

POLICY BRIEF

I-405 toll lanes are not working for most drivers, alternatives should be considered

By Mariya Frost,
Director, Coles Center for Transportation

April 2018

Key Findings

- 1. Current state law requires that two performance measures for I-405 express toll lanes must both be met: the federal speed requirement that lanes must operate at 45 miles per hour at least 90 percent of the time, and that revenues must cover operating costs.*
- 2. While state officials are meeting the revenue requirement, they admit the lanes are failing federal and state requirements for speed reliability, which should prompt the termination of the tolls. Instead, WSDOT management has chosen to interpret the law in a way that allows them to keep the toll lanes in place indefinitely.*
- 3. WSDOT's insistence on managing rather than reducing congestion suggests that pricing people out of lanes, rather than improving mobility, is a higher priority.*
- 4. The University of Minnesota evaluated the toll lanes and provided recommendations to improve their performance, despite acknowledging that the law calls for their termination.*
- 5. Key analysis was omitted from the University of Minnesota's study regarding alternative lane configurations or an all-general-purpose option, raising questions about the objectivity and integrity of the study.*
- 6. Tolling only one lane in each direction on the existing highway could improve speeds in both general-purpose and tolled lanes. This should be coupled with an added performance requirement that each toll lane move a minimum of 1,700 vehicles per lane, per hour.*
- 7. Removing toll lanes in either direction on the existing highway and allowing the private sector to build new tolled capacity instead would create a real choice for both drivers who can and cannot afford to pay a toll.*
- 8. Officials should reconsider their approach to tolling policy and review alternatives to the toll lanes that prioritize increased mobility and choice for all drivers, rather than a select few.*
- 9. Washington Policy Center recommends general guidelines for implementing tolling policy that is fair for everyone (see page 12).*

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Introduction

In 2002, state officials agreed to an Interstate 405 Master Plan that included approximately 150 roadway improvements to provide congestion relief for the public and to increase speeds on the I-405 corridor.¹ Officials said they would add up to two general-purpose travel lanes in each direction on I-405, as well as bus rapid transit, vanpools, new interchanges, and auxiliary lanes.

In 2003 and 2005, lawmakers raised the state gas tax in two stages by a combined 14.5 cents per gallon to 37.5 cents. With the tax increases, state lawmakers promised to provide the public with one additional general-purpose lane in each direction between Bellevue and State Route 522, in concurrence with the I-405 Master Plan.

But in 2011, lawmakers approved House Bill 1382, imposing tolls on the promised general-purpose lanes and converting the two-person high occupancy vehicle (HOV) lanes to express toll lanes (ETLs).²

The HOV restriction, previously allowing free travel for two-person HOVs in the toll lanes, increased to three or more people with a Flex Pass, so that two-person HOVs now had to pay to use the toll lanes during peak hours (5:00 a.m. to 9:00 a.m. and 3:00 p.m. to 7:00 p.m.). State officials said the tolling scheme would benefit all users of the highway – including travelers in the regular lanes.

Additionally, the bill gave the Washington State Transportation Commission (WSTC) authority to set toll policies. The WSTC imposed a minimum toll of 75 cents and a maximum toll of \$10, with computers changing toll prices every five minutes based on a number of factors, including revenue targets, use of the toll lanes, and traffic congestion in the adjacent general-purpose lanes.

As structured, raising additional money for the state became a major policy goal of the tolling program.

In September 2015, the Washington State Department of Transportation (WSDOT) began its two-year ETL experiment.

To try to win over the public, in March 2016, the WSTC changed policy to make toll lanes free for everyone on six major federal holidays, on weekends starting at 7:00

1 “I-405 Master Plan,” Washington State Department of Transportation, 2018, at <https://www.wsdot.wa.gov/Projects/I405/I405MasterPlan.htm>.

2 “House Bill 1382: Concerning the use of express toll lanes in the eastside corridor,” Washington State Legislature, May 16, 2011, at <http://app.leg.wa.gov/bills/summary/BillNumber=1382&Year=2011>.

p.m. on Friday until 5:00 a.m. on Monday, and on weeknights between 7:00 p.m. and 5:00 a.m..³

Additionally, in April 2017, WSDOT officials opened 1.8 miles of hard shoulder running northbound between State Route 527 in Bothell and Interstate 5 in Lynnwood, for limited general-purpose use between 2:00 p.m. and 7:00 p.m. Adding this small amount of general-purpose capacity greatly improved traffic flow in both general-purpose and toll lanes, reducing travel time for all drivers.

