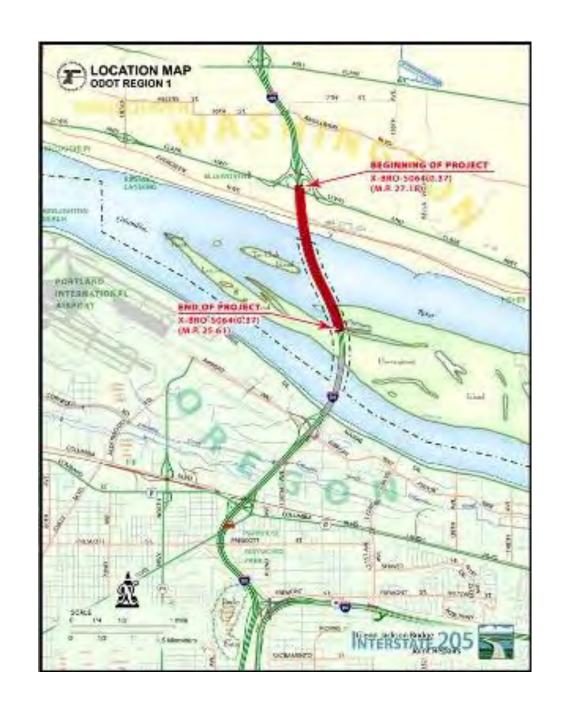
# Work Zone Travel Time Demonstration Project

### Work Zone ITS Opportunity

- HQ Traffic was contacted by vendor (ASTI)
  offering free use of work zone equipment for use
  in a demonstration project to evaluate the system
  for possible future use.
- A request was sent out statewide by HQ Traffic to solicit interest and potential project locations.
- SW Region replied immediately with interest in using the system to provide mitigation for anticipated impacts on I-205 project.

#### Project location and overview

- The I-205 Glenn Jackson Bridge Repair project replaced 22 deck joints on the north end of the structure, mile post 25.61 to 27.18.
- The Glenn Jackson Bridge is co-owned by the states of Oregon and Washington, with Oregon responsible for maintenance of the structure.
- The Glenn Jackson Bridge is a crucial link for commuters, freight and other traffic traveling the coastal corridor.
- Portland International Airport is located to the south of the bridge. There are approximately 140,000 vehicles a day that travel north and south across the bridge.



## **Traffic Impacts**

- ODOT allowed the contractor to close two lanes at a time on the I-205 Glenn Jackson Bridge for several weekends during the project.
- The closures began at 9 p.m. on Friday and ended at 5 a.m. on Monday morning.
   Motorists experienced tremendous delays and queues on northbound I-205 in Oregon.

# **Traffic Impacts Continued**

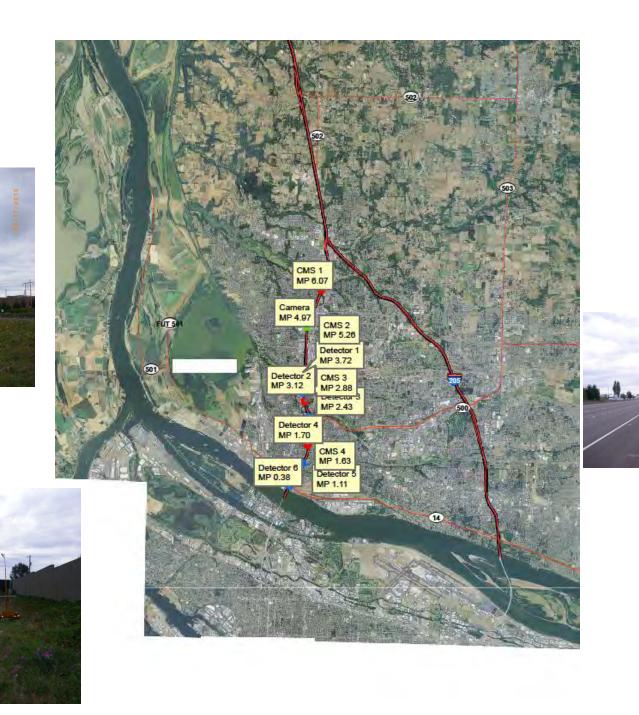
- Bridge deck joint work near SR 14 in Washington state required the closure of the ramps connecting I-205 to SR 14 during some weekends and weeknights. During the ramp closures, motorists were detoured to the SE Mill Plain Boulevard exit and back towards their destination.
- In anticipation of major impact to traffic during closures, SW Region was looking for opportunities to provide drivers real time travel times based on traffic queues and provide drivers opportunity to use alternate routes.

#### Equipment

- 6 Queue Detection Trailers
- 4 Portable Changeable Message Boards
- 1 Portable Video Trailer

### **Deployment Location**

- Along I-5 corridor from Columbia River bridge to the I-5/I-205 split to let drivers know travel times to the I-205 bridge.
- Camera image, speed and volume data transmitted to region TMC.
- Project webpage displays travel times and camera image.





#### Conclusions

- No major traffic impacts or queues occurred on southbound I-205 so system benefits were not fully realized.
- Simple setup
- ASTI website allowed us to control the devices and provided information to TMC and public.
- Concept of the system is excellent and has merit for future use.
- This system fulfills two of the three previously identified WSDOT work zone ITS technology priorities.