



Why do we have HOV lanes?

- **Efficiency**
HOV lanes increase freeway efficiency by moving more people in fewer vehicles than the general purpose lane next to them.
- **Reliability**
HOV lanes help express buses stick to their schedules. Carpools, vanpools and motorcycles also receive a quicker trip.
- **Speed, Ease and Money**
Users cite saving time and money, reduced stress and convenience as the main reasons they use the HOV system.
- **Freeway Demand**
HOV lanes reduce competition for a limited amount of space on the freeways during peak commuting periods.
- **Fewer Car Trips Area-Wide**
HOV lanes add fewer car trips to the overall transportation system than new general purpose lanes.
- **Air Quality and Climate Change**
If we create fewer car trips, we help to decrease additional greenhouse gas emissions and place less of a burden on the environment.
www.wsdot.wa.gov/hov/climate
- **Sustainability**
HOV Lanes play a crucial role in supporting more sustainable transportation choices.

For more information:

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The Washington State Freeway HOV System

The freeway HOV system is a key part of our state's highway network. It connects major population and employment centers in the central Puget Sound area. HOV lanes enable commuters to get to and from work more quickly. They also provide an incentive to share the ride in a bus, carpool, or vanpool, helping with this area's emissions and air quality. Approximately 225 lane-miles of a planned 320-mile freeway HOV system have been built since 1970.

What are HOV lanes?

HOV lanes are high occupancy vehicle lanes, also known as carpool or diamond lanes. HOV lanes are reserved for people who share the ride in buses, vanpools and carpools. Freeway HOV lanes are generally inside (left) lanes and are identified by signs and pavement diamond symbols. They are usually separated from other lanes by a single or double white line.

On most HOV lanes, vehicles must carry at least two people, including the driver. Buses, motorcycles and emergency vehicles may use the HOV lanes regardless of the number of occupants.

What makes HOV lanes efficient?

HOV lanes are designed to maximize the movement of people rather than vehicles. They usually move more people than a general purpose lane, even when they don't look full. For example, you may only see one bus per minute, but buses can carry the equivalent of 45 or more cars.

The average freeway HOV lane in the central Puget Sound area carries 1½ times as many people as the average general purpose lane in the peak commuting periods and directions. On I-5 in north Seattle, the northbound HOV lane carries almost 2½ times as many people as the lane next to it during afternoon rush hours.

www.wsdot.wa.gov/hov

Americans with Disabilities Act (ADA) Information: Persons with disabilities may request this information be prepared and supplied in alternate formats by calling the Washington State Department of Transportation ADA Accommodation Hotline collect at 206-389-2839. Persons with hearing impairments may access Washington State Telecommunications Relay Service at TTY 1-800-833-6388, Tele-Braille at 1-800-833-6385, or Voice at 1-800-833-6384, and ask to be connected to 360-705-7097.

Title VI Statement to Public: WSDOT ensures full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, national origin or sex in the provision of benefits and services resulting from its federally assisted programs and activities. For questions regarding WSDOT's Title VI Program, you may contact the Department's Title VI Coordinator at 360-705-7098.

When do HOV lanes operate?