Despite the changes, the toll lanes are failing a key requirement in law. Though the trial program ended in September 2017, WSDOT officials have continued to charge drivers to use the lanes. They are fighting to keep the lanes despite the lack of performance. WSDOT officials want to expand their tolling system to other highways across the Puget Sound Region. Maintaining tolls on I-405 is crucial to their expansion wishes, and to their desire to collect more money from the public.

Failing state and federal performance metrics

The initial reason state officials provided for their desire to build toll lanes was that the 2+ HOV lanes were not performing to federal and WSDOT speed standards of allowing drivers to travel at least 45 miles per hour 90 percent of the time. In 2015, WSTC members said, “In order to conform to standards, we need to be able to change the carpool definition to three or more people all of the time or manage the lanes to... maintain the 45 miles per hour speed objective.”⁴

Lynn Peterson, the former head of WSDOT who implemented the toll lanes, said federal mandates were forcing her to impose tolls on I-405 drivers: “Well, in the HOV lanes, the federal government does have performance standards that we need to continuously meet, and that is 45 miles per hour, 90 percent of the time. This is actually why we are even moving in this direction...”⁵

This statement is incorrect. Federal law regarding HOV and tolled facilities does not require HOV lanes to comply with the speed performance measure at all.⁶ The only time HOV facilities must comply with federal law and can be considered “degraded” (if they operate at speeds lower than 45 miles per hour) is when state officials charge tolls or allow single-occupancy vehicles other than motorcycles to use the lane.

For example, California officials allow low-emission vehicles to use HOV lanes regardless of the number of occupants. As a result, these California HOV lanes must comply with the federal speed requirement.⁷ Similarly, I-405 toll lanes must now meet federal mandates.

3 “I-405 toll lanes to be free on nights, weekends starting Friday,” by Mike Lindblom, *The Seattle Times*, March 15, 2016, at <https://www.seattletimes.com/seattle-news/transportation/i-405-toll-lanes-to-be-free-on-nights-weekends-starting-friday/>.

4 “I-405 Express Toll Lanes Public Meetings: Answers to questions posed by the public during the 2015 public input process,” Washington State Transportation Commission, February 3, 2015, at http://wstc.wa.gov/HighwayTolling/documents/2015_0219_BellevueQuestions_000.pdf.

5 “Federal regulations allow state officials to end unpopular tolls on I-405,” by Bob Pishue, Blog, Washington Policy Center, November 11, 2015, at <https://www.washingtonpolicy.org/publications/detail/federal-regulations-allow-state-officials-to-end-unpopular-tolls-on-i-405>.

6 United States Code 2010 Title 23 Chapter 1 Section 166: “HOV facilities,” Government Publishing Office, at <https://www.gpo.gov/fdsys/pkg/USCODE-2010-title23/pdf/USCODE-2010-title23-chap1-sec166.pdf>.

7 “2013 California High-Occupancy Vehicle Lane Degradation Determination Report,” California Department of Transportation, December 12, 2014, at http://www.dot.ca.gov/hq/traffops/traffmgmt/hov/files/degrd_rept/2013%20CA%20HOV%20Degr%20Report.pdf.

Current state law also reflects this rule, requiring two measures that must both be met: the federal speed requirement and a state revenue requirement. If, after two years, WSDOT officials did not keep traffic flowing 45 miles per hour at least 90 percent of the time, or if revenues failed to cover operating costs, tolls would be removed.

While state officials say they are meeting the revenue requirement (they have collected \$44.5 million from drivers over the last two years, with operations costs of \$15.7 million), they admit they have failed to meet the federal and state requirements for speed reliability.⁸

This finding is further confirmed by a new study completed by the University of Minnesota. The University was hired by the legislature's Joint Transportation Committee to analyze the ETLs and provide recommendations to improve their performance.⁹ A summary of those findings is presented in the following section.

Policy Analysis

University of Minnesota's findings and recommendations for I-405 toll lanes

The University team found that:

1. Statute does say that if both revenue and speed requirements are not met, ETLs are to be terminated.
2. Speeds are lower in the ETLs than required by law and general-purpose lane speeds have not improved.
3. Adjustments to I-405 ETLs, like raising the toll cap above the \$10 limit, could improve travel in the ETLs (but not for drivers in the general-purpose lanes) and would allow the state to continue taking money from the public.

