
- **Lift 1% Property Tax Cap.** Currently, growth of property tax revenue is limited to 1% plus the value of new construction. This option would allow jurisdictions to lift that cap permanently by voter approval. This option evaluates increasing the limit to 3% or the current rate of inflation, whichever is less in any given year.
- **Local Option Motor Vehicle** and **Special Fuel Tax.** This option makes the language around the motor vehicle and special fuel tax more flexible to allow counties to impose a tax of *less than* 10% of the statewide fuel tax rate, rather than *equal to* 10%; and require that the ballot communicate the tax rate *in cents* to make it more relevant and easier to understand for voters.
- **Local Option Transportation-Restricted Rental Car Sales Tax.** Currently, counties can implement a sales and use tax of 1% upon car rentals countywide but the revenues must be used for public stadium facilities and youth/amateur sports activities and facilities. This option allows counties to implement a sales and use tax of 1% upon car rentals countywide and dedicate the revenues to transportation.

- **Local Option Tolls.** Currently, TBDs can authorize tolls on state routes or federal highways, city streets, or county roads within district boundaries but the revenues may be restricted to toll facilities. This option as evaluated, allows counties, in addition to TBDs, to implement an additional increment on existing tolls and dedicate them to county transportation.
- **Street Utility Charge.** This option treats transportation systems like utilities in which residents and businesses pay based on their use of the system, in this case charged based on the number of trips generated by different land uses, rather than on the value of their property. The Washington State Supreme Court declared previously enacted City Street Utility Charges unconstitutional in 2012, so it is likely that a County Street Utility Charge would also be unconstitutional.
- **Transportation Benefit District (TBD) Sales Tax Adjustment.** This option allows the TBD to be imposed by councilmanic action, doubles the sales tax rate to 0.4%, and removes the 10-year sunset provision from the RCW to allow the TBD sales tax option to exist in perpetuity like other voted sales tax options.
- **Transportation Impact Fee Adjustment - Local Transportation Act (LTA).** Counties can charge impact fees under the Growth Management Act (GMA) and the Local Transportation Act (LTA). Impact fee revenue collected under GMA must be expended or encumbered within 10 years, while impact fees collected under LTA must be expended within six years. This option aligns the expenditure timeframe for LTA impact fees to 10 years to match that of GMA impact fees.

Below is an example describing the evaluation of local option tolls in Exhibit 41.

- **Fundraising Strength.** Local option tolls are estimated to generate $775,000 in revenue for the counties that could implement them under the proposal described above. This estimate assumes counties would implement a toll set at 1% of the current tolling rate. On average, this would be a toll of $0.01 - $0.06 depending on the facility and time of day. **$$$**
- **Growth.** This revenue is expected to remain the same in the future. →
- **Applicability.** The applicability of local option tolls is low; this revenue tool is limited to a few counties that have tolling facilities.
- **Stability.** This revenue source has medium stability. During economic downturns, travel may diminish but would not disappear.
- **Equity.** This revenue source is highly equitable in terms of who pays and who benefits since the direct users of the road are the ones paying the toll.
- **Ease of Administration.** It would be relatively easy to implement an additional county toll on current tolling systems but would require coordination with WSDOT and WSTC.
- **Political Feasibility.** Extending the use of local option tolls to counties and allowing uses for transportation purposes might require some legislative work to implement.

Exhibit 41. Evaluation of Alternative Transportation Funding Sources

Summary of Alternative Transportation Funding Sources

Fundraising Strength	What is the fundraising strength of this revenue option for eligible counties?
Growth	How is this revenue source expected to grow or decline in the future?
Applicability	How widely applicable is this option, considering current restrictions on eligible expenditures and jurisdictions that may use this?
Stability	How stable is this revenue source?
Equity	How much does the revenue option align the burden of who pays the tax/fee/charge with who potentially benefits?
Ease of Administration	How operationally feasible is the option? How easy is it to implement?
Political Feasibility	How politically feasible is the option?

Revenue Options	Fundraising Strength *(scale below)*	Growth	Applicability	Stability	Equity	Ease of Administration	Political Feasibility
E-bike and Bicycle Transportation-dedicated Sales Tax	$	↗	🟡	🔴	🟡	🟢	🔴
Lift One Percent Property Tax Cap	$$$	→	🟢	🟢	🟡	🟢	🔴
Local Option Motor Vehicle and Special Fuel Tax Adjustment	$$$	↘	🟢	🟡	🟡	🔴	🟡
Local Option Transportation-Restricted Rental Car Sales Tax	$$	→	🟡	🔴	🟡	🟢	🟡
Local Option Tolls	$$$	→	🔴	🟡	🟢	🟡	🟡
Street Utility Charge *Found unconstitutional by State Supreme Court*	$$$$	→	🟢	🟢	🟢	🔴	🔴
Transportation Benefit District Sales Tax Adjustment	$	↗	🟡	🔴	🟡	🟢	🟡
Transportation Impact Fee Adjustment - LTA	$	→	🔴	🔴	🟡	🟢	🟡

Legend

Median Annual Fundraising Strength per Eligible County		Growth	Applicability	Stability, Equity, Ease of Administration, Political Feasibility	
$	<$200 K	↗ Expected to grow	Applicable to nearly all counties/expenditures	🟢	High
$$	$200 K - $500 K	→ Expected to remain the same	Applicable to some counties/expenditures	🟡	Medium
$$$	$500 K - $1.5 M	↘ Expected to decline	Applicable to limited counties/expenditures	🔴	Low
$$$$	>$1.5 M				

Source: BERK, 2020.

After evaluating the options in Exhibit 41, we propose expanding or enhancing county transportation funding options through the following actions:

- Increase flexibility and clarity of the **local option Motor Vehicle and Special Fuel Tax.**
- Implement adjustments to **Transportation Benefit District** sales tax to help counties raise more revenues for transportation using an existing authority.
- Clarify rules and requirements surrounding **local option tolls.**
- Allow **property tax rates** to match economic conditions so revenues keep pace with expenditures.

E1. Increase flexibility and clarity of the local option motor vehicle and special fuel tax.

RCW 82.80.010(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 Appendix A.

We recommend the following:

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.

COUNTY GAS TAXES IN OTHER STATES

Oregon. Two counties in Oregon (Multnomah and Washington counties) collect a county gas tax, and both distribute some of the revenues to cities within their jurisdictions. Over two dozen cities also collect a city gas tax, though the exact number changes by month.

Sources: Association of Oregon Counties, County Road Needs Study, 2014; Oregon DOT, Current Fuel Tax Rates.

Florida. Counties in Florida are authorized to collect up to 12 cents of local option fuel tax for transportation purposes through three separate levies. (1) a 1-cent tax on every gallon of motor and diesel fuel sold in a county; (2) a 1- to 6-cent tax on every gallon of motor and diesel fuel sold in a county; and (3) a 1- to 5-cent tax on motor fuel sold in a county (diesel is not subject to this tax).

To equalize local diesel taxes specifically, the levies on diesel fuel are imposed at their maximum rate statewide, regardless of whether a county has imposed the tax on motor fuel.

Sources: Florida Department of Revenue, Local Option Taxes, 2020.

We believe these changes will make it easier for counties to enact this tax without substantially changing the intent of the original law.

This adjustment was proposed in Senate Bill 6652 and House Bill 2362 (companion bills) in the 2019-2020 legislative session; the bill did not pass.

E2. Implement adjustments to transportation benefit district sales tax to help counties raise more revenues for transportation using an existing authority.

RCW 82.14.0455 currently allows Transportation Benefit Districts (TBDs) 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 counties have the option to reintroduce the tax to the voters every 10 years in perpetuity.

There are several options that would improve the TBD Sales Tax Option by making it more accessible or creating more revenue generation:

- **Extend the length of tax or remove the sunset.** Uncertainty over the duration of this source makes it harder to use for projects or to support a long-term maintenance program.
  - One option is to remove the 10-year sunset provision from the RCW to allow the TBD sales tax option to exist in perpetuity like other voted sales tax options. This adjustment would use an existing authority while increasing revenue-generating potential of an existing revenue source.
  - Another option is to double the length of the tax to 20 years, similar to what was proposed in the 2019-2020 legislative session in Senate Bill 6652 and House Bill 2362 (companion bills), which addressed local transportation revenue options.
- **Double the allowable sales tax rate.** Another option is to raise the existing TBD sales tax rate to 0.4% similar to Senate Bill 6652 and House Bill 2362 (companion bills).
- **Allow the sales tax to be imposed by councilmanic action.** This was included in Senate Bill 6652 and House Bill 2362 (companion bills).

