



# I-5 System Partnership

A CALL TO ACTION



May 2019



Roger Millar  
Secretary of Transportation  
Washington State Department of Transportation

## A message from Secretary Roger Millar

The call to action by the I-5 System Partnership can't be understated. The consequences of not addressing the challenge of north-south travel in the Central Puget Sound via Interstate 5 and related routes (I-405, SR 99, SR 9, SR 167, Link Light Rail, Sounder Commuter Rail, etc.) now will reverberate far beyond Puget Sound to affect the quality of life for people throughout Washington state. I believe it is not just a "WSDOT problem" and that solutions will require new ways of doing business. It will take unprecedented partnerships, intense dialogue and political will to change how we manage and fund the future system for moving people, goods, and services between the mountains and Puget Sound.

Together, members of the I-5 System Partnership call on transportation agencies, local government, the business community, academia and communities to co-create a new path forward by developing a comprehensive master plan for the 107-mile I-5 system from Tumwater to Marysville. Only by working together can we ensure that all voices are heard and the plan is a shared vision that works for everyone.

### What is the I-5 System Partnership?

The I-5 System Partnership is a stakeholder group made up of representatives from transportation agencies, community organizations, the business community, and jurisdictions throughout the 107-mile study area from Tumwater to Marysville.

The I-5 System Partnership views Interstate 5 as the spine of a complex system that includes local streets, highways, transit, freight and emergency response.

There's agreement by the stakeholders that:

- The I-5 system is broken.
- Waiting to fix it will only cost us all more.
- We have to work together now to make lasting change.

# The I-5 System Partnership's Call to Action

Members of the I-5 System Partnership believe the time for action is long overdue and a master plan is needed.

The I-5 system is the center of a transportation system that drives economic, community and social well-being. If the challenges of the I-5 system are not addressed now, the worsening trends of congestion, delayed maintenance and environmental degradation will erode the region's quality of life, global competitiveness, ability to attract business, move goods and services, and increase the cost of living and transportation for all.

**We pledge to continue to work together to find the common ground necessary to maximize the value of this essential public asset.**

## Participating Members of the I-5 System Partnership:

- |                                    |   |   |
|------------------------------------|---|---|
| Association of Washington Business | Downtown Seattle Association                                      | Regional Council                              |
| Challenge Seattle                  | Economic Alliance   | Seattle Metropolitan Chamber of Commerce      |
| City of Arlington                  | Snohomish County  | Sightline Institute                           |
| City of Bellevue                   | Freight Mobility Strategic Investment Board                       | Snohomish County                              |
| City of Everett                    | Intercity Transit   | SODO Business Improvement Area                |
| City of Federal Way                | King County   | Sound Transit                                 |
| City of Fife                       | Master Builders Assn of King & Snohomish Counties                 | Tacoma-Pierce County Chamber                  |
| City of Kent                       | Microsoft   | The Nature Conservancy                        |
| City of Lake Stevens               | Mobility Innovation Center / CoMotion at University of Washington | Thurston Regional Planning Council            |
| City of Lakewood                   | Northwest Seaport Alliance  | Transportation Choices Coalition              |
| City of Mill Creek                 | Pierce County   | University of Washington                      |
| City of Newcastle                  | Pierce Transit  | Washington State Transportation Commission    |
| City of Seattle                    | Port of Everett   | Washington Roundtable                         |
| City of Shoreline                  | Port of Seattle   | Washington State Department of Transportation |
| City of Tacoma                     | Port of Tacoma  |   |
| City of Tukwila                    | Puget Sound   |   |
| Community Transit                  |   |   |
| Commute Seattle                    |   |   |