First, the study authors confirm that "statute directs the ETL projects on I-405 to be terminated as soon as practicable" if officials do not meet speed requirements.¹⁰ Further, based on their study results, the research team reports the lanes are failing.

Between September 2015 and June 2017, the study shows ETL speeds were above 45 miles per hour just 82 percent of the time during the morning peak period, below the service levels required under federal law. During the afternoon peak period, ETL speeds were above 45 miles per hour only 85 percent of the time. In both directions, state officials failed to meet the speed requirement.

WSDOT managers have decided to interpret the law differently. State officials now claim they only need to meet either the federal speed or state revenue requirement to keep imposing tolls, or they must fail both requirements to shut down.

8 "I-405 Express Toll Lanes: 24 Months of Operations," Washington State Department of Transportation, January 9, 2018, at <https://www.wsdot.wa.gov/sites/default/files/2018/01/09/Toll-405ETL-24MonthReport.pdf>.

9 "I-405 Traffic Data and Corridor Performance Analysis," University of Minnesota Department of Civil, Environmental, and Geo-Engineering," December 6, 2017, at <http://leg.wa.gov/JTC/Meetings/Documents/Agendas/2017%20Agendas/Dec%202017%20Meeting/I-405DraftFinal.pdf>.

10 Ibid.

WSDOT's invented interpretation is not realistic. If we assume that WSDOT's interpretation is correct, only four scenarios are possible:

- The toll lanes are both profitable and speedy, allowing WSDOT to impose tolls on I-405 indefinitely.
- The toll lanes are profitable, but not speedy. WSDOT can attain profitability because many people use the toll lanes, leading to high tolls and profits - but traffic is dense enough to lower vehicle speeds below the state and federal threshold. According to WSDOT, this is acceptable and allows state officials to impose tolls on I-405 drivers indefinitely, no matter how badly congested the lanes get.
- The toll lanes are not profitable but are speedy. This scenario could be met by just a handful of vehicles using the lanes, keeping vehicle speeds high and revenues low. According to WSDOT's claim, this is acceptable and allows officials to impose tolls on I-405 indefinitely.
- The lanes are heavily congested (which would lead to high toll revenues and low speeds) but WSDOT cannot cover its operating costs, resulting in not meeting the revenue requirement. Yet this is unlikely - the minimum toll rate charged (75 cents) is higher than the average cost of collection - a rate specifically recommended by WSDOT to avoid revenue collection problems. According to WSDOT's reasoning, this is the only scenario that would result in lifting the tolls on I-405.

Still, WSDOT insists on this incorrect interpretation of the statute, even though both the Joint Transportation Committee and the University of Minnesota interpret state the law the way it is written and understood by everyone else - including lawmakers who voted on the toll authorizing bill.

However, drivers may not be upset with WSDOT's tolling program if general-purpose speeds improved as promised.

In both the project's Environmental Assessment (EA) and on WSDOT's website, officials said their tolling program would provide substantial relief to all travelers, not just those who pay to drive in the restricted fast lane.

WSDOT's website states the following:

*"How will express toll lanes help improve regular lane speeds? When you choose to use express toll lanes, space frees up in the general-purpose lanes and improves speeds for the general-purpose lanes, too. The result is a corridor that moves more vehicles and people more efficiently."*¹¹

At the time the EA was produced, WSDOT officials said they expected to complete construction of toll lanes in 2014, so the agency made projections for general-purpose speeds in 2015. This is equivalent to one year or more of operations (see chart below).¹²

¹¹ "I-405 Express Toll Lanes - Why Express Toll Lanes," Washington State Department of Transportation, 2018, at <http://198.238.212.152/Tolling/405/about.htm>.

¹² "Environmental Assessment," Washington State Department of Transportation, May 2011, at <https://www.wsdot.wa.gov/sites/default/files/2018/01/08/I405BTLEnvironmentalAssessment.pdf>.

WSDOT’s 24-month report on ETLs includes actual general-purpose travel speeds during the summer months (July through September) of 2015, 2016 and 2017. For the purposes of this study, we compared the EA 2015 one-year projections to actual travel speeds in summer of 2016 (after about one year of toll operations).

Notably, in 2016, the only section of roadway that met the promised performance level was the morning commute from State Route 522 to State Route 520 (also known as the dual-lane southbound section). WSDOT officials projected this section would have general-purpose speeds of 43 miles per hour; actual travel speeds were 44 miles per hour. The other dual-lane section and two single-lane sections missed the EA’s one-year projections by four, five and 27 miles per hour, respectively.