E3. Clarify rules and requirements surrounding local option tolls.

Washington currently has five toll facilities: SR 520 Bridge, Tacoma Narrows Bridge, SR 167 HOT Lanes, I-405 Express Toll Lanes, and SR 99 Tunnel. Additional tolling is authorized on new sections of SR 167 and SR 509. Under RCW 47.56.820(2), state toll revenues must be dedicated to funding the facilities or infrastructure where the tolls are collected, however, this appears not to apply to local option tolls on the state highway. The Legislature authorizes tolls, the WSTC sets rates and policy, and WSDOT implements toll facilities.

Under RCW 36.73.040 and RCW 47.56.078, TBDs may authorize tolls on state routes or federal highways, city streets, or county roads, within district boundaries.

We recommend clarifying whether local option toll revenue is restricted to the facilities where tolls are collected or whether these funds may be invested in other facilities.

LOCAL OPTION TOLLING IN OTHER STATES

Local option tolling has been used in other urban areas including Dallas-Fort Worth, Houston, Miami, New York City, Orange County-California, Orlando, San Diego, and Tampa.

In most of these areas, a regional entity creates a system of toll facilities, where the toll revenues are managed as part of a system, and tolls are pledged to bonds that construct those facilities. These toll revenues may be leveraged to help improve existing toll facilities and to build new toll facilities.

Source: Transportation Futures Task Force, Overview of Transportation Funding, April 2015.

TBDs may authorize a local toll increment on a state highway toll, following the guidelines in RCW 36.73.040 and RCW 47.56.078. This authorization would benefit from a clarification. State highway tolls must be expended on the tolled facility, but it appears this limitation does not extend to local option tolls on the state highway. The reference to consistency with RCW 47.56.820 should be clarified to apply only to 47.56.820(1), requiring toll authorization from the Legislature. If RCW 47.56.820(2) also applies, requiring tolls to be expended only on the toll facility, there would be no reason for a local agency to utilize toll authority on a state highway as authorized by RCW 36.73.040(d).

A related potential option is to expand the authority to implement local option tolls to other local jurisdictions, including counties.

Expanding local option toll authority to counties could help support counties with state highway tolls. In some other states, local agencies can toll local roads and add an increment of tolls to state highways. Adding a small toll to the state highway could be used to mitigate the local impacts of highway traffic, including:

- Traffic impacts from toll roads on local roads.
- Traffic diversion from toll roads to local roads.
- Air quality impacts on the area in the vicinity of toll routes.

While this option would not expand funding sources to all 39 counties, it would be applicable to those counties with a state highway toll.

E4. Allow property tax rates to match economic conditions so revenues keep pace with expenditures.

Currently, growth of property tax revenue is limited by state law to 1% plus the value of new construction. This option would allow jurisdictions to lift that cap permanently by voter approval.

Senate Bill 6114, introduced in the 2015 legislative session, proposed increasing the limit to 3% or the current rate of inflation, whichever is less in any given year. The same bill was reintroduced in the 2016 legislative session. House Bill 2145, introduced in the 2019 legislative session, proposed lifting the 1% property tax cap and tying the rate to inflation and population growth.

Raising the property tax 1% limit would allow local jurisdictions to generate sufficient revenue to match expenses, such as criminal justice, construction, labor, and benefit costs that rise faster than 1% per year due to inflation. The ability for local jurisdictions to collect additional property tax revenue would depend on voter approval.

Appendix A. County Transportation Funding Sources

SUMMARY OF COUNTY TRANSPORTATION REVENUE SOURCES AND LIMITATIONS

The following table summarizes funding sources that counties may use to fund transportation investments.

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

Exhibit 42. County Transportation Revenue Sources and Limitations

REVENUE SOURCE	TRANSPORTATION RESTRICTED	NOTES	ELIGIBLE EXPENDITURES		VOTED
			Programmatic	**Capital**	
Federal Sources					
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 counties through 1) Federal pass through programs, 2) Federally managed programs, 3) State grant programs. ▪ Passes through state and/or MPOs/RTPOs.	✓	✓	No
Federal Discretionary Funds	✓	▪ Funds that are awarded for specific projects, rather than on a formulaic basis. Typically distributed competitively. ▪ Examples include Ferry Boat Discretionary, National Scenic Byways, and TIGER programs. Passes through state and/or MPOs/RTPOs.	✓	✓	No
Federal Timber Sales/Secure Rural Schools *16 U.S.C. Ch. 90* *RCW 28A.520.010 - .020*		▪ Compensates states for lost revenues from timber sales, revenues of which are shared with states to be distributed to counties with national forests. ▪ Counties should spend 50% of funds on public roads or public schools and the other 50% on public schools. ▪ Distributed by State Treasurer.	✓	✓	No
Payments in Lieu of Taxes (PILT) *Federal Law 31 U.S.C. Chapter 69*		▪ Because government agencies are exempt from property tax, counties with large areas of state and federal land do not receive road fund revenues from these properties. Some state and federal agencies provide counties with payments in lieu of taxes.	✓	✓	No

REVENUE SOURCE	TRANSPORTATION RESTRICTED	NOTES	ELIGIBLE EXPENDITURES		VOTED
			Programmatic	Capital	
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 (MVFT) (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; county portion is distributed based on population, road costs, and financial need. ▪ State transfers an additional portion from Transportation Partnership Account beginning in 2005. ▪ State transfers an additional portion from State Motor Vehicle Account under Connecting Washington Act starting 2015.	✓	✓	No
Multimodal Funds and Additional MVFT *RCW 46.68.126*	✓	▪ State transfers a portion from the State Multimodal Account under Connecting Washington Act starting 2015.	✓	✓	No
Capron Refunds *RCW 46.68.080*	✓	▪ Counties that are entirely composed of islands (i.e., San Juan, Island) receive gas tax refunds to compensate them for their lack of state highways and state highway investment.	✓	✓	No
County Arterial Preservation Program (CAPP) *RCW 46.68.090* *WAC 136-300*	✓	▪ Funded by 0.45 cents per gallon of the state MVFT from the State Motor Vehicle Account. ▪ Distributed by CRAB to counties based on share of paved county road miles. ▪ May be used to administer a pavement management system and for capital expenditures.	✓	✓	No
Rural Arterial Program (RAP) *RCW 46.68.090* *WAC 136-100*	✓	▪ Funded by 0.58 cents per gallon of the state MVFT from the State Motor Vehicle Account. ▪ Awarded to counties by CRAB on a competitive basis within five state regions. ▪ Funds support improvement and reconstruction of rural arterials and collectors.		✓	No

REVENUE SOURCE	TRANSPORTATION RESTRICTED	NOTES	ELIGIBLE EXPENDITURES		VOTED
			Programmatic	**Capital**	
Freight Mobility Strategic Investment Board (FMSIB) Grants *RCW 47.06A* *WAC 226.01*	✓	▪ To support statewide freight mobility transportation system. ▪ FMSIB selects and prioritizes projects for funding.		✓	No
Transportation Improvement Board (TIB) Grants *RCW 47.04.320* *WAC 479-10-500* *WAC 479-10-510*	✓	▪ Funded by state gas tax. ▪ Counties may be eligible for TIB's Urban Arterial Program (counties with urban unincorporated areas) or Complete Streets grant (counties with an adopted complete streets ordinance).		✓	No
WSDOT Local Programs: Safe Routes to School *RCW 47.04.300*	✓	▪ 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 to enhance safety and mobility for pedestrians and bicyclists.		✓	No
Local Sources: Transportation-Restricted					
County Road Fund Property Tax *RCW 36.82.040* *RCW 84.55.050*	✓	▪ To fund construction, alteration, repair, improvement, and maintenance of county roads and other transportation capital facilities; also funds county engineer's office.	✓	✓	No Yes, for levy lid lift
Commercial Parking Tax *RCW 82.80.030* *RCW 82.80.070*	✓	▪ For general "transportation purposes" per *RCW 82.80.070*. ▪ Subject to planning provisions. ▪ No counties currently use.	✓	✓	No
Local Improvement District (LID) / County Road Improvement District (RID) *RCW 35.43* *RCW 36.88*	✓	▪ LIDs used to fund improvements in specific areas, which must directly benefit nearby property owners. ▪ RIDs are enacted by counties. ▪ RIDs used to fund acquisition of rights-of-way for county roads and construction of or improvements to county roads and associated facilities.		✓	No

REVENUE SOURCE	TRANSPORTATION RESTRICTED	NOTES	ELIGIBLE EXPENDITURES		VOTED
			Programmatic	**Capital**	
Local Option Motor Vehicle Fuel Tax (MVFT) RCW 82.80.010	✓	▪ Maximum allowable rate equal to 10% of the state MVFT rate. ▪ Revenues are shared with cities and towns in the county. ▪ No county has successfully imposed a local option MVFT.	✓	✓	Yes
Local Option Taxes for High Occupancy Vehicle (HOV) Systems RCW 81.100.030 RCW 81.100.060	✓	▪ Only King, Pierce, and Snohomish counties may impose. ▪ Restricted for HOV lane development projects and commuter rail programs. ▪ Tax options include motor vehicle excise tax, rental car sales tax, and employer tax. ▪ No counties currently impose.	✓	✓	Yes
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*. ▪ Five counties have formed TBDs, but none impose a sales and use tax.	✓	✓	Yes
Transportation Benefit District – Vehicle Licensing Fee ***This option may be eliminated if Initiative 976 goes into effect.*** 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, if $50 to $100.

