

## **Big changes coming to I-5 in Vancouver**

*Plan for delays this summer in advance of the Interstate Bridge Closure, Sept. 12 - 20*

By Tamara Greenwell

Anyone who travels southbound on Interstate 5 in Vancouver is all too familiar with traffic backups and delays. Vancouver is the state's second-fastest-growing city according to the [Office of Financial Management's](#) population report. Continued growth and development are contributing to congestion on area highways that is beginning earlier in the morning and lasting later at night. The solution is not always adding more infrastructure but rather using existing infrastructure in a smarter, safer, and more efficient way.

This summer, we're installing new smart technology upgrades and adding a bus-only lane on southbound I-5 between 99th Street and the Interstate Bridge to help improve the flow of traffic and safety. While we're juggling mandatory furloughs and COVID-19 safety guidelines, we're working to get these projects completed ahead of the Interstate Bridge Truncheon Replacement project, which will close the entire northbound span of the Interstate Bridge on I-5 from September 12-20 and will have a ripple effect on travel throughout the region.



*Traffic backup on southbound I-5 in Vancouver*

### **New smart technology upgrades on I-5**

First let's talk about these new lower-cost tools we're installing, including a combination of new traffic cameras, adaptive ramp meters, electronic message signs and traffic/weather sensors along a 4-mile stretch of the interstate between 78th Street and the Interstate Bridge. We chose to install [Active Traffic and Demand Management](#) (ATDM) tools along this stretch of I-5 because it's an area where we see consistent congestion and a significant number of crashes. This stretch of highway also has several on-ramps spaced close together, which causes traffic to stack up as folks entering the highway merge onto the interstate. Intermittent lifts of the Interstate Bridge and stalled vehicles also cause backups.



Figure 9: Lane Control Sign Examples

Source: WSDOT



Figure 10: Lane Control and Supplemental Signs on Gantry

Source: WSDOT

### *Electronic message signs provide real-time travel information*

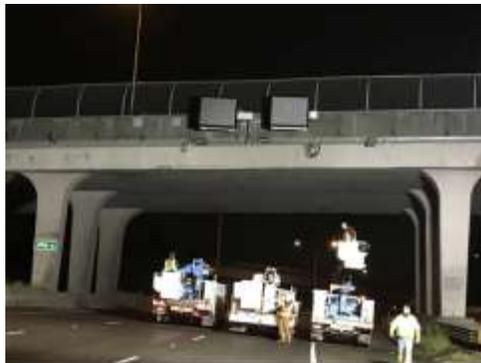
The pieces of the new ATDM system will work in tandem so we can provide you with real-time changing roadway conditions like weather information, changes in speed due to congestion, a crash or bridge lift, and lane closures due to a stalled vehicle, crash, police activity or construction. With earlier warning of an upcoming slowdown or lane closure, you can start adjust your driving before traffic stops. We put together this [nifty video](#) so you can see how it works.

The system includes adaptive ramp meters which are currently being installed along southbound I-5 at 78th Street, Main Street, State Route 500/39th Street, Fourth Plain Boulevard and Mill Plain Boulevard. We're also upgrading the existing ramp meter at SR 14/Washington Street in downtown Vancouver. These meters aren't the ramp meters of yesterday. Adaptive meters respond to real-time traffic conditions and turn on automatically when traffic starts to stack up. To maximize the existing roadway and minimize traffic backups onto nearby streets, newly installed signs and roadway striping will allow drivers accessing southbound I-5 via Fourth Plain Boulevard, Mill Plain Boulevard and SR 14/Washington Street to use the shoulder of the ramp as an additional lane to line up at the ramp meter when it is turned on.



*Adaptive ramp meters on southbound I-5 in Vancouver*

Adjusting the flow of vehicles merging onto I-5 at a consistent rate helps synchronize the flow of traffic to get more vehicles through this stretch of I-5 than is the case today. Another benefit to maintaining consistent traffic flow is that it helps to reduce the severity and frequency of crashes. While you might wait a little longer at a ramp to get onto I-5, you'll get more reliable and safer travel on the interstate, helping you reach your destinations sooner and safer.



*Crews installing electronic message signs over southbound I-5 in Vancouver*

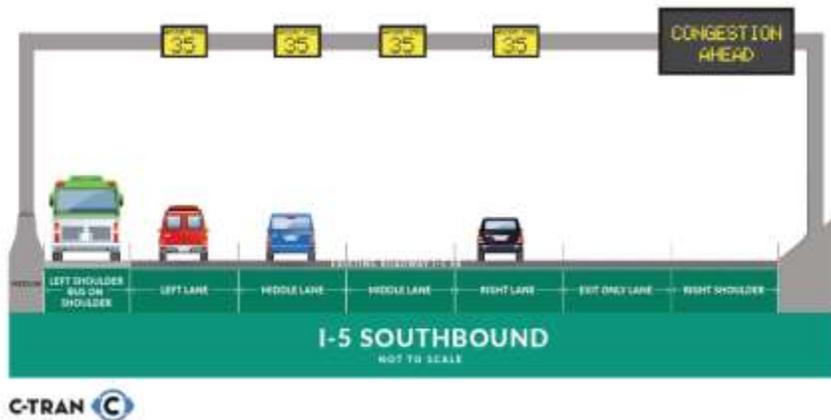
The system will also help reduce the number of people who skip around traffic backups on I-5, using downtown streets as a bypass. Currently we see about 35 percent of the drivers who exit I-5 at Main Street get right back on again in downtown Vancouver. By providing reliable travel on I-5, through travelers are more likely to stay on the interstate.