A lot is riding on I-5 now and in the future

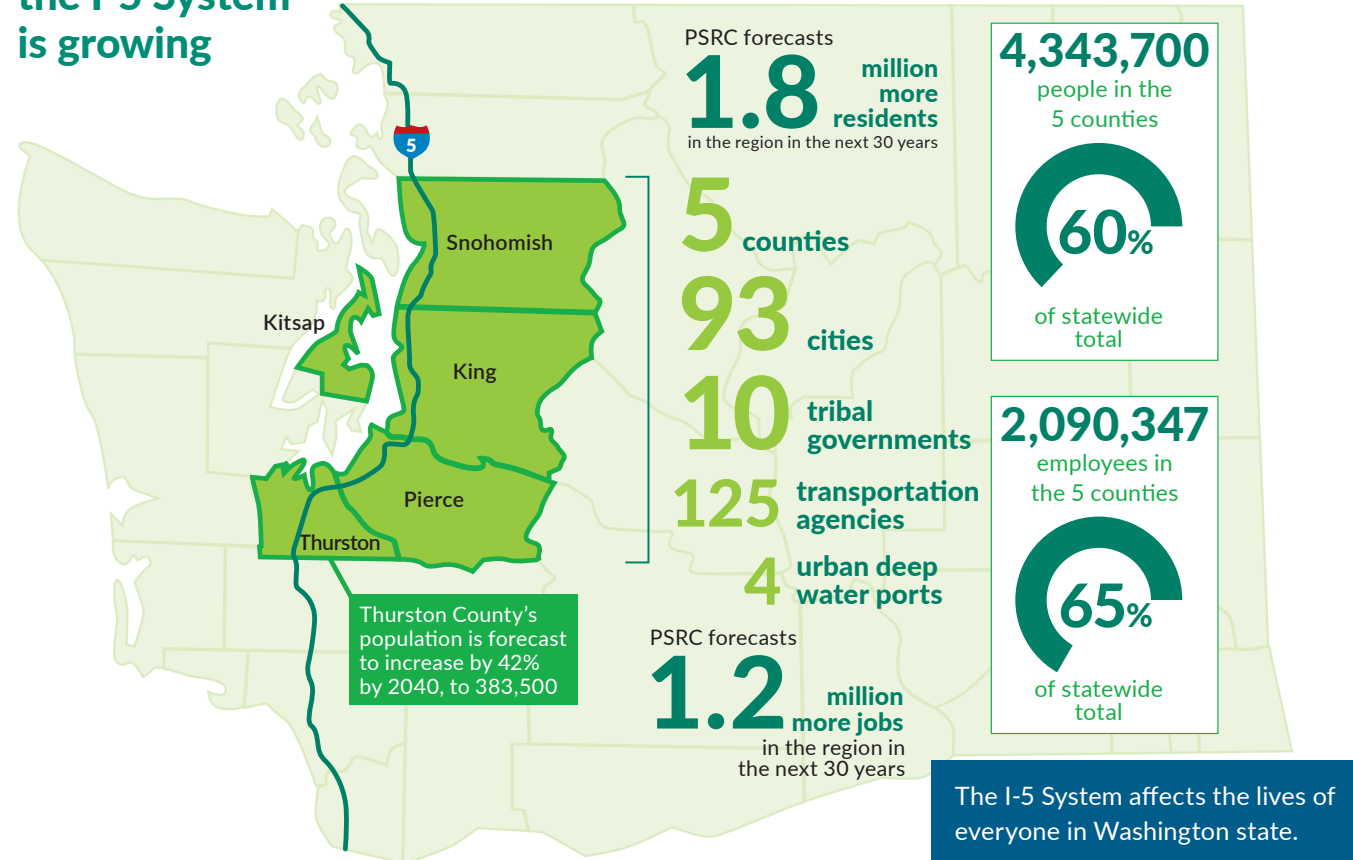
# The I-5 system is broken

The 107-mile stretch of I-5 between Tumwater and Marysville needs urgent attention. The cracked, rutted, crumbling pavement and seismically vulnerable structures on the interstate increase costs and pose challenges to everyone on it, including transit, freight and commuters. The carpool lanes on I-5 are often as congested as the regular lanes during peak periods and do not meet state performance standards.

## I-5's lack of reliability threatens Washington's ability to compete globally and quality of life for the region

This interstate is the backbone of Washington's transportation system, powering our economy, linking statewide markets to our ports, connecting people to jobs, goods and each other. All of the transportation systems it connects to, including local streets, highways, transit, freight and national defense rely on I-5. A lasting change is needed.