REVENUE SOURCE	TRANSPORTATION RESTRICTED	NOTES	ELIGIBLE EXPENDITURES		VOTED
			Programmatic	Capital	
Transportation Impact Fees RCW 82.02.050 (GMA) RCW 39.92 (LTA)	✓	▪ Under GMA, only for public streets and roads addressed by a capital facilities plan element of a GMA comprehensive plan. ▪ Under LTA, any county may impose to pay for transportation infrastructure related to demand generated by new delveopment.		✓	No
Local Sources: Non-Restricted					
Property Tax Title 84 RCW RCW 84.55.050		▪ Not restricted. ▪ Limited to a maximum rate of $1.80 per $1,000 of assessed value in incorporated areas. ▪ Limited to a maximum combined rate (including county road fund levy) of $4.05 per $1,000 of assesed value in unincorporated areas.	✓	✓	No; yes for levy lid lift or excess levy
Retail Sales & Use Tax RCW 82.08 RCW 82.14.030		▪ Not restricted. ▪ Limited to a maximum rate of 1%. ▪ In incorporated areas, counties receive 15% of revenue (effective maximum tax rate of 0.15%).	✓	✓	No
Real Estate Excise Tax First Quarter Percent (REET 1) RCW 82.46.010(5) RCW 82.46.030 RCW 82.46.035(2)		▪ GMA counties: capital projects included capital facilities element of Comprehensive Plan. ▪ Non-GMA counties: capital purpose identified in a capital improvements plan.		✓	No
Real Estate Excise Tax Second Quarter Percent (REET 2) RCW 82.46.010(5) RCW 82.45.030 RCW 82.46.035(2) RCW 82.46.037 Engrossed House Bill 1219		▪ GMA counties only. ▪ Restricted to streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, bridges, water/storm/sewer systems, parks. May be used for affordable housing and homelessness projects until 2026, based on Engrossed House Bill 1419 (passed April 2019).		✓	No

REVENUE SOURCE	TRANSPORTATION RESTRICTED	NOTES	ELIGIBLE EXPENDITURES		VOTED
			Programmatic	**Capital**	
Real Estate Excise Tax One-Half Percent (REET 3) *RCW 82.46.010(3)*		▪ Counties 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
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

Sources: Department of Revenue, 2018; MRSC, 2019; State Auditor's Office Financial Intelligence Tool, 2018; Washington JTC Transportation Resource Manual, 2019; BERK, 2020.

A.1. Federal Sources

Federal funding flows to states and local governments through two main channels:

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

The State receives federal funds 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. [62]

Federal funding programs include:

- Congestion Mitigation and Air Quality Improvement Program.
- Highway Safety Improvement Program.
- National Highway Performance Program.
- National Highway Freight Program.
- Passenger Ferry Grant Discretionary Program.
- Surface Transportation Block Grant Program.
- State of Good Repair Grants.

Flow of Federal Transportation Dollars to Counties

Federal funds are passed along to counties through several mechanisms:[63]

- **Federal pass-through programs**: recipients are selected by MPO, RTPO, and county leads through regional priority competitive programs. Programs include the Surface Transportation Program and Transportation Alternatives.
- **Federally managed programs**: projects and programs are selected by WSDOT through statewide competitive programs. Programs include the Local Bridge Program and the Highway Safety Improvement Program.
- **Federal discretionary programs**: grantees are selected federally through nationwide competitive programs.

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

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

Federal Timber Sales/Secure Rural Schools

16 U.S.C. Chapter. 90*, *RCW 28A.520.010 - .020

The federal Secure Rural Schools (SRS) program compensates states for lost revenues from timber sales, revenues of which are shared with states to be distributed to counties with national forests. Distribution of funds from federal timber sales and SRS are governed by RCW 28A.520.010, which indicates counties should spend 50% of funds on public roads or public schools and the other 50% on public schools.

SRS funds are subject to congressional reauthorization and therefore the long-term sustainability of the program is unknown.

Payments in Lieu of Taxes

31 U.S.C. Chapter 69

Because government agencies are exempt from property tax, counties with large areas of state and federal land do not receive road fund revenues from these properties. But those counties are still responsible for maintaining roads in and around these properties. To address this discrepancy, some state and federal agencies provide counties with payments in lieu of taxes (PILT). Agencies may include:

- Washington State Department of Natural Resources.
- Washington State Department of Fish and Wildlife.
- US Forest Service, via the Secure Rural Schools program.
- US Bureau of Land Management, via the Taylor Grazing Act.

A.2. State Sources

Local Project Appropriations for Transportation Projects

The Legislature may make direct appropriations to specific transportation projects in the state budget.

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 county portion is distributed on a per-capita basis and counties, together, receive **4.96** 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.
- Ferry Operations: 0.54 cents.
- Ferry Capital Construction: 0.55 cents.

Multimodal Funds and Additional MVFT

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.

Capron Refunds

RCW 46.68.080

Under the Capron Act, San Juan and Island counties 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 counties for their lack of state highways.

- In San Juan Island, which has neither a state highway nor a fixed connection with the mainland, all vehicle license fee revenue and the first 23 cents of MVFT less administrative costs are returned to the county shared with Friday Harbor based on their relative assessed valuation.
- For Island County, which has some state highways and 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.

County Arterial Preservation Program (CAPP) Grants

RCW 46.68.090, ***WAC 136-300***

- The CAPP is funded by 0.45 cents per gallon of the state MVFT from the State Motor Vehicle Account. The program was designed to help counties preserve existing paved road networks.
- Funds are distributed by CRAB directly to counties based on share of paved county road miles. These funds may be used to administer a pavement management system and for capital expenditures.
- In order to be eligible for CAPP funds, counties are required to use a pavement management system to assist their project selection and decision process.

Rural Arterial Program (RAP) Grants

RCW 46.68.090, ***WAC 136-100***

- The RAP is funded by 0.58 cents per gallon of the state MVFT from the State Motor Vehicle Account. Funds awarded to counties by CRAB on a competitive basis within five state regions. Funds support improvement and reconstruction of rural arterials and collectors.
- The program was designed in 1983 to help finance the reconstruction of rural arterial roads facing severe deterioration after railroads were abandoned. The rural arterial road system linked the state's harvested resources to the marketplace. RAP serves countywide commercial transport needs and helps counties to improve rural roads that are primarily local use or recreational.
- The competitive grant program considers the following: 1) structural ability to support loaded trucks; 2) ability to move traffic at reasonable speeds; 3) adequacy of alignment and related geometry; 4) accident and fatal accident experience; 5) local significance.

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.

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 administers competitive grant programs for local transportation projects. While most TIB programs target city street projects, historically about 24% of TIB funds have gone to county projects.[64]
- TIB may distribute grant funding to counties through the **Urban Arterial Program** for counties with urban unincorporated areas and cities with a population over 5000. They may also serve counties through the Urban Sidewalk Program (currently suspended) and Complete Streets Program (for any city or county with an adopted complete streets ordinance).

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

[64] JTC Transportation Resource Manual, 2019.