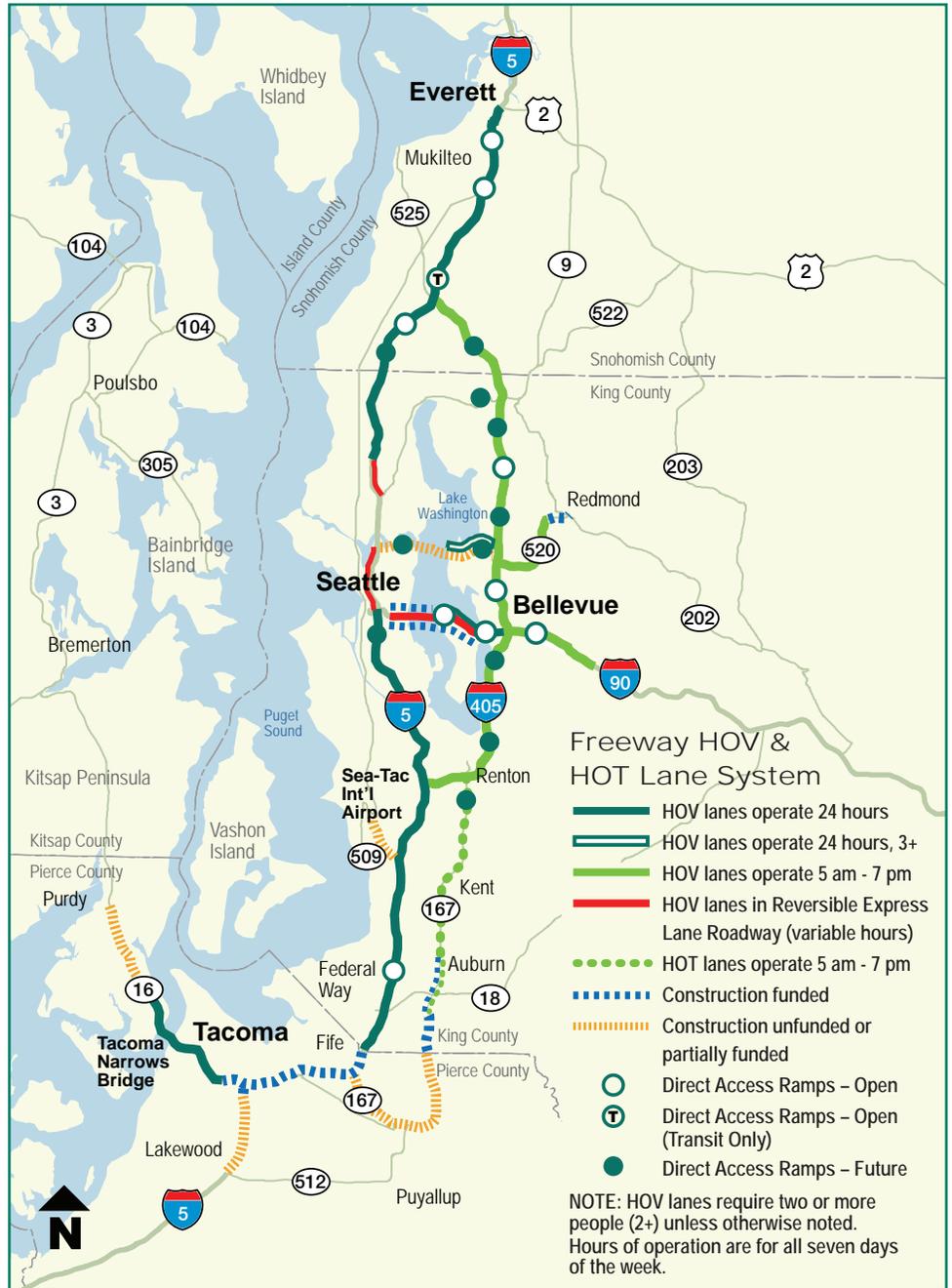
HOV operating hours are as follows for all seven days of the week:

- **I-5:** 24 hours a day. See special hours of operation in the I-5 Reversible Express Lanes (between Northgate and downtown Seattle) below.
- **I-90 (east of I-405):** 5 am – 7 pm
I-90 (west of I-405): 24 hours a day
 There is a westbound HOV lane from Bellevue Way SE in Bellevue to 80th Avenue SE on Mercer Island which operates 24 hours a day on the left side of the outer roadway. Note: The HOV lanes between Bellevue and Seattle in the I-90 Reversible Express Lanes have special hours of operation (see below).
- **I-405:** 5 am – 7 pm
- **SR 16:** 24 hours a day
- **SR 167 HOT Lanes:** 5 am – 7 pm
- **SR 520 (east of I-405):** 5 am – 7 pm
SR 520 (west of I-405): 24 hours a day
 Note: The westbound SR 520 HOV lane requires three or more people west of I-405. Unlike the rest of the freeway HOV system, all HOV lanes on SR 520 are on the right side of the general purpose lanes.
- **Direct access ramps:** 24 hours a day
 Note: Direct access ramps at Ash Way are for buses only.