### Demand on the I-5 System is growing



## A master plan is needed now to address the challenges of the I-5 system

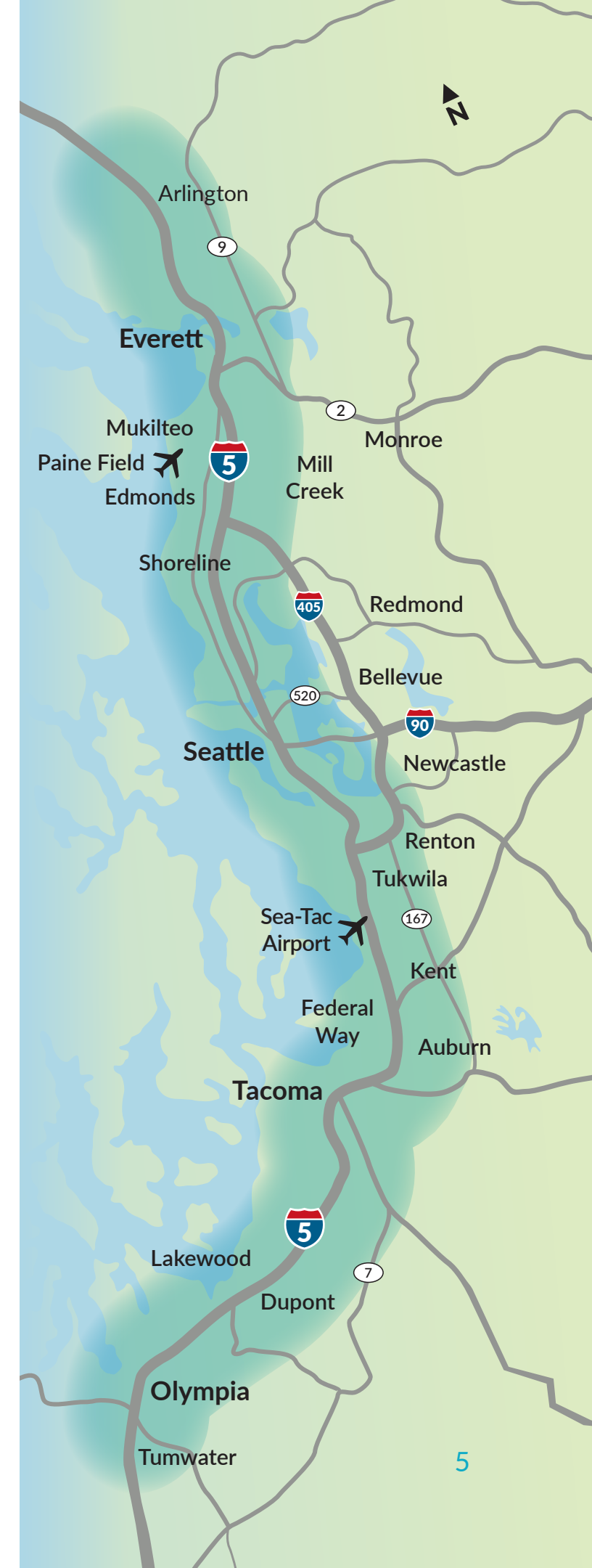
With significant population and employment growth over the last decade and another almost 2 million residents expected by 2050, the system will be even more strained if nothing is done. Current financing can't address the challenges of the I-5 system, and piece-meal solutions just move problems down the line. Waiting to fix it will only cost more. A coordinated and strategic comprehensive framework to address these pressing issues is long overdue.



### Doing nothing is not an option

The I-5 System Partnership met for a year to identify goals and strategies for the future of the I-5 system. They agreed doing nothing is not an option any longer.

By seizing this opportunity to work together, and leveraging 21st century technology and private sector innovations, we can plan an I-5 system that serves the Puget Sound region's future needs.



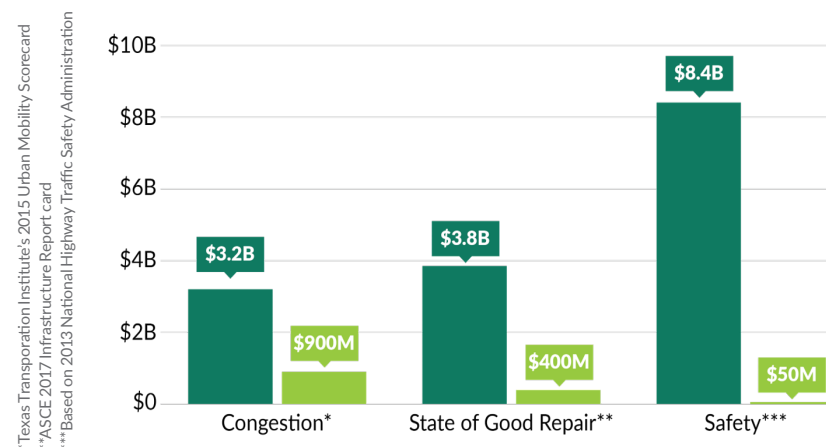
# Risk of Doing Nothing

It is an understatement to say that congestion costs everyone time and money. Washington businesses become less competitive with each delayed product delivery and each employee stuck in traffic. Every year, travelers and freight trucks spend a growing number of hours trapped in congestion. Poor air quality from vehicle emissions, poor water quality from pavement runoff, and noise pollution from cars and trucks also damage human and environmental health, with greater effects on already disadvantaged communities.