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.[65]

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.[66]

A.3. Local Transportation-Restricted Sources

County Road Fund Property Tax

RCW 36.82.040*, *RCW 84.55.050

- The Road Fund property tax levy is a primary source of transportation funding in counties and may be levied in unincorporated areas up to the statutory maximum of $2.25 per $1,000 of assessed value (AV).
- Counties can levy either a single-year or multiyear levy lid lift, temporary or permanent, to increase county road property taxes in taxing districts without banked capacity beyond the 1% limit.
- With a *permanent single-year lid lift*, a county can increase the county road fund property taxes beyond the 1% limit in the first year, and then that amount is used to calculate all future 1% 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*, a county can increase the county road fund property taxes beyond the 1% limit (up to a limit factor specified in the ballot measure), for six consecutive years up to a rate equal to or less than the statutory maximum of $2.25 per $1,000 of AV. After the six years, the total levy can increase by up to 1% annually. Multiyear lid lifts must be submitted at the primary or general election.

Commercial Parking Tax

RCW 82.80.030

- Cities, counties (unincorporated areas), and Regional Transportation Investment Districts (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 customer or the commercial parking business, based on gross proceeds or number of stalls. Tax-exempt carpools, vehicles with handicapped decals, and government vehicles

[65] WSDOT, https://www.wsdot.wa.gov/LocalPrograms/SafeRoutes/default.htm
[66] WSDOT, https://www.wsdot.wa.gov/LocalPrograms/ATP/funding.htm

are exempt.

- Restricted to "transportation purposes" per RCW 82.80.070.
- *No counties have implemented this tax. Twelve cities have implemented this tax.*

Local Improvement District (LID) / County Road Improvement District (RID)

RCW 35.43*, *RCW 36.88

- Cities, counties, port districts, water districts, TBDs, and other local governments can create LIDs to fund improvements in specific areas. Local improvements must directly benefit nearby property owners and can be initiated by a petition of property owners.
- Counties can create 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.

Local Option Motor Vehicle Fuel Tax (MVFT)

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.
- Restricted to "transportation purposes" per *RCW 82.80.070* and "highway purposes" per 18th Amendment.
- *No counties are currently levying 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 Occupancy Vehicle (HOV) Systems

RCW 81.100.030*, *RCW 81.100.060

- RTIDs and King, Pierce, and Snohomish counties may levy an HOV tax by voter approval. The purpose of the tax is for HOV lane development, mitigation of environmental impacts of HOV development, support of employer programs to reduce single-occupant commuting, and commuter rail programs.
- The employer tax may be up to $2 per employee per month. The motor vehicle excise tax (MVET) may be up to 0.3% on the value of a vehicle in counties (or 0.8% in the case of RTIDs). Trucks over 6,000 lbs. are exempt. The rental car tax may be up to a 13.64% surcharge on the state sales and use tax paid on retail car rentals within the county or RTID.
- The employer tax and MVET/car rental tax together may not exceed the maximum allowed from the MVET/car rental tax.
- *No entity has enacted an HOV tax.*

Transportation Benefit District – Sales and Use Tax

RCW 36.73, ***RCW 82.14.0455***

- Independent taxing districts created through ordinance can impose an additional voted sales and use tax of up to 0.2%. The tax must be reauthorized by voters after 10 years.
- This option could be more susceptible to market volatility, since taxes collected depend on commercial use. This option can potentially help to align costs with beneficiaries in areas with pass-through users of the transportation system, since the tax would apply to recreational users passing through.
- No counties are currently using a TBD sales and use tax. Additionally, a voted sales and use tax could be politically challenging to implement in the Sound Transit regional transit authority, given overlapping taxing jurisdictions.

Transportation Benefit District – Vehicle Licensing Fee

This option may be eliminated if Initiative 976 goes into effect.

RCW 36.73, ***RCW 36.73.065***, ***RCW 82.80.140***

- TBDs can impose a Vehicle Licensing Fee (VLF) fee, without voter approval, up to $20. If a $20 VLF is in effect for at least 24 months, then a VLF up to $40 can be imposed; if a $40 VLF has been in effect for at least 24 months, then a $50 VLF can be imposed. VLFs can be up to $100 with voter approval.
- Two ordinances are required: first a Transportation Benefit District (TBD) and then a VLF. The fee can be collected months after approved. The County must notify DOL once the fee is approved so the fee is included in vehicle renewal notices. DOL collects 1% of revenue generated from a VLF.
- This VLF is limited to vehicles under 6,000 pounds. In some areas, there may be an equity concern as large vehicles that may cause a significant wear on the roads would not bear the burden of this cost.

Transportation Impact Fees

RCW 82.02.050 (GMA), ***RCW 39.92*** (LTA)

- 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.
- 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.

A.4. Local Unrestricted Funds

Property Tax (General Fund)

Title 84 RCW*; *RCW 84.55.050

- 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% growth allowance.
- A county's "banked" capacity is available to use in future years without voter approval, per RCW 84.55.092.

Retail Sales & Use Tax

RCW 82.08*; *RCW 82.14.030

- Counties can impose, by resolution or ordinance, a non-voted sales and use tax at 0.5% on any taxable event, per *RCW 82.14.030(1)*. Counties 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 county 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.

Real Estate Excise Tax (REET)

RCW 82.46.010*; *RCW 82.45.030*; *RCW 82.46.035(2)*; *RCW 82.46.037

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

- Counties 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 counties may levy REET 1. Counties planning under GMA must use REET 1 on capital projects included in the capital facilities element of the Comprehensive Plan. Counties 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 counties 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.
  - **Use of REET 2 for maintenance and REET 1 projects:** Counties may use a portion of collected REET 2 funds for capital projects and limited maintenance.
  - **Use of REET 2 for affordable housing and homelessness:** Counties may use a portion of collected REET 2 funds for affordable housing and homelessness projects 2026, based on *Engrossed House Bill 1419* (passed April 2019).

A.5. Local Debt Financing

Limited Tax General Obligation (LTGO) Bonds

RCW 39.36*, *Article 8, Sec. 6, State Constitution

- 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 AV of taxable properties; and councilmanic debt is limited to 1.5% of the AV of taxable properties.

Unlimited Tax General Obligation (UTGO) Bonds

RCW 39.36*, *RCW 84.52.056*, *Article 7, Sec. 2, State Constitution

- 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.

Appendix B. County Classifications

Rural and Urban Classification

Rural and urban classification for counties is based on OFM's classification system, which defines rural counties as counties with population density less than 100 persons per square mile or land size less than 225 square miles.[67]

Exhibit 43. Rural and Urban County Classification

Rural and Urban County Classification		
Rural		**Urban**
Adams	Klickitat	Benton
Asotin	Lewis	Clark
Chelan	Lincoln	King
Clallam	Mason	Kitsap
Columbia	Okanogan	Pierce
Cowlitz	Pacific	Snohomish
Douglas	Pend Oreille	Spokane
Ferry	San Juan	Thurston
Franklin	Skagit	Whatcom
Garfield	Skamania	
Grant	Stevens	
Grays Harbor	Wahkiakum	
Island	Walla Walla	
Jefferson	Whitman	
Kittitas	Yakima	

Source: OFM, 2020.

[67] OFM, Population density and land area criteria used for rural area assistance and other programs, 2020.

Region Classification

Region classification is consistent with the region classification used in the *2010 WSAC County Road Preservation Needs Report* and confirmed with WSAC for use in this study.

Exhibit 44. County Region Classification

Region Classification				
Northeast	**Southeast**	**Southwest**	**Northwest**	**Puget Sound**
Adams	Asotin	Clark	Clallam	King
Chelan	Benton	Cowlitz	Island	Pierce
Douglas	Columbia	Grays Harbor	Jefferson	Snohomish
Ferry	Franklin	Lewis	Kitsap	
Grant	Garfield	Mason	San Juan	
Lincoln	Kittitas	Pacific	Skagit	
Okanogan	Klickitat	Skamania	Whatcom	
Pend Oreille	Walla Walla	Thurston		
Spokane	Yakima	Wahkiakum		
Stevens				
Whitman				

Source: WSAC, 2010.

Appendix C. Case Studies

Case Study:
Adams County

KEY TAKEAWAYS

- Adams County is a rural county with a large road system and significant freight usage of its roads.
- The largest sources of transportation revenue for Adams County are the state gas tax distribution, the county road fund property tax, and state and federal grants.
- Increasing damage to Adams County roads from semi-trucks, combined with rising construction costs, are making it difficult for the County to keep up with needed preservation work and repairs.

SYSTEM CONTEXT

Adams County is a rural county located in Eastern Washington. Its nearly 1,800-mile road system is one of the **largest county road systems** in the state. With a population of just over 20,000 and modest population growth, the County has been challenged to maintain its roads and bridges with **slow-growing revenues.** Adams County is a major agricultural production area and its aging truck system was not built to today's standards. **Damage to county roads from freight trucks** is significantly increasing the need for road repairs.