Reversible Express Lane hours:

- **I-5:** Several segments of HOV lane exist in the Reversible Express Lanes on I-5. These operate in only one direction at a time. The I-5 Reversible Express Lanes typically operate southbound during the morning, northbound during the afternoon and evening, and are closed at night. This schedule is the same for weekdays, weekends, and holidays.
- **I-90:** The I-90 Reversible Express Lanes are open to all vehicles between Rainier Avenue S. and Island Crest Way. They are restricted to HOVs west of Rainier Ave S. and east of Island Crest Way. They typically operate westbound from 1 am – 12:30 pm, and eastbound from 2 pm until midnight during the weekdays. On weekends (and most holidays) they typically operate eastbound only, from 2 pm Friday to midnight on Sunday.

The above schedules are often adjusted for special events. See www.wsdot.wa.gov/Northwest/King/ExpressLanes for more information.



Rules of the Road

Travel together: Except for short segments on SR 520 (3+) and I-90 (solo ok), a driver must have at least one other person in the vehicle to use the HOV lanes. See left sidebar for details. The definition of “person” is not limited by age or driver’s license.

No double-crossing: Vehicles may enter and exit HOV and HOT lanes at any point where there is a single white line (continuous or dashed). Vehicles may **not** cross double-white lines.

Watch your weight: Trucks are limited to 10,000 pounds. Towing is allowed in the HOV lanes as long as the combined weight is 10,000 pounds or less, and an adequate speed can be maintained. There is no weight limit for recreational vehicles or buses.

Know your hours: HOV lanes have varying hours of operation (see left side-bar and map this page.) When HOV lanes are open to all traffic they should be treated as a regular freeway lane, which is usually reserved for passing.

Be a HERO: Vehicles in the HOV lanes during operating hours without the required number of people, and trucks weighing more than 10,000 pounds, are subject to a \$124 fine from the Washington State Patrol. Citizens may report HOV and HOT lane violators through the HERO program at 1-877-764-HERO or online at www.wsdot.wa.gov/hov/hero.

What's new on the HOV System?

New Lanes

Since the beginning of 2007, 21 lane-miles of HOV lane have opened on I-5 in Everett and Federal Way, 13 lane-miles have opened on SR 16 in Tacoma and Gig Harbor, and another two lane-miles have opened on SR 167 in Auburn. HOV lanes are under construction at the east end of SR 520 in Redmond, on SR 16 and I-5 in Tacoma, and at the north end of SR 167.

www.wsdot.wa.gov/hov/HOVProjectsList

New Ramps

Direct access ramps are left-side ramps that allow HOVs to directly enter and exit HOV lanes in the center of the freeway without weaving across all the other lanes of traffic. They improve safety, reduce congestion, save time and increase travel time reliability for all freeway users. Direct access ramps are now open on I-5 in Federal Way, in Lynnwood, at Ash Way in Snohomish County, in south Everett, and in downtown Everett; on I-405 in Bellevue and Totem Lake; and on I-90 on Mercer Island, at Bellevue Way SE, and at Eastgate.

www.wsdot.wa.gov/hov/DirectAccessRamps

SR 167 HOT Lanes Pilot Project

HOT lane stands for **high occupancy toll lane**. The state's first HOT lanes were converted from existing HOV lanes and opened on SR 167 between Auburn and Renton in May 2008. The SR 167 HOT lanes continue to provide premium service to HOVs but also allow solo drivers to use the lanes for a toll when there's room. Toll prices vary depending upon how much space is available: the less space, the higher the toll. This helps ensure an optimum number of vehicles are using the lane and that adequate speeds can be maintained.

HOT lane users need to know that entering and exiting the HOT lane is restricted to areas where the double-white pavement lines turn to dashed. Single occupant drivers who wish to use the lanes must obtain a transponder, a device that allows for automatic toll collection. HOVs do not pay a toll and are not required to have a transponder to use the lanes on SR 167. For drivers who will be using their vehicle as both a carpool and driving solo, a shield is available from the *Good To Go!* office which will temporarily disable their transponder when two or more people are in the car.

The four-year HOT Lanes Pilot Project will provide WSDOT an opportunity to study the effects on both HOV and general traffic and assess application in other locations. Learn more about the HOT Lane Pilot Project, open a toll account, or get a transponder or transponder shield by visiting:

www.wsdot.wa.gov/projects/SR167/hotlanes or calling 1-866-WDOT2GO or 1-866-936-8246.

How well is the HOV system working?

