WHITE PAPER

Inside Washington's Gas Tax and Transportation Funding Package

By Sam Yaghmaie, PE, LEED AP

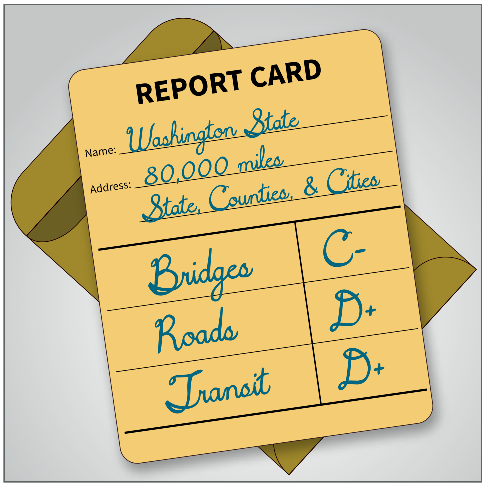
Executive Summary

The historic $16 billion Connecting Washington Transportation Package doesn't address the right priorities for the state's infrastructure.

The state will remain in dire straits until there is a solution in place that combines technology, innovations and smarter planning strategies to ensure a more sustainable and effective transportation system.

Why Washington Has a Problem

Washington's economy depends more heavily on trade than any other state in the United States and requires a reliable infrastructure system for effective freight mobility.



What the system lacks is a solid strategy for preserving and maintaining the 80,000 miles of state highways, county roads and city streets that are on the verge of deteriorating. Washington's infrastructure graded poorly in a recent American Society of Civil Engineers (ASCE) Report Card, showing that the state has a lack of planned, guaranteed funding and inadequate maintenance across the board.

Up until now, most proposed infrastructure solutions have backfired—and for good reasons:

- Widening corridors and building new ones seemed worthwhile, but after every lengthy construction project along I-405, more vehicles appeared.
- While officials hoped typical maintenance tactics would yield new results, roads kept deteriorating.
- Different modes of transportation were treated in a piecemeal way instead of taking a wide view. This proved to be unsustainable.

In June 2015, the Washington State Legislature approved a historic $16 billion Connecting Washington Transportation Package to fund infrastructure and services projects. Washington

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became one of the first eight states to approve a recurring revenue package to improve transportation infrastructure.

Unfortunately, the package's priorities are backward and could worsen the situation: Future generations could have higher debt ***and*** deteriorating infrastructure.

Experience shows that the package can be viewed with two principles in mind:

1. Do not borrow and spend money on building and preserving infrastructure. Instead, use cash flow for projects and spend wisely based on set priorities.

2. Spend more money on preserving and maintaining infrastructure on the verge of deteriorating, not on new construction. This is true across the country: The ASCE gave America as a whole a D+ rating again in its latest infrastructure report card.

> *To stabilize funding for transportation, the State needs to return to cash flow funding and pay for projects as we go.*

Cash Flow Spending vs. Borrow and Spend

The Washington State Transportation Commission (WSTC) offers policy guidance and recommendations to the governor and legislature regarding transportation finance and funding. It reviews and assesses how the state's entire transportation system works and creates a 20-year plan.

Here are the WSTC's key messages from its 2015 Revenue proposal (emphasis added):

- "In the prior transportation packages, the state fuel tax was increased by 14.5 cents. Of which, 13.5 cents of those revenues were fully leveraged to issue bonds funding approximately 421 capital improvement projects. ***As a result of fully bonding the revenue stream from these tax increases, none of that revenue is available to the State now or in the foreseeable future to pay for needed maintenance, preservation or improvement projects."***