We treasure our region's natural beauty and quality of life. We want our children to thrive here. With almost 2 million more residents expected in the Puget Sound region by 2050, "business as usual" will not fix our HOV system, pay for a maintenance backlog growing bigger each year, keep our freight systems moving to market, nor meet the mobility needs of our people.

If nothing is done, our economy and quality of life will suffer as congestion worsens.

## Now is the time to act.



The cost of sitting in traffic to the state's economy is \$3.2 billion a year, yet only \$900 million is spent to address the issue. Similarly, keeping a state of good repair costs us just under \$4 billion and safety \$8.4 billion, yet we spend only \$400 million and \$50 million respectively.

### What's at risk?

**Risk:** Increased congestion in the I-5 system reduces economic vigor, public health, community vitality and environmental resilience.

**Risk:** Congestion and lack of reliable freight access to and from the region's ports create a barrier to getting Washington goods to market around the world and ultimately decrease the state's global competitiveness.

**Risk:** HOV lanes no longer provide reliable speed advantage to transit and rideshare vehicles, congesting the system with more people on the road in single-occupancy cars

**Risk:** Deteriorating repair conditions cause I-5 to fail in the event of a major earthquake.

**Risk:** Underserved communities have fewer transportation options, exacerbating inequitable access to jobs and services.

**Risk:** Continued housing development far from job centers increases commute distance, adding even more congestion.

**Risk:** The gas tax fails to provide a sustainable source of funding, reducing even further the state's ability to address congestion, maintenance and safety in the system.

# A Partnership for the Future of the I-5 System

The I-5 System Partnership worked collaboratively over the last year to review the pressing challenges of the I-5 system and establish a set of **goals and strategies** for the future of the system. The Partnership recommends development of an I-5 System Master Plan that identifies specific improvements that should be made to each part of the I-5 system. Working toward a set of clear goals will position the I-5 system to support future generations and help meet the challenges of future growth in a way that protects our economy, environment and communities. The Partnership's goals and strategies are consistent with adopted regional visions of the Puget Sound Regional Council and the Thurston Regional Planning Council.

## What are the Partnership's goals for the I-5 system?

### Safety and Reliability

Predictably, safely and efficiently serve the transportation needs of our region

### Equitable Opportunity

Advance access to support economic opportunity, equity, health and quality of life for our region and its people

### Connected Communities

Improve connections between communities with more multimodal options and partnerships

### Adaptive Innovation and Technology

Innovate with mobility solutions, land use decisions, and emerging technologies that serve the evolving needs of our communities and economy

### Maintained System

Pursue lowest lifecycle cost to preserve the system in a state of good repair

### Resilient System

Create resilience in anticipation of disruptive conditions

### Environmental Stewardship

Maintain the highest standards for environmental management

### Sustainably Funded

Ensure revenues and resources are available that set the I-5 system on a new course toward sustainable funding, less burdened by debt

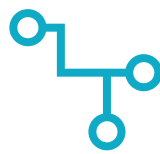
## What are the Partnership's strategies?

The I-5 System Partnership identified six overarching strategies to help achieve the goals identified by members. Together these goals and strategies can serve as a blueprint for a comprehensive **I-5 System Master Plan**.



### Optimize the existing system and invest strategically

Consistent with the Practical Solutions approach to project planning and management, using data-driven performance measures and local partner engagement to seek lower-cost approaches and efficient funding mechanisms.



### Embrace new and emerging technologies

Emerging technologies are radically changing the ways in which people interact, work, travel and shop. The Master Plan should assess how these changes may impact the I-5 system, especially opportunities to increase its safety and people-carrying capacity.



### Coordinate land use and transportation

Every land use decision and every transportation decision should be made with consideration of how to maximize accessibility and make better use of our resources.



### Increase travel choices

To increase system efficiency, I-5 system improvements should optimize access to public transportation and non-motorized travel options.