The HOV freeway system is successful in these ways:

- Nearly all HOV routes save users time compared to the general purpose lanes -- up to 20 minutes during rush hours (varies by location).
- HOV lanes move about 35% of all the people on area freeways in only 19% of the vehicles in the peak commuting periods and directions.
- The average HOV lane carries 1½ times as many people as the average adjacent lane in the peak commuting periods and directions.

Despite the above successes, freeway HOV lanes are over- and under-utilized at many locations.

Over-utilization: Over-utilization slows the HOV lanes. This decreases the incentive to share rides and makes it difficult for buses to maintain their schedules.

Parts of I-5, I-405, and westbound SR 520 HOV lanes no longer meet the WSDOT 45 mph performance standard. Solutions are being developed for these corridors. For information, visit:

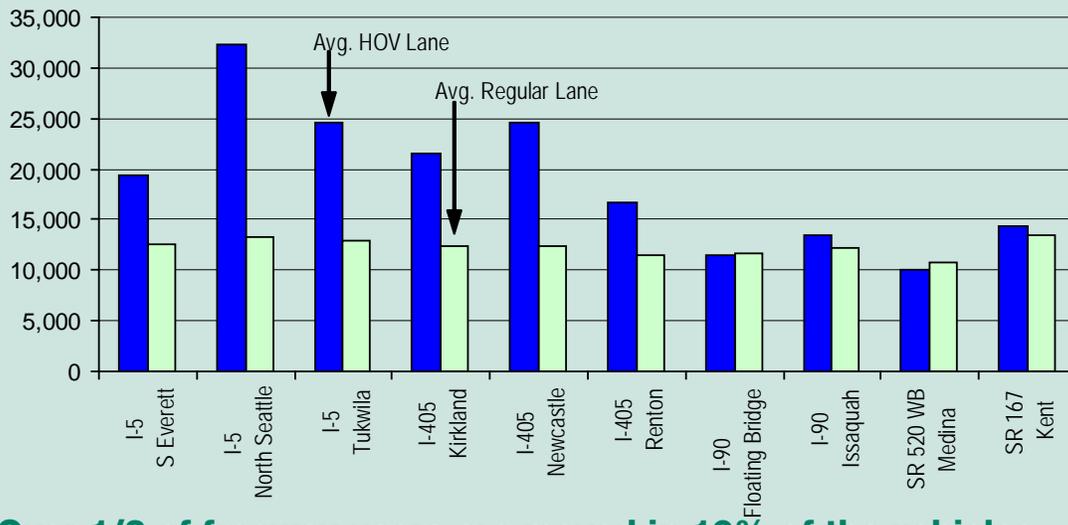
www.wsdot.wa.gov/MovingWashington

Under-utilization: Under-utilization means that valuable infrastructure is not being used as efficiently as possible.

As shown in the chart to the left, most monitoring locations showed many more people in HOV lanes than in an average adjacent lane during rush hours in the main direction of travel. Exceptions are:

- I-90 Floating Bridge: The HOV lanes at this location are in the Reversible Express Lanes, a facility with very few access points. This limits the number of people in the lanes.
- I-90 in Issaquah: HOV volumes on I-90 through Issaquah are expected to continue growing along with increasing freeway congestion.
- Westbound SR 520 in Medina: Vehicle volumes are limited on this stretch (by requiring 3+) for safety reasons.
- SR 167 in Kent: The extra space on SR 167 is being made available to solo drivers through the HOT Lanes Pilot Project.

People moving in freeway HOV lanes compared to regular lanes (average weekday peak commuting periods and directions)



Over 1/3 of freeway users are moved in 19% of the vehicles.

This chart compares the number of people carried in HOV lanes to the average lane next to them at different points around the system during 2007. Peak periods are considered to be between 6-9 am and 3-7 pm.



What's in the future for the HOV system?