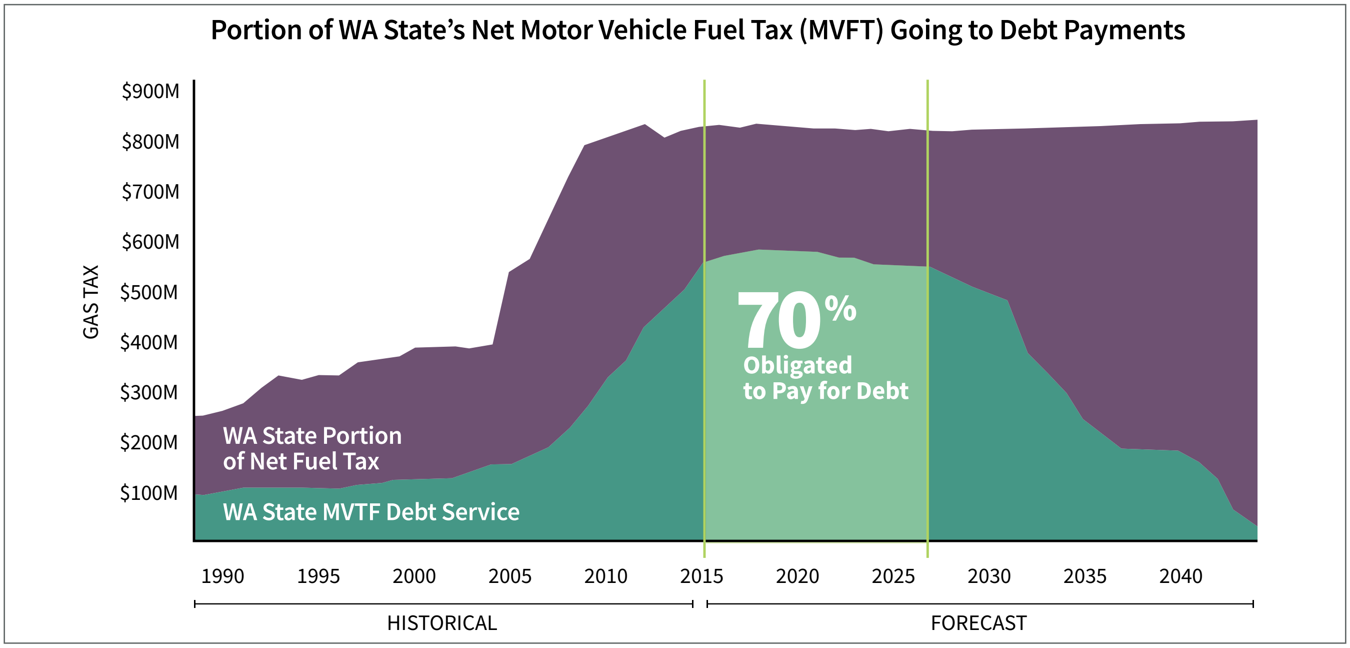
- "As reported by the Office of the State Treasurer, 'In FY 2014, debt service on bonds issued to finance these projects totals 104% and 72% of the state's share of the revenues from the 2003 and 2005 gas taxes. Current projections show that issuing all of the bonds for the legislatively directed list of projects means debt service would exceed fuel tax revenues generated by the 2003-2005 taxes by more than 15 percent.' "

- "To stabilize funding for transportation, ***the State needs to return to cash flow funding and pay for projects as we go.*** By not bonding these new revenue streams the State will ensure we have more revenue in the future to pay for future expenses. ***This will provide a more stable revenue stream*** on an ongoing basis to pay for transportation infrastructure."

How the Gas Tax Fits In

An 11.9-cent gas tax increase, along with a host of fees on car and truck registrations, accounts for $6.18 billion of the package, which will provide for construction projects through 2031.