One condition of these measurements is that the EA projections for 2015 were made based on a three-hour peak period in the morning and afternoon, while the recent 24-month report is based on a more generous four-hour peak period. The additional hour allows WSDOT to average travel data over a larger range, yielding better results than those based on a three-hour peak period or a single peak hour.

Thus, lanes that failed to meet the EA projections in either 2016 or 2017, both years’ data benefiting from a four-hour peak period metric, are likely worse during rush hour than they are made to appear. The lanes that do meet EA projections are questionable for the same reason.

Section	Projected GP Travel Speeds (EA)	Actual GP Travel Speeds (24-month ETL report)		
	2015	Summer 2015	Summer 2016	Summer 2017
AM I-5 to SR-522 (Single, SB)	31 mph	28 mph	26 mph	25 mph
AM SR-522 to SR-520 (Dual, SB)	43 mph	36 mph	44 mph	43 mph
PM SR-520 to SR-522 (Dual, NB)	32 mph	24 mph	28 mph	32 mph
PM SR-522 to I-5 (Single, NB)	54 mph	35 mph	27 mph	46 mph

According to the new report, general-purpose speeds did improve “immediately following opening of the paved [general-purpose lane] shoulder.” In other words, traffic congestion improved when WSDOT officials added general lane capacity for all drivers, not managed capacity (toll lanes) for use only by some drivers.

Still, WSDOT claims success, saying “the general-purpose lanes are performing better or about the same as they were prior to the express toll lane system.”¹³ In other words, they say the tolling program is working because traffic has not gotten much worse.

The illusion of choice

Public officials argue that what is most important is that drivers in general-purpose lanes have a choice to use express toll lanes, and that they are demanding to use them. Mark Hallenbeck, director of the Washington State Transportation Center, says,

“Individuals have the option of paying for a better level of service when they choose. Choice is a really good thing, particularly when you are choosing between mediocre alternatives, because at least you pick the best alternative for you.”¹⁴

¹³ “New numbers show WSDOT vastly underestimated 405 toll lane usage,” by Linzi Sheldon, KIRO 7 News, December 16, 2015, at <http://www.kiro7.com/news/new-numbers-show-wsdot-vastly-underestimated-405-t/19102443>.

¹⁴ “I-405 toll lanes are cutting traffic times – but not by enough,” by Lizz Giordano, *Crosscut*, February 12, 2018, at <https://crosscut.com/2018/02/i-405-toll-lanes-are-cutting-traffic-times-not-enough>.

Hallenbeck is right that paying to save a few minutes in the fast lanes is a choice, albeit a mediocre one, because it is a choice between a slow trip in the “free” general-purpose lanes, or a costly trip in the lanes the traveling public already paid for. This is not a true choice, however, because public officials limit choices to promote the option they prefer. Their preferred option is the one that brings in more money for the state.

Additionally, the notion that drivers are clamoring for toll lanes conflicts with WSDOT’s own admission in the 24-month report that,

“...the more severe the congestion in the general-purpose lanes, the more appealing the express toll lanes become.”

In other words, it is not that drivers are demanding toll lanes independently, but rather that the public’s desire for toll lanes is derived from severe traffic congestion WSDOT officials have created in the general-purpose lanes.

The Puget Sound Regional Council (PSRC) echoes this finding, saying,

“...express toll lanes...depend on congestion to be successful. It is congestion that creates the value offered by a lane managed through pricing.”¹⁵

Put differently, most drivers need to be sitting in gridlock in order for other drivers to benefit by paying the toll.

The University of Minnesota’s recommendations to improve toll lane operations

The University study found that although the ETLs are generating significant revenue for WSDOT, they are not meeting the speed requirement. The study authors, who were not allowed by the Joint Transportation Committee to consider terminating the lanes, conclude that the toll lanes should be preserved through various improvements instead.

The University team offered several short-term and long-term recommendations to improve ETL operations, so the state can continue to collect toll revenue far into the future (forever).

The short-term recommendations include:

- Changing the tolling algorithm because toll rates are “too low as traffic volume builds in the ETL,” which WSDOT could have done at any point in the last two years. This means WSDOT could “make prices rise from the 75-cent minimum toward \$10 or beyond much earlier.”¹⁶
- Segmenting tolling (quickly changing prices in each segment of the highway) and restriping for more access points so people can merge in and out as toll rates would no longer be locked in for the entire trip. This recommendation

¹⁵ “Transportation 2040 Update, toward a sustainable transportation system,” Appendix F, Puget Sound Regional Council, May 29, 2014, at <https://www.psrc.org/sites/default/files/t2040update2014appendixf.pdf>.