### Keep freight and goods moving

Too often, land use and transportation decisions are made without proper consideration of freight mobility. Freight transportation needs to be an intrinsic part of the I-5 system solutions, because freight moves our region's economy and is necessary for jobs and economic growth.



### Maintain and preserve our assets

Even as we implement solutions that improve I-5 performance, we also need to take care of the basic investments that we already have in place.

## Advancing the Work of the Partnership: What's Next?

In order to advance the goals and strategies of the I-5 System Partnership, a comprehensive plan for the 107-mile I-5 system from Tumwater to Marysville is a critical next step. An **I-5 System Master Plan** would consider all potential solutions and recognize that "business as usual" is not an option. Some of the solutions may be controversial, but challenging problems require bold solutions.



### What will it take to be successful?

#### Recognition that I-5 is more than a highway

I-5 is the core of an interconnected local and regional transportation system that carries both people and goods. Because of this, solutions must keep in mind both the physical highway and the way people and business use it. They must address the way local streets, highways, transit, rail and freight connect and interact. Decision makers need to consider the cost of inaction as well as the costs of needed actions.

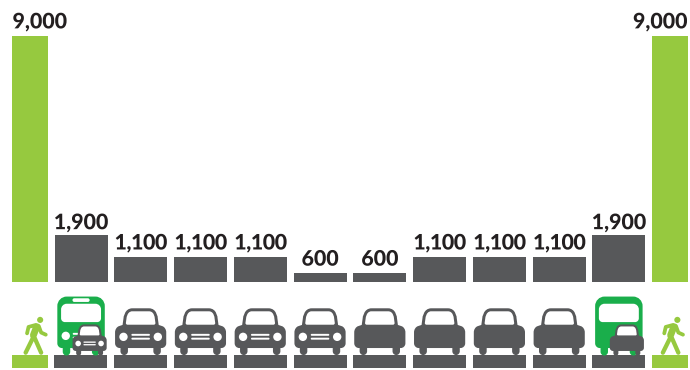
#### Unprecedented partnerships

The I-5 System Partnership includes a wide-ranging group of leaders working together to address the pressing challenges of the I-5 system. It is a collaboration between local governments, the regional business community, transit agencies, ports, community organizations, and the University of Washington. These are the types of diverse collaborations that will facilitate lasting positive change.

## Keeping pace with the future of transportation

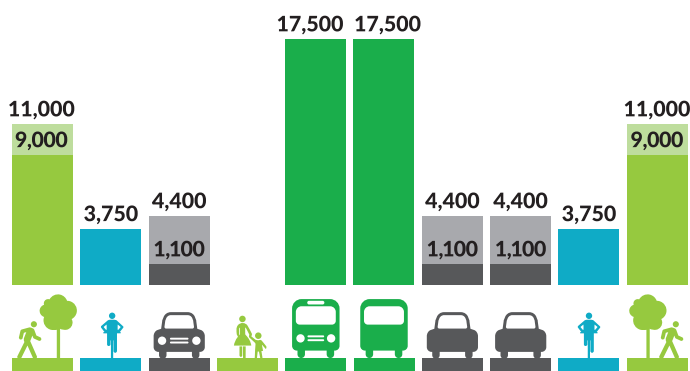
We need a new mindset to make this 20th century infrastructure viable in the 21st century and beyond. Communities are changing and so are the ways in which people travel from place to place. New technologies and innovations are already shaping the future: new car sharing and on demand services, as well as advancements like automated, connected and electric vehicles, and high speed rail. At the same time, transit services need to be more accessible.

### The 20th century way



This street can serve up to **29,600** people per hour.

### Going forward



This street can serve up to **77,000** people per hour.



*Social equity means all people have access to the resources and opportunities that improve their quality of life and let them reach their full potential.*

## Integrating social equity

Any efforts to improve the I-5 system should include historically underserved communities early in the decision-making process, addressing barriers to participation as a primary concern. An I-5 System Master Plan must lead with racial equity and highlight how decisions either create or dismantle institutional barriers related to racism, bias, poverty, limited-English proficiency, disability or immigration. Social equity must be both a process and an outcome of the I-5 System Master Plan.

## Approaching things differently

By viewing I-5 as a system and leveraging innovation, stakeholders can coordinate operations on other roadways and all modes of transportation. This coordination is leading to solutions that address the changing needs of our communities and the larger economy. All potential solutions for the system need to be evaluated to determine which work best, and how they interact. Practical Solutions, used throughout WSDOT, is a **performance-based approach** to transportation decision-making. This data-driven approach uses tools and performance measures to seek lower-cost approaches and efficiencies in operating highways, ferries, transit and rail, to reduce travel demand, and to reduce the need for building costly new infrastructure.