TRANSPORTATION INVESTMENTS

The County currently manages just under 1,800 centerline miles of county roads and 111 county-owned bridges. This includes just under 650 miles of paved roads and over 1,100 miles of gravel roads. 518 of the paved road miles are part of the County's truck system. Currently, 50% of the truck system has some form of identified deficiency—structural deficiency, insufficient width, or other.

Adams County prioritizes roadway projects in its 6-year Transportation Improvement Plan, using federal functional classification, average daily traffic, and truck volume to rate projects. Additionally, the County makes use of a cost

KEY CHARACTERISTICS	
Region	**Northeast**
Classification	**Rural**
Population	**20,150**
Average Annual Population Growth	**0.8%**
Centerline Miles	**1,775**
Bridges	**111**
Annual Road Budget	**$10.5 million**

Sources: OFM, 2019; CRAB, 2019; Adams County, 2020.

accounting system that allows it to consider which infrastructure projects will provide the most benefit for their cost.

While the Public Works Department uses the Mobility Pavement Management System administered by CRAB, County staff noted the system does not account for underlying deficiencies in roadways, which also contribute to maintenance and preservation costs.

Over time, the County's costs for road preservation, maintenance, improvements, and capital projects have increased due to:

- **Inflation in costs** for labor and materials.
- **Administrative costs** on projects funded by **federal grants.**
- **Damage to roads from semi-trucks.**

County staff highlighted that current funding is not keeping pace with rising labor and materials costs. Like other counties, Adams has seen a dramatic increase in the cost to have gravel crushed at its own site over the last 10 years—from **$3** to **$8 per ton**.

Additionally, County staff shared that while the federal Disadvantaged Businesses Enterprise (DBE) program has important benefits, requirements are challenging for the County because a limited number of DBE-eligible contractors means that costs are significantly higher with DBE versus non-DBE businesses.

RATING PAVEMENT CONDITION

The County Road Administration Board (CRAB) offers counties access to a shared statewide **Pavement Management System** (PMS). This allows counties to make use of a PMS at lower costs than if they maintained their own system.

Under CRAB's PMS, roads are rated with a pavement condition rating using criteria from the State's *Pavement Surface Condition Rating Manual*.

For Adams County, the PMS considers four core elements: longitudinal cracking, transverse cracking, alligator cracking, and patching.

County staff have noted that these criteria are better suited to evaluate Hot Mix Asphalt (HMA) roads typically used in urban and suburban areas and do not account for **underlying deficiencies** on most of the rural county's roads which use Bituminous Surface Treatments.

Bituminous Surface Treatment in Progress

Source: Adams County, 2020.

The County also emphasized that administrative requirements on federally funded projects extend timelines and increase costs. Each phase of such federally funded projects is funded separately, with administrative approvals that take three to four weeks incorporated into each phase. This contrasts with state-funded (CRAB) projects, which can move forward under a spending plan once they are approved and do not incur lengthy delays with any modifications. Projects funded by the County itself can move forward even more quickly; if funds are available, the County Commissioners can approve a project in as little as a week.

Lastly, damage to county roads from semi-trucks is a major concern. The majority of Adams County's truck system was built decades ago to accommodate single axle trucks and do not meet the minimum standards for new roads today. With freight businesses now using semi-trucks and agricultural producers using larger equipment, County roads are sustaining damage, including rutting and damage to road edges.

These impacts significantly increase the County's cost to preserve and repair its roads.

Exhibit 45. Patching, Edge, and Shoulder Damage from Freight Trucks

Source: Adams County, 2020.

TRANSPORTATION FUNDING CAPACITY AND REVENUE SOURCES

In 2019, the Adams County road fund had combined annual capital and operating revenues of $10.5 million. The road fund's major sources of funding include the state gas tax distribution (41%), federal grants and distributions (30%), the road fund property tax (18%), and County Arterial Preservation Program (CAPP)/Rural Arterial Program (RAP) funds (10%).

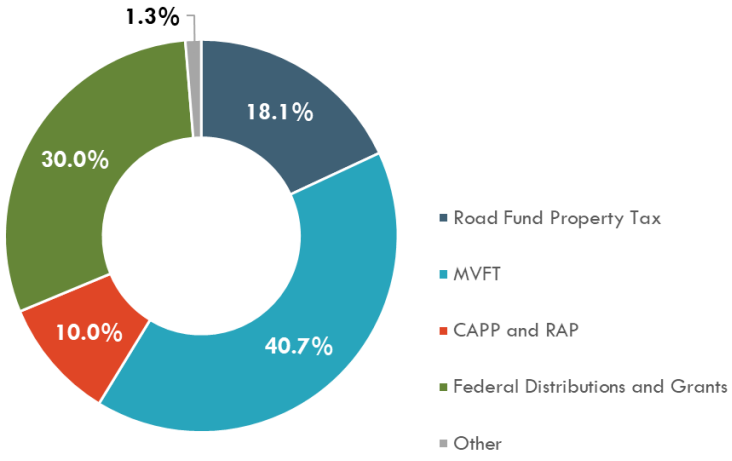
While grants provide critical capital funding, they also pose challenges for the County's Public Works Department. Typically, capital projects at the very top of the County's priority list are not competitive for grant funding. This is driven, in part, by federal regulations that make projects on local access roads, minor collectors, and short-span bridges ineligible for most federal grants. So, the County selects the highest-priority projects that are competitive and submits them for grant funding. This results in significantly delayed projects—County staff noted that in the last 20 years, the County has been able to directly fund only one or two capital projects.

While the County does not currently use a road fund levy shift or diversion, it has used both in the past. When the County ended a multi-year levy shift in 2008, the road fund still faced funding challenges because it was limited to a 1% revenue increase in the property tax levy from the previously reduced revenue maximum. As a result, the road fund levy rate is currently just $1.33 per thousand dollars of assessed value, out of the maximum allowable rate of $2.25. Because the total road fund revenue can only increase by 1% per year, the levy rate has remained very low as compared to the maximum allowed rate. Adams County Commissioners placed a county road fund levy lid lift onto the ballot in 2017 to raise the levy rate to $2.25, but the lid lift was not approved by the voters. County staff cited lack of education around the purpose of the lid lift as a likely cause for the failed vote.

Many local transportation funding options have not been applicable or feasible in Adams County. Sales of gas in unincorporated areas are so limited—County staff estimated only two or three gas stations in the county are in unincorporated areas—that the revenue from the tax would not justify the time and effort to get the option passed. Lack of density in unincorporated areas makes road improvement districts and local improvement districts impossible, as the County cannot collect sufficient revenue from such a district to fully fund a project. Impact fees face a similar challenge—because of slow growth in

unincorporated areas, the County might not collect sufficient revenues within the defined timeframe to complete the project and risk forfeiting revenues.

Exhibit 46. Adams County Road Fund Revenue Sources (2019)



Sources: Adams County, 2020; BERK, 2020.

The County identified the following as their preferred options for addressing funding challenges:

- **A state-operated federal funds exchange,** which would allow the County to maximize federal grant dollars by compressing timelines and reducing administrative burden. Federal grants are critical to counties' capital road projects. However, the multiple rounds of approval needed for federal funding greatly extend project timelines and thus costs for building new infrastructure.
- **A local option tax or state tax** with revenues dedicated for preservation and maintenance purposes. With slow growth in property tax and gas tax revenues and few feasible local option taxes, Adams County is struggling to raise enough revenue to preserve its roadway system at the necessary level.

References

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Case Study:
Okanogan County

KEY TAKEAWAYS

- Okanogan County is a rural county with a large road system of both paved and unpaved roads.
- Preserving existing roads, addressing structural deficiencies, and replacing short-span bridges and culverts with larger fish passable structures are major concerns for the County.
- The road fund property tax, state gas tax distribution, and federal distributions and grants together made up over 70% of the road fund revenues in 2018.
- Dedicated state or federal funding for replacing short-span bridges and upgrading structurally deficient roads will be critical in the years ahead, as infrastructure reaches the end of its lifespan.

SYSTEM CONTEXT

Okanogan County is a rural county located in eastern Washington State. The largest county in Washington by land area, its road system consists of more than 1,300 centerline miles. Population growth in Okanogan County is slow compared to other areas of the state, so preservation and maintenance, rather than increasing system capacity, are the County's focus.

TRANSPORTATION INVESTMENTS

Okanogan County's transportation infrastructure includes 677 miles of paved county roads, 662 miles of unpaved roads, and 51 bridges. The County Engineer and Public Works Department focus their work on preservation and maintenance of existing infrastructure, which includes:

- **Chip sealing** paved roads.
- **Regrading** unpaved roads.
- **Snowplowing** roads.
- **Keeping culverts clear** and replacing them when rusted or damaged.