¹⁶ “Washington’s I-405 express tolls should rise past \$10 to keep traffic moving, new reports says,” by Mike Lindblom, *The Seattle Times*, December 14, 2018, at <https://www.seattletimes.com/seattle-news/transportation/washingtons-i-405-express-tolls-should-rise-past-10-to-keep-traffic-moving-new-report-says/>.

undermines the initial goal of toll lanes – to provide a more reliable trip. People would not know either the final cost of their trip or how long that trip might take. Further, an open-access strategy, combined with segmenting tolls, may work well if toll lane speeds are equal to or slower than general-purpose lane speeds, but this would also mean that traffic congestion would worsen in the general-purpose lanes as more people transfer out of the toll lanes. If toll lane speeds are faster than general-purpose speeds, then there may be increased friction due to braking as people from faster toll lanes try merging into slower general-purpose lanes before they cross into a new segment with a high toll rate. Crash rates may rise while general-purpose lane performance further deteriorates.

- Removing WSDOT’s own proposed cap on tolls and increasing the maximum toll rate amount beyond \$10.¹⁷
- Expanding the peak period from its current 5:00 a.m. to 9:00 a.m. range, to 5:00 a.m. to 10:00 a.m. so that 2+ HOV motorists who use the toll lanes for free between 9:00 a.m. and 10:00 a.m. are no longer able to do so. The study recognizes that 2+ HOV commuters could be supported in the toll lanes between 5:00 a.m. and 6:00 a.m., since peak travel time starts after 6:00 a.m. Still, they recommend expanding the current four-hour peak period to five hours, rather than shifting it to 6:00 a.m. to 10:00 a.m. This recommendation may help toll lane travel between 9:00 a.m. and 10:00 a.m., but it would make travel worse for two-person carpools, which would get forced into general-purpose lanes, leading to increases in general-purpose congestion.

The long-term recommendations include:

- Extending ETLs in each direction.
- Adding auxiliary lane capacity for corridor continuity.
- Increasing transit options by implementing I-405 Master Plan transit improvements.

All of these recommendations translate to more money being paid by drivers for the ongoing, unmet promise of faster travel times. Key analysis was omitted regarding alternative lane configurations or an all general-purpose option. Focusing only on options that reinforce existing toll lanes and ignoring options that may make the corridor work better for everyone raises questions about the objectivity and integrity of the study.

Measuring success

How public officials measure the success of the toll facility depends on what they are trying to accomplish through pricing. The PSRC describes three objectives, which it calls MinLOS (Minimum Level of Service), RevMax (Revenue Maximization), and CostMin (Travel Time Cost Minimization).

¹⁷ “I-405 Express Toll Lanes Rate Setting,” by Craig J. Stone and Rob Fellows, Washington State Transportation Commission, January 21, 2014, at http://wstc.wa.gov/Meetings/AgendasMinutes/agendas/2015/January21/documents/2015_0121_BP8_I405ETLRateSetting.pdf.

A MinLOS pricing objective sets the toll based on the speed in the toll lane in order to keep traffic moving. Under this objective, “the toll is solely a function of speed in the HOT lane, as opposed to incorporating users value of time.”¹⁸ For example, if speeds drop below a certain level in the toll lane, the tolling algorithm increases the price of the toll to push people out of the lane. If speeds increase, the price of the toll decreases.

A RevMax pricing objective sets the toll specifically to maximize how much toll revenue officials take from drivers. This, too, is a balancing act, as the price should be reasonable enough that people will pay it, but not so low that the toll lane loses its value (the value being a faster trip).

A CostMin pricing objective seeks to minimize “the total cost to the users for traversing the facility, both HOT and GP lanes.”¹⁹ The total cost includes the users value of time.

If maximizing revenue is WSDOT’s primary concern, then officials will operate under the RevMax objective. This profit-maximizing approach is understandably unpopular with the public because it is inequitable. Wealthier motorists will gladly pay a higher price for a faster trip, but they will do so at the expense of those who cannot afford the higher tolls.