Want to know more?

# The I-5 System at a Glance

Over the past year, the I-5 System Partnership has unpacked the issues the I-5 system faces today and gained a better understanding of the many coming changes, challenges and opportunities they may bring. The following provides more information on the evolution of I-5 and highlights the key issues that the partnership believe need to be addressed.



The first section of the "Tacoma-Seattle- Everett freeway" was completed on Oct. 1, 1959, and by the end of that year, most of the highway between Vancouver and Olympia met interstate standards.

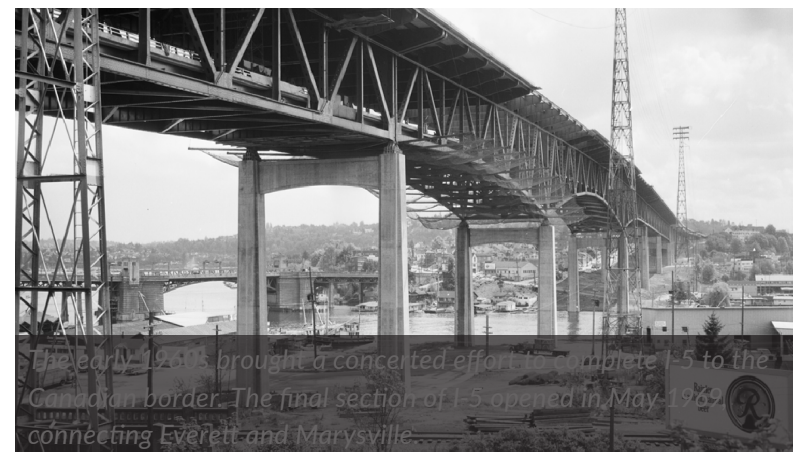
## Interstate 5: Yesterday

### The road that changed everything now needs to change again

When first conceived, I-5 was a part of the Eisenhower era vision of an interstate system that would bring America closer together. Its construction created opportunities for economic growth, but it was also a disruptive innovation with both intended and unintended consequences.

The new interstate connected communities once considered distant by car. It also cut through neighborhoods, redefining land use, neighborhood boundaries and real estate values. The neighborhoods cut off by I-5, disproportionately communities of color, were exposed to new noise, pollution and physical barriers, resulting in negative health outcomes. It brought inexpensive California produce to Puget Sound consumers, changing the market dynamics for local farmers. Agricultural land turned into suburbs, warehouses and office parks, increasing the number and length of car trips sowing the seeds of future congestion.

Much has changed since the early days of the interstate. The population of the Puget Sound region has more than doubled from nearly 2 million residents in 1969 to almost 4.3 million today. During this time period, annual average daily traffic has grown 150 percent, from 124,599 average daily vehicles to 250,000 in 2017. The deferred maintenance and preservation needs for I-5 is over \$2.5 billion, including bridges needing seismic repair.



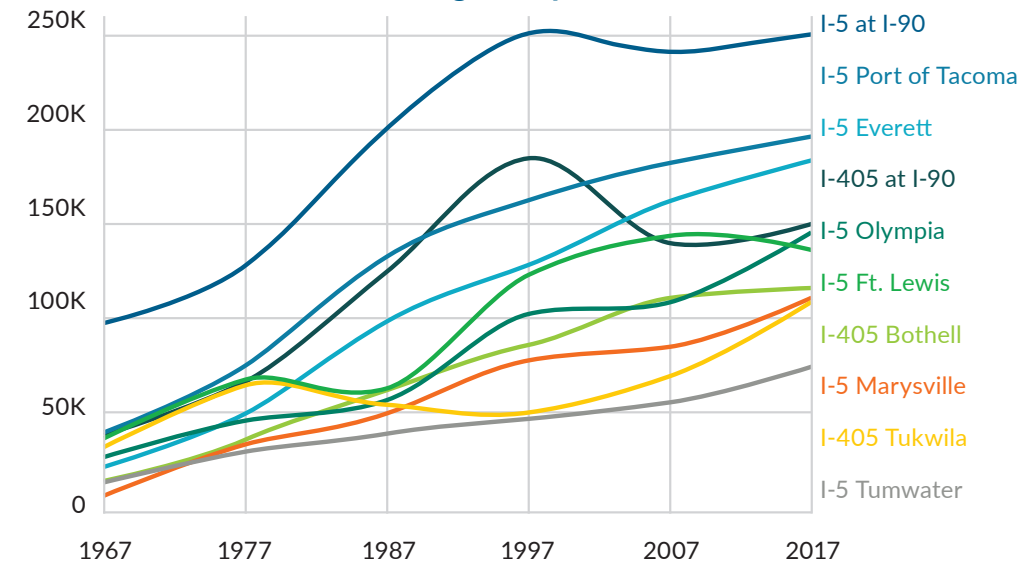
The early 1960s brought a concerted effort to complete I-5 to the Canadian border. The final section of I-5 opened in May 1969, connecting Everett and Marysville.

