



MEMORANDUM

TO: Southwest Washington Regional Transportation Council Board of Directors
FROM: Matt Ransom, Executive Director 
DATE: December 22, 2017
SUBJECT: Major Project Funding Context

AT A GLANCE – INFORMATION

The purpose of this memorandum is to provide information for how major transportation infrastructure programs are commonly funded based on historical and current conditions. Further, the memorandum also provides an introduction of trends related to long-term project funding, and policy considerations for future evaluation of regional project funding proposals.

BACKGROUND

Funding of major highway and roadway infrastructure has typically been supported by an array of funding tools, most commonly: federal and state gas taxes, regional levies, and roadway tolling. Roadway tolling for the construction of new and replacement of major highway infrastructure (e.g. bridges, tunnels, highway corridors) is the most common application (both nationally and in Washington State). In recent decades, roadway tolling programs have also been expanded to include application of dynamic (variable pricing) tolling methods, where tolling rates are set to change throughout the day in order to achieve established corridor performance goals. Application of roadway tolling programs is most commonly corridor specific, and designed to achieve pre-defined objectives (e.g. project funding, performance management, express-lane capacity).

TOLLING IN THE STATE OF WASHINGTON

The most common historical application of roadway tolling in Washington State has been for the purpose of funding new or replacement bridges. In aggregate, there exist over twenty examples of historic and or current toll financed bridge / corridor projects across Washington State. (Table: Summary of Toll Projects in Washington State)

Within the RTC region, two toll bridges exist serving community connections between Skamania and Klickitat Counties and Oregon. The two existing toll bridges are: Bridge of the Gods (owned and operated by the Port of Cascade Locks) and the Hood River Bridge (owned and operated by the Port of Hood River). Both bridges utilize toll revenue to fund capital maintenance and repair and other related port affairs. Each of these bridges is in need of long term maintenance and upgrade needs. And within Clark County, the Interstate 5 bridges (northbound and southbound) were originally constructed by utilizing toll financing and each operated as toll bridges until the construction costs for each bridge was retired.

In recent years, the Washington Legislature has expanded the use and purpose of roadway tolling to include the application of dynamic (variable price) tolling to help augment / improve system

performance as a corridor wide transportation system management strategy. Existing WSDOT bridges / corridors where dynamic tolling is currently being utilized for both project funding and corridor performance management include: SR-167 HOT Lanes; Evergreen Point (SR-520) Bridge; I-405 Express Lanes; SR-99 Tunnel (*planned*); Puget Sound Gateway (SR-167/SR-509) (*planned*).

LONG RANGE TRANSPORTATION FINANCING

Long term forecasts and trends in transportation infrastructure funding find a continued diminishment in the purchasing power and sole reliance on the current gas/diesel tax roadway funding structure(s). This is occurring in part due to three factors: the increased fuel economy of the average vehicle, combined with the accelerating deployment of both hybrid and fully electric vehicle propulsion technologies and the decline in federal gas tax funding contributions to states because the federal gas tax has remained unchanged since 1993; federal and state gas taxes are static (not inflation or cost indexed). Combined, each of these macro-economic forces are compelling both states and regions to find and explore new and innovative ways to both fund and manage the performance of major transportation infrastructure.

In the foreseeable short-term, gas tax revenue is expected to be the main revenue source for transportation system improvements, with the exception of project specific tolling programs for major infrastructure (eg. new bridges or corridors). However, over the long-term, there will need to be considerations to shifts in major transportation infrastructure funding programs. Among the strategies that Washington state (and other states) are currently evaluating include new funding programs such as: Road Usage Charge programs, which are vehicle-miles-traveled based user fee systems (applied uniformly across all vehicle propulsion platforms); project specific tolling programs to re-build/construct major infrastructure and manage system performance; and exploration of public-private-partnership (P-3), which are typically private consortium project delivery programs that most often rely on a combination of government and toll funding for project financing.