KEY CHARACTERISTICS	
Region	**Northeast**
Classification	**Rural**
Population	**42,730**
Average Annual Population Growth	**0.5%**
Centerline Miles	**1,335**
Bridges	**51**
Annual Road Budget	**$18.0 million**

Sources: OFM, 2019; CRAB, 2019; Okanogan County, 2018.

At its current level of funding, the County is unable to keep up with the ideal preservation schedule. Prior to 2008, the Public Works Department would chip seal 100 miles of paved roadway per year. After the County's revenues fell during the Great Recession, it temporarily paused preservation

work and now chip seals just 65 miles of roadway per year. This extended the preservation cycle from a **6-year cycle** to a **10-year cycle**, increasing the likelihood that the County will have to undertake more expensive road repair and replacement work in the future. While chip sealing a mile of road costs **$33,000**, rebuilding that same mile if it is beyond repair costs **$1 million.**

Funding limitations restrict other preservation projects as well. For example, the County would like to bridge maintenance to its roster of preservation projects but lacks the funds to do so.

The budget challenges for the County road fund are driven, in part, by rising costs for road work. These include:

- **Inflation in costs** for labor and materials.
- **Environmental impact mitigation.**
- **Structural deficiencies.**

County staff noted that rising costs for construction labor and materials are a major issue; while the revenues from the road fund property tax can only increase by 1% per year, inflation in the construction cost index is even higher than in the cost of living index. Across the board, **materials costs increase by 5% to 7% annually.**

Washington Department of Fish and Wildlife (WDFW) regulations have affected the level of repair and replacement that counties must use for stream and river crossings. County staff cited the example of a culvert under Sinlahekin Road that washed out in recent years. Under WDFW regulations, the County had to replace the original 4-foot culvert with a more than 20-foot structure. The County paid for the replacement directly from the road fund, at a cost of more than $130,000.

Exhibit 47. Original Sinlahekin Road Culvert and its Replacement

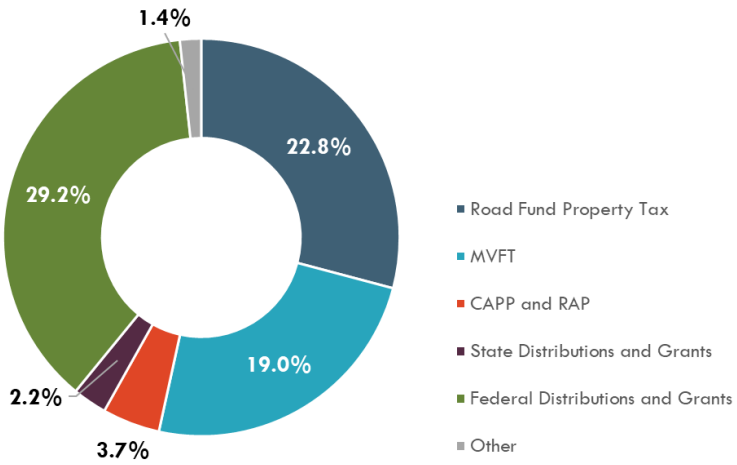
Source: Okanogan County, 2020.

Finally, underlying structural deficiencies contribute to the County's rising costs. Many of the County's roads are old dirt roads that were chip sealed long ago. To keep these roads in adequate condition, the County must repeatedly chip seal them, and typically must employ emergency road weight restrictions every spring to prevent damage during the spring thaw. To fully rebuild these roads to avoid excessive maintenance costs, the County would have to rebuild the road to meet current standards, likely at a cost of $1 million per mile—funding that the County does not have.

TRANSPORTATION FUNDING CAPACITY AND REVENUE SOURCES

In 2018, Okanogan County's road fund had an annual combined operating and capital budget of **$18.0 million.** The largest sources of revenue for the road fund are federal distributions and grants (29%), the county road fund property tax (23%), and the state gas tax distribution (19%). Other sources of funding include the state Rural Arterial Program (RAP), County Arterial Preservation Program (CAPP), other state distributions and grants, fees, and other miscellaneous revenue.

Exhibit 48. Okanogan County Road Fund Revenue Sources (2018)



Sources: Okanogan County, 2020; BERK, 2020.

Federal and state grants are often restricted for use in capital projects. Because of this funding structure, Okanogan County is typically limited to one or two capital projects per year. Federal and state grant priorities partially determine which projects the County undertakes. Typically, the projects that are the best candidates for receiving grant funds are not the County's highest priority projects but second or third on the list.

PAYMENTS IN LIEU OF TAXES

Okanogan County contains large areas of state and federal land. Because government agencies are exempt from property tax, the County does not receive road fund revenues from these properties. However, the County is responsible for maintaining roads in and around these properties.

To address this discrepancy, some state and federal agencies provide the County with payments in lieu of taxes (PILT; sometimes, PILOT). Agencies that contribute to Okanogan County's road fund via PILT include:

- Washington State Department of Natural Resources.
- Washington State Department of Fish and Wildlife.
- US Forest Service, via the Secure Rural Schools program.
- US Bureau of Land Management, via the Taylor Grazing Act.

The road fund operating budget, which covers maintenance and preservation work, is supported by the road fund property tax, the gas tax, and federal and state payments in lieu of taxes.

To balance provision of essential services with slow revenue growth due to the 1% property tax revenue limit, Okanogan County has had to use levy shifts to balance the current expense budget. In 2018, the County shifted $600,000 in revenue from the road fund to the current expense fund, with $4.1 million in property tax revenues remaining in the road fund.

Okanogan County has faced substantial challenges in finding local transportation funding sources that suit its resources and needs. Currently, the County only uses the road fund property tax. Limited commercial activity in unincorporated areas, lack of Growth Management Act (GMA) planning status, and varying attitudes towards additional taxation within the County all contribute to the challenges. Top challenges include:

- **Limited commercial activity.** Without significant fuel sales or commercial parking lots in unincorporated areas, the local option gas tax and the parking tax are not feasible.
- **GMA planning status.** Okanogan County is not planning under the GMA and cannot levy GMA impact fees.
- **Varied voter attitudes.** While constituents in some areas would approve a transportation benefit district (the Town of Twisp formed its own TBD in 2016) or support LTA impact fees, voter attitudes are varied, so implementing these tools countywide is unlikely to happen.

County staff identified the following steps as their preferred actions for improving the County's ability to raise transportation revenues:

MAINTAINING ROADS IN RURAL WASHINGTON

Rural counties in Washington face a unique set of maintenance and preservation challenges. These include:

- **Repeated maintenance** on former dirt roads. Frequent chip sealing is required on roads that were never designed as paved roads.
- **Grading gravel roads.** As gravel costs have risen dramatically over the last 10 years, the costs of maintaining unpaved roads have been greatly impacted.
- **Snow plowing.** Okanogan County experiences snowy winters, which requires the Public Works Department to carry out regular plowing. The County spends up to **$2 million per year**, about 17% of its road fund operating budget, on plowing.
- **Lack of paved shoulders.** Many rural roads were built without paved shoulders. As freight trucks have increased in size, county roads are sustaining more shoulder and edge-of-pavement damage.

- **Grant funding for short-span bridges,** which would allow the County to replace aging or damaged structures. Only bridges longer than 20 feet are eligible for federal funding. Without grant funding, Okanogan County has had to borrow against its future RAP funding to replace short-span bridges.
- **A state-operated federal funds exchange,** which would allow the County to maximize federal grant dollars by compressing timelines and reducing administrative burden. The multiple rounds of approval needed for federally funded projects greatly extend timelines and thus costs for new infrastructure.
- **Greater revenue-generating capacity for the current expense fund, potentially through a higher property tax limit,** to allow the County to avoid levy shifts and fully fund road preservation. By investing in road preservation now, the County could save money in the long run.

STATLER BRIDGE REPLACEMENT

The Statler Bridge was an 18-foot, 100-year old County-owned bridge located outside the city of Okanogan. In September 2019, the County closed the bridge due to flood damage. Because the bridge was just under 20 feet in length, it was ineligible for federal funding. The County was forced to use emergency funds, borrowing against its future RAP funding.

To meet WDFW regulations, the replacement structure is 68 feet in length. The bridge was completed in June 2020, at a cost of more than $1 million.

Source: Okanogan County, 2020.