We're about halfway done with the installation of this smart technology upgrade. Later this month, we'll close I-5 between the I-5/I-205 split and SR 500 from 11 p.m. Friday, July 24 until 6 a.m. Saturday, July 25, to install a new high-tech electronic message sign bridge, which will span the full width of the interstate, across all lanes in both directions.

Please be patient as we test the system to make sure it's all connected and working in tandem before the system "goes live" in September. While we can't fully stop congestion (unless more people continue to telework or work alternative hours), these new smart technology tools will work to maximize our existing roadway system, providing real-time information to help reduce traffic backups and delays, all while improving safety.

### **Bus-only lane on I-5 between 99th Street and the Interstate Bridge**

To provide more reliable travel times for transit users, we're partnering with C-TRAN to build a [bus-only lane](#) using the left shoulder on southbound I-5 from the Northeast 99th Street Transit Center in Hazel Dell to the Interstate Bridge. During weekday peak travel times when travel speeds drop below 35 mph, buses will be able to use the left shoulder of the interstate to bypass traffic backups. The bus-only lane is reserved for transit buses and are not designed to carry large amounts of traffic.



*How new ATDM tools and the bus-only lane will look when construction is complete*

The bus-only lane will look and operate like any other shoulder and have a minimal effect on traffic. Newly installed signs along the roadway will let you know when buses are using the lane. The shoulder will always be available for disabled vehicles, incident response and emergencies (bus drivers are trained to go around these incidents). This project helps us maximize use of the existing roadway and provide reliable travel times for transit users.

### **Interstate Bridge Trunnion Replacement Project**

COVID-19 and furloughs have certainly changed how we work, but we're still on schedule to get the ATDM and Bus on Shoulder projects completed ahead of the [Interstate Bridge Trunnion Replacement project](#), which will close the entire northbound span of the Interstate Bridge from September 12-20. During the closure, crews will replace mechanical parts that help lift and lower the 103-year-old bridge.

Vehicles, pedestrians, and bicyclists in both directions of travel will share the three existing lanes and sidewalk on the southbound bridge span, resulting in heavy traffic and long delays in Vancouver and Portland on I-5, I-205, I-84, SR 14 and local streets.

If we're going to keep traffic moving during the closure, we'll need everyone's help. Consider options such as delaying or shifting trips, biking, taking transit, or working remotely when possible. If travelers do not change their driving habits during the bridge closure, and if traffic is at normal levels, the length of backups on I-5 may double to four miles and the region may experience up to 16 hours of congestion per day.

After the bridge closure, travel delays will continue on southbound I-5 near the Interstate Bridge while crews close one lane of I-5 for additional work for seven full days and nights, which will create delays for morning southbound travelers. Whether you take a vacation, work from home or use public transit, it'll be important to plan ahead so you're not stuck in traffic due to construction this summer and fall. We have some great tools to help. You can get real-time travel information via our [mobile app](#) or sign up to receive [email updates](#).

### **Interstate Bridge Replacement Program**

With work to replace the trunnion on the Interstate Bridge happening this year, many folks have asked what's happening with long-term efforts to replace the bridge. Recognizing that transportation challenges associated with the aging structures remain unaddressed, both Washington and Oregon dedicated funding to restart Interstate Bridge replacement work in 2019 and each state legislature formed a committee with eight representatives to provide direction and oversight. In fall 2019, Governors Jay Inslee and Kate Brown signed a Memorandum of Intent announcing the restart of [Interstate Bridge Replacement Program](#) efforts and directed ODOT and WSDOT to open a bi-state office to complete this work.



*Photo courtesy Office of Governor Kate Brown*



*Interstate Bridge lift in progress*

Recent efforts have focused on reengaging partners through a facilitated workshop process and bringing on critical staffing resources. This includes the [hiring of a new program administrator](#) to lead the bi-state program office and selecting consulting firm WSP to provide specialized expertise to support program work. The goal is to begin the next phase of program development work this summer, including technical analysis and the start of community engagement work. This will include the formation of two advisory groups as part of broader, comprehensive

community engagement efforts with a wide range of stakeholders to identify a bridge solution that reflects community values and can build broad regional support. You can [sign up](#) to receive email updates on this work, including public meeting notices and ways to stay engaged.