During the 2018 and future Regional Transportation Plan updates, RTC will need to be aware of the long-term transportation infrastructure funding trends, and may need to factor into its planning and project funding forecasts the utilization of new project revenue sources and funding programs.

REGIONAL POLICY CONSIDERATIONS

Recognizing the long-term trends of transportation infrastructure funding, and considering past and current regional funding proposals, the following factors are introduced as evaluation metrics that RTC could utilize to gauge the merits of future funding proposals as they may manifest locally or regionally over the upcoming 20-year planning horizon.

Among the factors to consider, the following represent key evaluation metrics. These could be used by RTC as policy considerations, technical evaluation metrics, or planning document reference points. The evaluation factors could include:

- **Consistency with Regional Transportation Plan(s).** The Regional Transportation Plan is the region's consensus policy statement of transportation investment priorities and strategies. Regional or project specific funding proposals that enhance or promote implementation of the RTP's identified projects and transportation strategies can be seen as supportive and beneficial, and conversely, initiatives that diminish or restrict implementation of the RTP could be seen as un-supportive.
- **User Equity.** Project funding proposals should be designed to both avoid or minimize impacts and distribute the benefits in an equitable manner. Metrics that help assess funding program equity could include: constituencies should not necessarily be harmed or gain no benefit where avoidance could be achieved, or that mitigation or enhancements could be provided in a meaningful way.
- **System Performance Impacts & Benefits.** Funding proposals are ideally deployed to improve system performance conditions (freeways, major arterials, transit systems) as measured in any number of ways including: expanded roadway and multi-modal capacity, increased travel reliability, reduced peak-hour congestion / duration, increased corridor person / vehicle throughput or speed.
- **Project Funding.** Evaluation of new funding proposals should consider the full array of projects that need or may benefit from a new funding program, or whether specific funding proposals would permanently preclude future implementation of a needed regional project.

NEXT STEPS

RTC staff will continue to evaluate current and long-term trends in major transportation project funding and monitor current proposals for new roadway funding programs within the RTC region and bi-state metropolitan area.

Summary of Toll Projects in Washington State

Corridor	History
Vancouver/Portland Northbound Bridge (I-5)	1917-1928, 1960-1966
Vancouver/Portland Southbound Bridge (I-5)	1960-1966
Longview (SR 433) (<i>Built in 1930, Purchased in 1947</i>)	1930-1965
Lacey V. Murrow Memorial Bridge (I-90) <i>First Lake Washington Bridge</i>	1940-1949
Tacoma Narrows Bridge (SR 16) (<i>First Bridge</i>)	1940-collapsed
Agate Pass Toll Bridge (SR 305)	1950-1951
Tacoma Narrows Bridge (SR 16) (<i>Second Bridge</i>)	1950-1965
Fox Island Bridge (SR 303)	1954-1965
Port Washington Narrows Bridge (SR 303)	1958-1972
Maple Street Bridge – Spokane	1958-1990
Hood Canal Bridge (SR 104)	1961-1979
Biggs Rapids Bridge (U.S. 97) (<i>Sam Hill Memorial Bridge</i>)	1962-1975
Evergreen Point Bridge (SR 520) <i>Second Lake Washington Bridge</i>	1963-1979
Vernita Toll Bridge (SR 24)	1965-1976
Hood Canal Bridge (SR 104) (<i>Rebuilt</i>)	1982-1985
Tacoma Narrows Bridge (SR 16) (<i>New Span</i>)	2007 - present
S.R. 167 Hot Lanes	2008 - present
Evergreen Point Bridge (SR 520)	2011 - present
I-405 Express Toll Lanes	2015 - present
S.R. 99 Tunnel	<i>TBD - Under Construction</i>
Puget Sound Gateway (SR 167 / SR 509)	<i>TBD - Under Construction</i>

Toll Bridges in RTC Region

Bridge	Bridge Owner/Operator	History
Bridge of the Gods	Port of Cascade Locks	Built: 1926 Port Owned since: 1961
Hood River Bridge	Port of Hood River	Built: 1924 Port Owned since: 1950