Those who remain in the slower general-purpose lanes are not served by the revenue maximization approach and are, in fact, made worse off. As WSDOT officials continue to interpret state law in their own favor, the agency could begin to operate under this objective if it so chooses to the detriment of travel and mobility.

Recommended alternatives to the current model

The current model on I-405 is two toll lanes and three general purpose lanes in the dual lane sections, and one toll lane and two general purpose lanes in the single lane sections. Other alternatives should be considered.

One toll lane in each direction on the existing highway.

The PSRC was consulted with ECONorthwest to examine toll lane operations. In the PSRC’s 2014 update to Transportation 2040, ECONorthwest found that imposing tolls on one lane instead of two would reduce toll prices and would increase general-purpose speeds for all drivers.²⁰ The computer model then lowers toll prices because improved general-purpose speeds reduce the willingness of people to pay to drive in the tolled lane. As a result, speeds are improved in both general-purpose and tolled lanes, benefitting everyone.

In the dual lane sections of I-405, one toll lane in each direction could be returned to the public as a general-purpose lane. For the remaining toll lane, lawmakers could add performance-based benchmarks. For example, the Federal Highway Administration says, “a safe range for establishing managed capacity for most project



Source: WSDOT

¹⁸ “Transportation 2040 Update, toward a sustainable transportation system,” Appendix F, Puget Sound Regional Council, May 29, 2014, at <https://www.psrc.org/sites/default/files/t2040update2014appendixf.pdf>.

¹⁹ Ibid.

²⁰ Ibid.

setting would be approximately 1,700 hourly automobile equivalents per lane.”²¹ Transportation officials told the Washington State Transportation Commission that vehicle flows above 1,800 per hour, per lane are possible when vehicle travel is around 45 miles per hour. Traffic engineers often cite 45 miles per hour as the “sweet spot” for maximum traffic flows.

Adding a performance requirement that each toll lane move a minimum of 1,700 vehicles per hour would add accountability to ensure maximum traffic flow in the tolled lanes. This way, WSDOT officials do not meet their speed target simply by having a small number of vehicles using the toll lanes through monopoly pricing that restricts other drivers’ access to the toll lanes.

Officials should consider this analysis in deciding whether keeping one toll lane in each direction and returning the other lane between Bellevue and Bothell to a general-purpose lane is a better option. If legislation is enacted that eliminates one toll lane in each direction, drivers would again be able to use one more public highway lane in each direction without the added cost of a toll, while the state would still require drivers to pay to use one lane. Travel speeds would increase for all drivers, though WSDOT officials would receive less toll money.

No toll lanes in either direction on the existing highway; allow private sector to build new tolled capacity instead.

A public good, by definition, is “a product that one individual can consume without reducing its availability to another individual, and from which no one is excluded. Economists refer to public goods as ‘nonrivalrous’ and ‘nonexcludable.’”²² Are roads a public good? A typical highway lane can carry around 2,000 to 2,200 vehicles per hour. Traffic slows down when that maximum flow is exceeded. As a result, the actual flow capacity of the road declines. In this way, “highways are unusual, if not unique, in that their supply decreases when demand increases.”²³

Therefore, because our use of the highway has a “rivalrous” and “excludable” impact on other motorists, roads are not considered a public good. They are, rather, a diminishing good. When a road becomes so congested that it diminishes in value to every user, the real question then becomes: Is it fair to exclude some people by pricing existing capacity so that at least those who are less price sensitive can continue to receive value from the highway?

For many, the answer is “No.” This is why one alternative is to eliminate ETLs on I-405 altogether. Tolling existing capacity of a diminishing good is inequitable and exclusionary. In the case of I-405, it is even more so, because WSDOT largely refuses to build more general lanes in heavily populated urban areas, which places a disproportionate burden on those with lower or fixed incomes who cannot afford to pay a toll.

Transportation officials should consider ways they can serve both drivers who can and cannot afford tolls.

21 “A Guide for HOT Lane Development,” Federal Highway Administration, March 2003, page 64, at http://ntl.bts.gov/lib/jpodocs/repts_te/13668_files/images/13668.pdf.

22 “Public Good,” definition, Investopedia, 2018, at <https://www.investopedia.com/terms/p/public-good.asp>.

23 “Ending Congestion by Refinancing Highways,” by Randal O’Toole, Policy Analysis, No. 695, Cato Institute, May 15, 2012, at <https://object.cato.org/pubs/pas/PA695.pdf>.