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Case Study:
Skagit County

KEY TAKEAWAYS

- Skagit County is a rural county located in northwest Washington State.
- Compared to other counties with similarly sized road systems, Skagit County has a large number of County-owned bridges. Many of these bridges are nearing the end of or have already outlived their lifespans and require replacement.
- Federal and state grants do not provide sufficient funding to replace aging road structures, so the County must supplement these sources with its road fund revenues.
- With the current available resources, Skagit County faces a trade-off between preservation and maintenance work and capital projects to replace deficient or obsolete structures.

SYSTEM CONTEXT

Skagit County is a rural county located in northwest Washington State. Skagit County has been experiencing moderate growth in recent years, especially in the population centers of Mount Vernon and Anacortes. Skagit County has one of the highest ratios of bridges per road mile among Washington State counties, a function of the area's extensive river system and its location on the Salish Sea.

TRANSPORTATION INVESTMENTS

Skagit County's transportation infrastructure includes 762 centerline miles of paved county roads, 39 miles of unpaved county roads, 110 bridges, and a single-vessel ferry system. The County's highest road priorities are preservation of existing infrastructure and replacement of deficient or obsolete facilities. However, road fund revenues are not keeping pace with the costs to carry out this work.

Challenges for the Skagit County road fund are driven in part by rising costs for road work. These include:

- **Fish passage barrier removal.**
- **Environmental impact mitigation.**
- **Replacing aging bridges.**

KEY CHARACTERISTICS	
Region	**Northwest**
Classification	**Rural**
Population	**129,200**
Average Annual Pop. Growth	**1.2%**
Centerline Miles	**801**
Bridges	**110**
Annual Road Budget	**$32.1 million**

Sources: OFM, 2019; CRAB, 2019; Skagit County, 2018.

While replacing culverts that block fish passage has environmental and social benefits, such projects can dramatically increase costs by requiring the replacement of facilities that are otherwise in good condition. For example, a **fish passage barrier removal** project might involve replacing a **3-foot culvert** under a good-condition road with an **80-foot bridge**. Because the project would not have taken place without the need to remove the fish passage barrier, the County's road costs increase significantly.

Once bridges are built to replace culverts, **environmental impact mitigation** requirements can significantly increase maintenance costs. Bridges differ from culverts in that they require more extensive annual inspections and cleaning. And Washington Department of Fish and Wildlife (WDFW) environmental regulations limit the ways in which the County can clean bridges, so as not to affect the waterway under the bridge. County staff shared that the **cleaning and painting cost** estimated for one steel truss bridge was **$6 million**—nearly equal to the cost to replace the bridge.

The need to **replace aging and deficient bridges** is a significant financial challenge for Skagit County. Of the County's 110 bridges, **16 are functionally obsolete** and **five are structurally deficient**. Bridge replacement projects can run into the millions of dollars, and grant funding for these projects is limited.

Exhibit 49. Flooding at a Culvert on Colony Mountain Drive

Source: Skagit County, 2020.

Exhibit 50. Skagit River Bridge at Marblemount (built 1930)

Source: Skagit County, 2020.

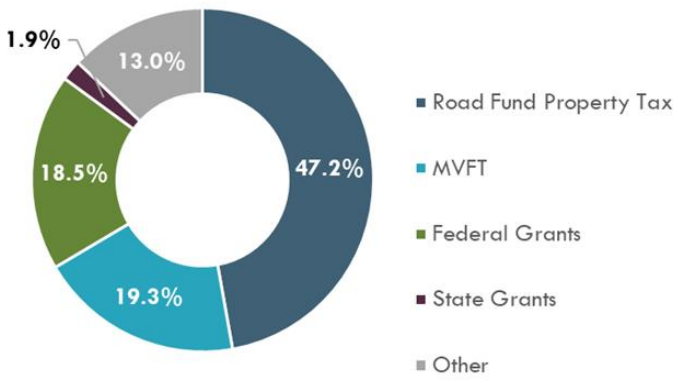
TRANSPORTATION FUNDING CAPACITY AND REVENUE SOURCES

In 2018, Skagit County's road fund had an annual combined operating and capital budget of **$32.1 million.** The largest sources of revenue for the road fund are the county road fund property tax (47%), the state gas tax distribution (19%), and federal grants (19%). Other sources of funding include the state County Arterial Preservation Program (CAPP), other state grants, fees, and other miscellaneous revenue.

Meeting capital infrastructure needs is a major concern for Skagit County, as aging bridges, roads, and a ferry vessel will all require replacement in coming years. Major capital projects are typically funded by state and federal grants, but the County's ability to secure grants is determined in part by its ability to raise its own revenues. Most grants require a 13.5% local match, so even relatively minor reductions to the road fund budget—like the County's $1.35 million annual levy diversion for traffic law enforcement or the nearly $1 million annual ferry subsidy—can have larger impacts for capital projects.

Skagit County faces a trade-off between preservation and maintenance work and capital projects to replace deficient or obsolete structures.

Exhibit 51. Skagit County Road Fund Revenue Sources (2018)



Sources: WSDOT, 2018; BERK, 2020.

As of 2018, the only local transportation funding option Skagit County used was the road fund property tax. County leaders have been reluctant to use some local funding options—namely impact fees and improvement districts—out of concern that they will impede development and job creation within the county.

County staff identified the following steps as their preferred actions for improving the County's ability to raise transportation revenues:

- **Grant funding for bridge replacement,** which would allow the County to fully fund capital projects without drawing extensively on its road fund. This would preserve the road fund budget for maintenance, ultimately saving money in the long-term as the County avoids deferred maintenance.
- **Additional local funding options that are not tied to development,** which would allow the County to raise revenues without potentially losing economic opportunities. Additional local revenues would also give the County greater leverage to secure grants for capital projects.

GUEMES ISLAND FERRY

Skagit County is one of four counties that operate a vehicle ferry system. The County operates one route—Anacortes to Guemes Island—with one vessel, the *M/V Guemes*. While some counties operate ferry systems via public transit agencies or ferry districts, Skagit County operates its ferry system directly.

While the County receives some funds from the State Legislature to operate the ferry, the system is managed under its road fund.

Currently, the County is seeking to replace the 40-year-old *M/V Guemes* with a newer electric vessel. The County was unsuccessful in forming a ferry district to pay for the capital improvements but is currently using ferry fare surcharges and state funding to help fund a portion of the cost needed to replace the ferry. The County is still **$8 million short** of the funding required for the replacement and needed infrastructure.

NORTH FORK BRIDGE

The North Fork Bridge is a 726-foot County-owned bridge that crosses the Skagit River at Best Road west of the town of Conway.

Built in 1959, the bridge is now **functionally obsolete** and is in **fracture critical status**. Overweight loads planning to cross the bridge must be reviewed on a case-by-case basis.

County staff estimated that the cost to replace the bridge will be at least **$30 million**. The best funding avenue, the state Bridge Advisory Committee, caps grants at $12 million, so the County will need to secure **$18 million**—more than half its annual budget—from other sources to replace the bridge.

Source: Skagit County, 2019.

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Case Study:
Thurston County

SYSTEM CONTEXT

Thurston County is an urban county located in the south Puget Sound region. Formerly a primarily rural and suburban county, Thurston County is growing at a rapid pace: its population has increased by more than 40% since 2000 and the average annual population growth rate over the last five years is 1.6%. The County currently manages just over 1,000 centerline miles of county roads and 128 County-owned bridges.

Population growth and increased vehicle volume, plus aging County roads and bridges, have led to **greater preservation and maintenance needs**. At the same time, **revenues have grown slowly**, contributing to a backlog of **deferred maintenance** and leading to higher long-term costs as the County is forced to use more expensive repair techniques (overlay) on roads that were not earlier preserved using lower cost techniques (chip seal).

TRANSPORTATION INVESTMENTS

Thurston County's transportation infrastructure includes 1,031 miles of county roads, 128 bridges, and 46 miles of paved bike trails. Thurston County uses the Mobility Pavement Management System provided by the County Road Administration Board (CRAB). Under this system, 70% of the County's paved road miles are currently rated as in good condition, 25% in fair condition, and 5% in poor condition.

KEY TAKEAWAYS

- Thurston County is an urbanizing county experiencing significant population growth and increasing demands on its road system.
- The road levy property tax is the largest revenue source for the Thurston County Road Fund, comprising more than 60% of the annual operating budget, with the County's portion of the motor vehicle fuel tax providing about 18% of the annual operating budget.
- The County's capital program is funded with the road levy property tax and traffic impact fees, which are used to leverage for grants and other sources of external funding (typically near 80% of the capital fund revenue).
- Thurston County established a Transportation Benefit District (TBD) in 2014 but at this time, the TBD does not have an established funding source.