## Demand has outpaced investment

Over the years, transportation partners throughout the Puget Sound region have invested in transit, freight facilities, active traffic management, and transportation demand management to help this 20th century infrastructure meet our 21st century needs. Unfortunately, even these investments have not kept pace with the growing population, nor have they leveraged technological advances and societal change to create more efficient solutions for moving people.

And yet the health of the I-5 system continues to be fundamental to the quality of life for virtually every person, community and business in Washington. The I-5 system enables access to jobs and markets. The wellbeing of the I-5 system creates a ripple effect on economic vigor, public health, community vitality and the natural environment.

### Estimated Annual Average Daily Traffic



Washington's greatest traffic congestion centers on the I-5 system.

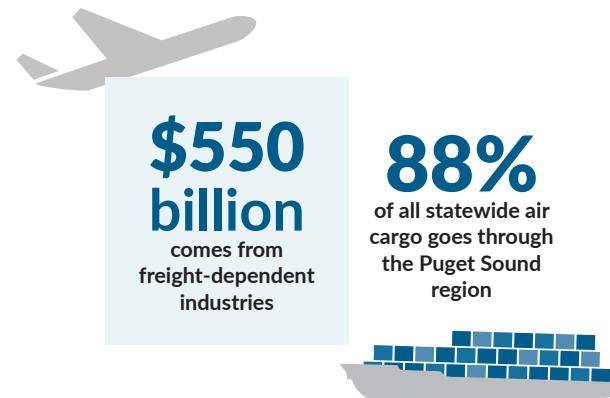


Environment and economy intersect at I-5 through the Nisqually River Delta.

## Interstate 5: Today

### Moving goods: Connecting freight to our ports

I-5 in the Puget Sound region is a primary connector for the ports of Everett, Olympia, Seattle and Tacoma. It is a lifeline for getting Eastern Washington agricultural products to Asian markets. Operations at the ports of Tacoma and Seattle alone carry over 27 million tons of freight per year and together represent the fourth-largest container gateway in North America. With over \$73 billion in international trade flowing through these two ports each year, there is a significant impact on the state's economy, with over 58,000 jobs supported and \$5.9 billion in revenue annually. The I-5 system is a critical lifeline for the region's booming economy. Congestion and lack of reliable freight access to and from the region's ports create a barrier to getting goods to market around the world and ultimately the state's economic vitality and global competitiveness.



### Moving people: the HOV system and transit

The high occupancy vehicle (HOV) system, designed to move more people with fewer vehicles, is operating today with the same levels of congestion as regular lanes, with speeds below performance targets. Furthermore, frequent violations reduce HOV lane reliability. When HOV lanes fail to provide a reliable speed advantage to transit and rideshare vehicles, those modes become less desirable and more single-occupancy vehicles fill the highway. The HOV system is also incomplete, with general purpose lanes only at critical connection points.

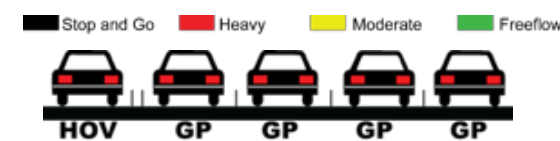
**7 HOV projects**  
in the study area cost **\$1.6 billion**  
(three completed, three under construction, one in design)

WSDOT implemented express toll and HOT (High Occupancy Toll) lanes on I-405 and SR 167, which has improved HOV speeds and reliability.