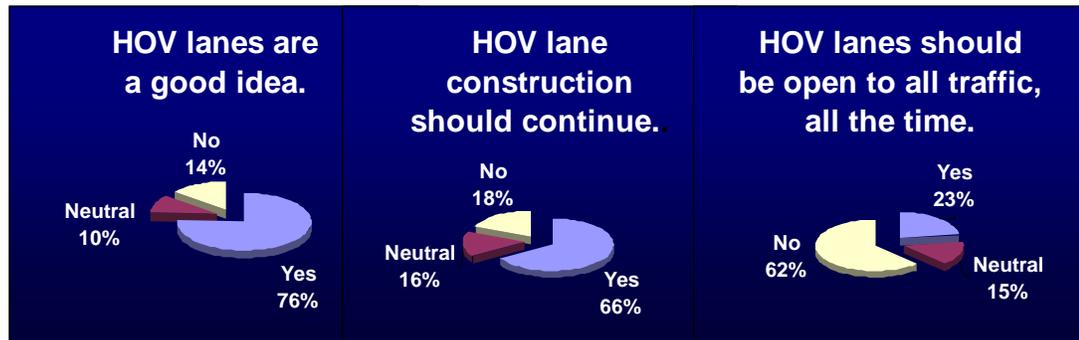
Moving Washington: A program to fight congestion

The Washington State Department of Transportation is meeting the challenge of congestion with a balanced, integrated program which includes three strategies:

- **Adding Capacity Strategically** to best use limited resources by targeting the most congested areas. HOV lanes are being added in areas shown in the map on page 2.
- **Operating Efficiently** to get the most use out of the roads and infrastructure we already have. HOV lanes are 50% more efficient than the general purpose lanes when the freeways are most congested. In many locations, it will be even more efficient to convert HOV lanes to HOT lanes or express toll lanes in the future.
- **Managing Demand** by offering more commute choices. HOV lanes help to support ridesharing options by providing a way for buses, vanpools, and carpools to bypass congestion.

More conversions of HOV to HOT lanes or express toll lanes are on the way. For a list of projects by corridor, see the *Moving Washington* program: www.wsdot.wa.gov/MovingWashington

2007 Survey Responses from Solo Drivers



What is the public saying about HOV lanes?

HOV lanes are popular with both HOV and solo freeway drivers. A public opinion poll done by the University of Washington in 2007 showed that 76% of freeway drivers who *did not usually use the HOV lanes* still thought the lanes were a good idea. Sixty-six percent of this same *non-user group* felt that HOV lane construction should continue, and 62% disagreed with the idea of opening the HOV lanes to everyone all the time. The full opinion poll is available at www.wsdot.wa.gov/hov/studies.

Would traffic move faster if the HOV lanes were opened to all traffic all the time?

Studies show that HOV lanes encourage commuters to travel together. Many people who do not usually drive alone on the freeway during rush hours would switch to solo freeway driving if the HOV lanes were opened to all traffic --including many of the people who are currently riding the bus, carpooling, and vanpooling. Enough demand exists for peak period freeway space to quickly result in just another clogged lane if HOV lanes were opened to all traffic all the time.

Why aren't HOV lanes open to all traffic during the evenings, mid-day and weekends?

Evenings. A study performed in 2002 showed that opening the HOV lanes to all traffic during the evening hours might provide some benefit to solo drivers without negatively impacting HOV or general freeway traffic on the east side of Lake Washington. As a result, eastside freeway HOV lanes were opened to all traffic between the hours of 7 pm and 5 am in 2003. The Federal Highway Administration required WSDOT to make \$1.2 million of safety improvements to eastside HOV lanes before they were opened at night.

This opening at night included all existing HOV lanes on I-405 and to the east of I-405, including SR 167 and portions of SR 520 and I-90. It did not include I-5, or the portions of SR 520 and I-90 that lay west of I-405. On I-5, making the required safety improvements to open the HOV lanes to all traffic would have cost in excess of \$50 million. On SR 520, the HOV lane cannot hold higher volumes due to safety reasons. On I-90, the HOV Reversible Express Lanes between Rainier Avenue South and Island Crest Way are already open to solo drivers due to an inter-agency agreement.

Mid-Day. Since the lanes have already received the required safety improvements, it is fair to ask why eastside freeway HOV lanes are still restricted to HOV drivers during the mid-day. Although HOV traffic volumes are usually lower during the mid-day than during the peak commuting periods, they are still high enough to cause operational and safety concerns in several locations if opened to all traffic.

Weekends. The HOV lanes tend to be as full, or fuller, than the other freeway lanes on the weekends, so opening the lanes to all traffic on the weekends would not help with congestion in the general purpose lanes.