KEY CHARACTERISTICS	
Region	**Southwest**
Classification	**Urban**
Population	**285,500**
Average Annual Pop. Growth	**1.6%**
Centerline Miles	**1,031**
Bridges	**128**
Annual Road Fund Budget	**$43.2 million**

Sources: OFM, 2019; CRAB, 2019; Thurston County, 2020.

The County uses a comprehensive system of criteria to prioritize transportation investments across categories, including pavement preservation, Americans with Disabilities Act (ADA) improvements, bridges, culverts and fish passage enhancements, and more. The County Public Works Department uses these criteria to rank all proposed projects.

Over time, costs for preservation, maintenance, improvements, and capital projects have increased due to:

- **Inflation in costs** for labor and materials.
- **Administrative requirements from grant agencies.**
- **Environmental impact mitigation.**
- **Fish passage barrier removal.**

The County cited increasing labor costs as both a cost driver and an operational challenge. As salaries have increased in the region, the Public Works Department has struggled to retain in-house talent. Environmental requirements, while providing public benefit, increase costs of projects by requiring public works departments to build different—often larger—structures than they would otherwise.

For example, replacing an existing culvert to allow for fish passage typically requires building a significantly structure—often a bridge. For example, the County's Troy Drive fish passage project required replacing two 48-inch diameter culverts with a 55-foot bridge. For the Hunter Point Road project, the County replaced a 48-inch diameter culvert with an 80-foot bridge.

FISH PASSAGE BARRIER REMOVAL IN THURSTON COUNTY: A MODEL PROGRAM

Since 2013, Washington has been under federal injunction to replace state-owned culverts that block anadromous fish passage by 2030. The district court had previously held that the State was in violation of its treaty obligations to 21 Tribal Nations by blocking fish passage with culverts. The removal of these culverts is expected to cost the State around $3 billion.

While the courts have not yet ruled on cities and counties' responsibilities to remove culverts, legal experts believe that **local governments may ultimately be held to the same obligation** as the State. Some local governments have already begun to plan for that scenario.

Thurston County is one such government—since 2017, the County Board of Commissioners has **dedicated $2 million per year for fish passage improvement** projects. The County consulted with the Squaxin, Chehalis, and Nisqually Tribal Nations in selecting projects.

A recent county project is the Hunter Point Road project, which replaced a culvert with an 80-foot prefabricated bridge in 2018. The next year, the County saw the first salmon in more than 100 years swim up the creek under the bridge.

As of 2020, the County's Public Works Departments has **completed eight fish passage projects**, funded by a mix of county real estate excise tax (REET) dollars and federal and state grants. The projects have freed up seven miles of previously blocked fish habitat and the County has received state and national awards for the project.

Source: Thurston County, 2020.

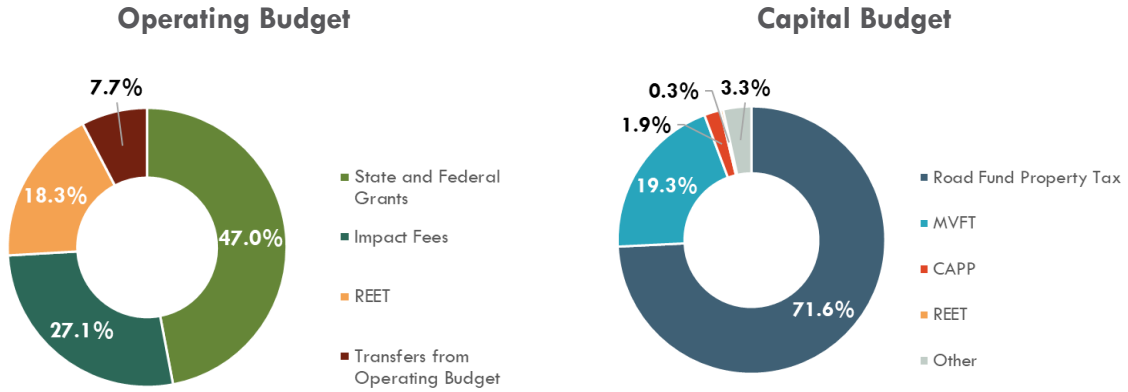
TRANSPORTATION FUNDING CAPACITY AND REVENUE SOURCES

In 2020, Thurston County's road fund has planned operating revenues of $27.5 million and planned capital revenues of $15.7 million.

For annual county road operations, Thurston County primarily relies on the property tax road levy and state distributions of the motor vehicle fuel tax (MVFT). These two sources account for than 90% of annual operating revenue, with smaller portions funded by the County Arterial Preservation Program (CAPP), real estate excise tax (REET), fees, and other sources. While the County previously had one road improvement district (RID), it was retired in 2018.

For capital projects, federal and state grants are the predominant revenue source. In 2020, grants comprise 47% of the capital budget, with remainder coming from impact fees, REET, and transfers from the operating budget.

Exhibit 52. Revenue Sources, Thurston County Road Fund Operating and Capital Budgets (2020)



Sources: Thurston County, 2020; BERK, 2020.

Funding challenges at the county level have contributed to a funding gap for Thurston County's Road Fund. Both the county road fund and the current expense fund—which pays for general county services—are limited by the 1% property tax revenue increase cap, which means that property tax revenues grow at a slower pace than the typical rate of inflation growth. For many counties, including Thurston, county commissioners rely on levy shifts and diversions from the county road fund to balance the County's current expense fund. These actions are wholly within the authority of the Thurston County Commissioners but have a significant effect on the road fund.

Currently, Thurston County uses a $1.5 million diversion from the county road fund to support traffic law enforcement. Additionally, the County uses a $3 million levy shift to support other county operations.

While public works departments can adjust to the shifts and diversions and still balance their budgets, they do so by deferring routine maintenance, which increases costs in the long run. Currently, Thurston County dedicates approximately **$5 million** annually to pavement preservation activities, but the County Engineer estimates that the County would need to spend **$10 million** to maintain its roads in their current condition. By investing less now, the County will ultimately spend more in the long run, as roads require more intensive (and expensive) repairs.

For capital projects, Thurston County relies on federal and state grants, impact fees, and REET revenues. While grants provide critical capital funding, the County is restricted in how it can use these funds,

depending on the source. For example, projects to replace short-span bridges (less than 20 feet in length) are not eligible for most grants. Thurston County has a number of short-span bridges nearing the end of their design life but has been unable secure grant funding for them and lacks sufficient revenues in the road fund to pay for them directly. The costs to replace a short-span bridge commonly exceed $2 million. In contrast to other counties,[68] Thurston has had success in securing some funding for capital projects via impact fees. Though implementing them requires careful management and communication with stakeholders, the rapid pace of development in the area has allowed the County to collect impact fees to support the funding of many projects. The impact fees also provide funding that help the County plan for transportation improvements to accommodate the expected continued rapid growth in the area. While impact fees have many restrictions on their use, the funding they provide is critical.

Outside of transportation impact fees, Thurston County does not currently use any other local option taxes. The County did form a transportation benefit district (TBD) in 2014, but at this time, it has not been funded. The County has not attempted to pass a local option fuel tax.

County transportation staff shared that the following would help the County to meet their funding needs:

- **Grant funding for short-span bridges**, which would allow the County to replace aging structures. Only bridges longer than 20 feet are eligible for federal funding for replacement, so counties must fund replacements with their own revenues. With multiple short-span bridges currently reaching the end of their lifespans, Thurston County will be unable to fund their replacement on schedule without the introduction of grants for these structures.
- **A state-operated federal funds exchange**, which would allow the County to maximize federal grant dollars by compressing timelines and reducing administrative burden. Federal grants are critical to counties' capital road projects. However, the multiple rounds of approval needed for federal funding greatly extend project timelines and thus costs for building new infrastructure.
- **A non-voted local fuel tax** with revenues dedicated to county transportation purposes. The state gas tax is the backbone of transportation funding at the state level and is critical to counties. However, counties have not been able to use the local option gas tax which, unlike the state version, requires voter approval. Two counties attempted to pass the local option, and none have successfully done so.
- **Greater revenue generating capacity for the current expense fund, potentially through a higher property tax limit**, which would allow the County to avoid levy shifts and fully fund road preservation. By investing in road preservation now, the County could save money in the long run.

[68] See Adams County and Okanogan County case studies in *WSAC County Transportation Revenue Study*.

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