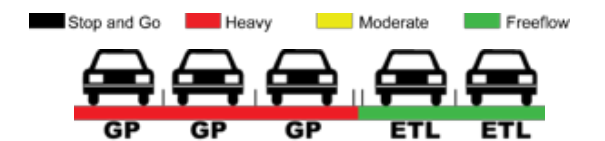
### I-5 (Northbound at NE 130th St)

Daily Volume: 105,000 cars (peak hour)



### I-405 (Northbound at NE 85th St)

Daily Volume: 107,000 cars (peak hour)

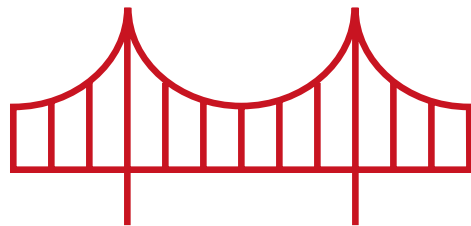






## Maintenance and preservation

Huge maintenance needs have outpaced their traditional funding sources on I-5 and will continue to deteriorate and exacerbate conditions. Seismic retrofits are needed throughout the Seattle area, so I-5 does not fail in the event of a major earthquake.



I-5 faces huge maintenance needs and funding hasn't kept pace.

**\$2.5 billion** needed for preservation through 2040.

**\$700 million** needed to preserve **430 bridges** through 2040.

**\$1.3 billion** needed to preserve pavement through 2040.

**\$550 million** needed for seismic retrofits to I-5 through Seattle. Drivers will have to use other routes following a major earthquake.

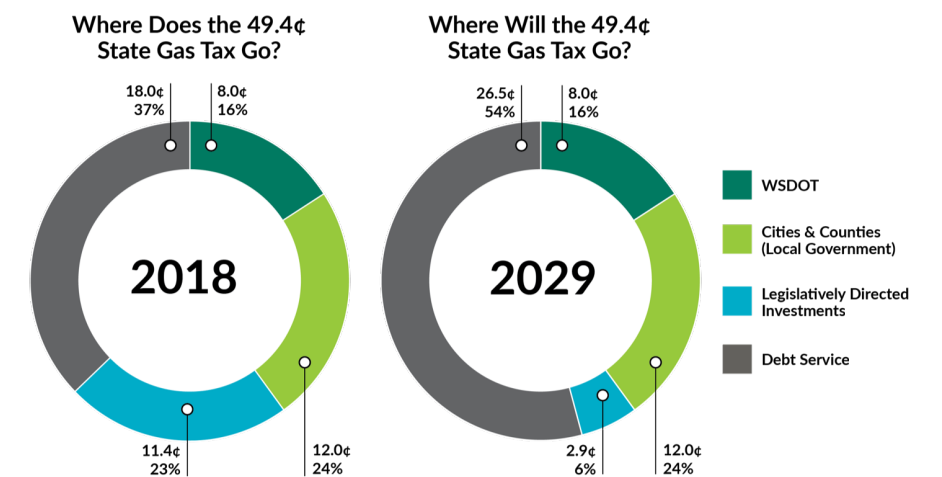


Traditional funding does not support the costly backlog of maintenance needs, like the drainage system and cracked decking on Seattle's Ship Canal Bridge.



## Funding

The gas tax, traditionally used to pay for system maintenance and improvements, is no longer a sustainable source of funding. Historical growth in fuel tax revenues has flattened due to fuel efficient vehicles, and a large portion of those diminishing revenues pays for the interest on loans for roadway improvements that have already been built. Currently, approximately two thirds of state gas tax revenues are devoted to paying off bonds for completed projects.



## Land use

The interstate system opened up an opportunity for middle-class Americans to afford their own single-family home, away from the city. Today's traffic congestion on the I-5 system is created, in large part, by commuters traveling long distances to and from work. We need to look at ways to plan for and build communities with coordinated land use and transportation in mind so people can live and play closer to their places of work. Innovations like telecommuting and flexible schedules also hold promise for improving congestion in already-developed areas. Overall, we will need a balanced suite of thoughtful land use strategies to ensure future development provides more affordable house and travel options that can help reduce demand on the system.



## Additional Resources

- [I-5 System Partnership Strategic Framework](#)
- [I-5 Partnership Meetings Dates and Topics](#)
- [VISION 2040 \(PSRC\)](#)
- [Regional Transportation Plan \(PSRC\)](#)
- [Sustainable Thurston \(TRPC\)](#)
- [2040 Regional Transportation Plan \(TRPC\)](#)
- [Washington Transportation Plan \(WSDOT and WSTC\)](#)
- [State of Transportation 2019 \(WSDOT\)](#)