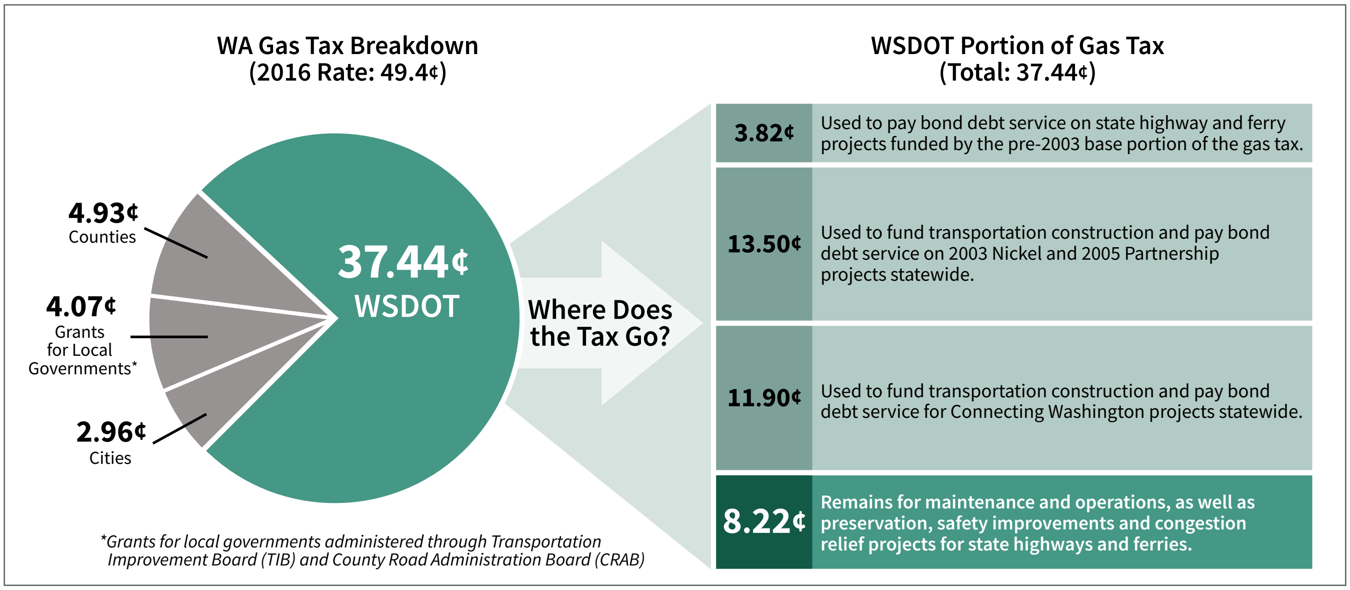
One might expect that the result would be a boon for new construction or renovations. But here's the unexpected part: Over the next 13 years, approximately 70% of Washington's net portion of gas tax revenue will pay for the long-term debt associated with financing ***past*** transportation projects. The below graphic (adapted from WSTC graph) illustrates this disappointing fact.



The WSTC made its opinion clear by stating: "This [2015 Revenue] proposal urges that bonds not be issued against these new revenue streams."

Effect on Public Agencies

The below graphic demonstrates where the gas tax is going. (The graphics are adapted from the WSDOT table *Where Does the Gas Tax Go?)* Only 8.22 cents, or 22% of the total 37.44 cents, will be available for new infrastructure projects.



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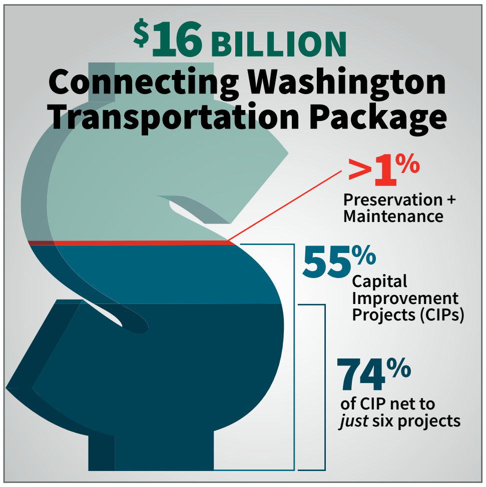
What does this mean for public agencies? It doesn't seem like they will be able to transform the additional tax revenue into new projects right now. Out of necessity, public agencies should seek out innovative ideas elsewhere to maximize funding for infrastructure.

Cities and counties ***should*** be key players in this situation, as they own over 60% of the road miles. Local agencies are crucial to preserving aging infrastructure. However, agencies' efforts won't receive nearly enough support over the life of the package: Only 3% of the revenue will go to cities and counties. This won't come close to meeting their maintenance needs.

Neglecting Maintenance

Another portion of the WSTC's 2015 Revenue Proposal urged that 48% of the new funds be allocated to preservation and maintenance:

> While the state has invested significantly in system improvements over the last 10 years, we have fallen behind in maintaining and preserving the existing transportation system… of this $21B [actually $16 billion in the final package], Connecting Washington Task Force targeted $10B for maintenance, preservation, and operations for the state, county, and cities and transit.