If the failing ETLs are eliminated and returned to the public in the form of general-purpose and 2+ HOV, public officials should consider working with the private sector to build new managed lanes. While the state does bring in private contractors in some cases, Washington's public-private partnership law is very restrictive. Making the law less restrictive may encourage the private sector to propose solutions WSDOT otherwise would not.

Additionally, those who cannot pay a toll would receive the benefit of improved travel times on general-purpose lanes that they have already paid for with fuel taxes. Drivers who can pay a toll can do so in new managed lanes. This alternative would give WSDOT an opportunity to create a real choice for everyone, rather than a manufactured choice that serves one group of people at the expense of everyone else.

Recommended general tolling policy

Managing new lanes through variable pricing can be a fair and effective method to improve traffic volumes, if done properly. Tolls can provide revenue to expand the state's highway system. Once a facility is paid for, the tolls would be removed. This temporary toll model has been used successfully across the country to improve mobility for the public.

Pricing roadways has also been used to manage demand. Sometimes called "congestion pricing" or "demand management," this is the approach WSDOT wrongly takes on existing, paid-for capacity on I-405. Using tolls to manage congestion raises significant philosophical problems of equity and fairness.

Washington Policy Center recommends the following guidelines for implementing tolling policy that is fair for everyone:

- The state should have the sole authority to impose tolls, unless otherwise delegated through a defined public/private partnership.
- Tolls may fluctuate based on traffic congestion.
- Tolls should only be implemented on new lane capacity or to replace an existing public facility.
 - Converting existing, underutilized HOV lanes to HOT lanes qualifies because it adds new capacity for single occupant vehicles.
 - Early tolling on an existing roadway should be prohibited, since taxpayers already paid for it.
 - Tolling existing infrastructure should be prohibited for the same reason.
- If the goal of pricing a roadway is to manage demand, the tolled facility must provide drivers a reliable non-tolled alternative.
- Toll revenue should be constitutionally protected by the state's 18th amendment for highway purposes only.
- Money from tolls should be spent only on the same road on which the tolls were collected.

- Only the new capacity or the replaced facility that provided the toll should benefit from the revenue. Applying tolls to a broadly defined corridor is not fair to drivers who paid the toll.
- The priority for using toll revenue should follow this order: 1) Paying off debt on new roadway; 2) Maintaining a new roadway; 3) Expanding a new roadway.

Conclusion

Toll lanes have worked well in other areas of the country, but WSDOT officials have yet to provide similar benefits to travelers on I-405. Although the toll lanes are generating money for their department, they are failing to meet the state and federal speed performance requirements, and they have not increased mobility for most travelers who depend on I-405 for daily travel.

The money collected from drivers in toll lanes during heavily congested peak travel times provides state officials a strong deterrent against providing general congestion relief. They know that increasing mobility in general-purpose lanes would reduce or eliminate drivers' incentive to pay a toll. Additionally, if the legislature decides to borrow money through long-term bond financing based on future I-405 toll revenue, it would create a financial obligation that could further deter public officials from ever providing congestion relief. Investors would not look kindly on adding any future general capacity to I-405, as that may reduce toll revenues that depend on congestion in the general-purpose lanes.

The state continues to profit from toll revenue and uses revenue generation as a justification for keeping toll lanes in place, despite their failure to operate at federally-mandated speeds. Public officials' and WSDOT's insistence on managing rather than reducing congestion suggests that pricing people out of public travel lanes, rather than improving mobility, is a higher priority.

Officials should reconsider this state-centered approach to tolling policy and review alternatives to the ETLs that respond sincerely to public need – increased travel choices for both drivers who can and cannot afford to pay tolls. Increased mobility and choice for everyone is a fairer and better measurement of success.

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About the Author

Mariya Frost is the Director of the Coles Center for Transportation at Washington Policy Center. Born in Russia, she and her family came to the United States in 1993 and she grew up in Washington state. She is a graduate of the University of Washington with a degree in Political Science. Mariya completed a studies program in the Dominican Republic, Spain and northern Africa through the University of Nations, and has completed courses in accounting and business administration at Saint Martin's University. She spent ten years working in the private sector and as a staff member at the U.S. House of Representatives and the Washington state senate.

Mariya has lived in both Eastern and Western Washington, and believes strongly in the freedom of mobility for all Washingtonians. She is on the Board of Directors for the Eastside Transportation Association, a member of the Jim MacIsaac Research Committee, and a member of the Women of Washington civic group.