Yet the final package allocated *less than 1%* for preservation and maintenance, while Capital Improvement Projects (CIPs) will consume 55% of the package.

And there's more startling news: CIPs consume 74% of that 55% CIP budget for just six major projects along I-5, I-90 and I-405, leaving only $2.5 billion for other WSDOT and local road construction and replacement projects.

Here's a quote from the Washington Transportation Plan 2035, a document prepared by four entities (WSTC, WSDOT, the Metropolitan Planning Organizations and the Regional Transportation Planning Organizations). The plan provides guidance and recommendations for the state transportation system:

> Several very significant capital expansion and replacement projects are underway, promising to improve future mobility in critical corridors, but also consuming a large percentage of available funding and financing capacity. Generally, there is insufficient funding available to address both known and unanticipated future transportation needs, as too large a percentage of authorized funding streams are committed to specific projects/programs and to debt services.

With existing infrastructure slipping further into disrepair, the state will go deeper into debt, without a thorough analysis of whether pay-as-you-go financing would offer a prudent option. Instead, 18% ($2.9 billion) of the new package will pay interest and principal on already-built projects, and the law allows for new debt services of $5.3 billion. The result: As noted earlier, about

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70% of net fuel tax revenue prior to this package will stay devoted to long-term debt; that's an estimated $4.1 billion of ***just interest*** for the next 30 years.

This plan has the potential to plunge the state into the deepest debt in its history—a debt that will devour interest payments for decades and limit funding desperately needed for existing roads and transit projects.

Future-Oriented Changes

Wholesale changes, rather than ones that nibble around the edges, are possible if funding is made neutral by placing transit and road projects on equal footing.

Associated regulations and guidelines need the flexibility to go beyond vehicle lanes and include multimodal solutions:

- Dedicated transit lanes
- Bike lanes
- Sidewalks
- Transit cutouts and stops
- Traffic calming measures

Over 10% of the package is dedicated to transit, vanpool and mobility grants, bike paths and pedestrian walkways. This is not enough for future needs, but it's a very promising start. The package also gives authority to Sound Transit and Community Transit for the expansion of public transit and sales tax measures.

And the Washington Transportation Improvement Board deserves praise for not only improving its own efficiency with the Performance Management Dashboard, but also for encouraging cities and counties to become innovative: When public agencies compete for funding, they will receive 15 points for sustainable approaches, including low impact development, on-site pavement recycling such as FDR/CIPR/HIPR, and low energy or solar lighting.

A Cultural Shift

To learn about state-of-the-art technologies and practices, the International Technology Scanning Program (sponsored by the Federal Highway Administration) visited more than 80 international public agencies. The result of these insights? A new strategy that wise U.S. public agencies are encouraged to adopt:

- When pavement management is integrated into an asset management culture, it supports agency business processes and long-term financial responsibilities.
- The public benefits when agencies help elected and appointed officials become better stewards of transportation assets.
- Agencies thrive when investment priorities are known and stakeholders are held accountable for their actions.

- Agencies improve when they embrace efficiency and value driven program delivery approaches.

These are proven approaches that can be a foundation for real change. Citizens can push for:

- A fundamental cultural shift to bring the long-term strategy of financial planning to a local level.
- Effective management of our infrastructure and communication of the risks of underfunding transportation maintenance.
- Collaborative development of long-term financial planning with government officials, who should be held accountable for the way public funds are used for infrastructure.

Making the proper adjustments now to improve Washington's roadways can help to avoid a financial catastrophe and leave the state and its infrastructure in better shape for future generations.

About the Author

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A civil engineer by trade, Sam has over three decades of experience in project management, construction management, design quality review, project LEED certification, materials engineering and geotechnical consulting services. He is an expert at managing projects in the areas of transportation, water and wastewater, dams, ports and power facilities, and he's dedicated to making these projects affordable and sustainable.

Sam is a member of the American Public Works Association (APWA); he's the Chair of the National Sustainable Transportation Subcommittee (2012-2016) and the APWA Washington Chapter's Construction Management Committee (2009-2016). Sam is also a past president of the Construction Management Association of America's Washington Chapter, which he led for two years.