

## **Update: December 20, 2011**

Drivers may be wondering why the Variable Message Sign (VMS, see the original post below for detail) on Delta Highway remain turned off. Here is an update on the project status.

The VMS project was installed in coordination and with technical assistance from the Oregon Department of Transportation (ODOT), and was operational for a brief period in February 2011. While the system was performing as expected a majority of times, a technical adjustment was identified requiring additional data collection, analysis, and a tweak in the software controlling the system. Lane County and ODOT are currently performing additional system tests. The VMS is expected to be operational again sometime in early 2012.

### **The Variable Message Sign Project on Delta Highway Update**

In late February 2011, drivers on the northbound Delta Highway will notice a Variable Message Sign (VMS), similar to one shown in the picture below.

The VMS is a Lane County project that is funded, designed, and constructed by the Oregon Department of Transportation (ODOT). The project purpose is to address high rear-end type crashes on northbound Delta Highway.



While we are excited that the traffic safety issue is being addressed, we are equally conscious about its potential impact on the Bike and Pedestrian Bridge view across Delta Highway several hundred feet north of it. This information sheet is intended to provide answers to frequently asked questions. As always, we are standing by to hear your concerns on the project.

#### **What is VMS?**

As the name suggests, the VMS displays different messages on the same message board specific to situations. Unlike regular roadway signs, they are turned off when not needed.

The VMS is designed as an Intelligent Transportation System (ITS) solution to address unusually high rear-ends crashes on Delta Highway.

The sign displays messages based on signals picked up by three sensors installed at specific locations on the roadside. The traffic data from the three sensors are routed to an ODOT Intelligent Transportation System server in Salem. The server examines the traffic information and communicates with the VMS to display the appropriate message

to warn drivers of slow speed or stopped conditions around the curve or near the Beltline Highway on and off ramps.

### **Where will the VMS be installed on Delta Highway?**

The VMS will be located about 700 feet south of the Bike and Pedestrian Bridge, near the existing temporary flashing beacon sign.

### **What size is the sign and why?**

The VMS is 30.5-foot long and 8.5-foot wide supported by a cantilever beam off a 23-foot high pole. The pole is located at about 8 feet from the shoulder. The sign will project out to cover two-thirds of the roadway width. Due to its size and location directly over the roadway, many drivers may be concerned that the view of the bridge may be blocked as they approach the sign. Similar to the visual impact shown in the picture<sup>1</sup> above, the location of the sign upstream of the Bike and Pedestrian Bridge may obscure the bridge for the northbound road users.

The sign design is governed by anticipated message length and letter size. The letters on the sign must be legible for the high-speed traffic (55 mile per hour). The letter standards are specified in the Manual on Uniform Traffic Control Devices for Streets and Highways, the nationally adopted design reference.

### **Can the sign be relocated?**

The sign must be located where it is easily seen by the drivers and well in advance of the trouble spots for its effectiveness. Crash data indicated that slowed vehicles immediately after the curve, not visible to traffic approaching the curve, are the cause of most rear-ends crashes on Delta Highway. The sign is positioned at the tangent section of the road just before the curve so that the drivers can respond to a changed driving condition downstream of the curve. It is positioned such that traffic from Valley River Center on-ramp, northbound Interstate 105 Delta Highway on-ramp traffic, and northbound drivers can all see the message. Other locations are ruled out for potential conflict with ramp operations and visibility considerations.

### **How much of the bridge will we see?**

Analogous to looking through a pair of sunglasses, the visual blockage will be insignificant when viewed at a far distance. It gradually increases as drivers move closer to the sign. Comparatively worse blockage would occur when the driver approaches within 150 feet to 350 feet from the sign (approximately 850 feet to 1,050 feet from the bridge). The blockage, however, is not likely to last more than 3 seconds (the time drivers dwell on the sign while in the 200 foot long block zone).

### **When will the sign be up?**

The construction has already started. The contractor is finishing sensor poles and accessories first. The sign will be assembled in early January 2011. It will take a couple of months to connect and complete testing before going to full operation.

### **I need more information, who should I contact?**

You may contact Ed Chastain, Lane County Traffic Engineer, at 541 682-6931.

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<sup>1</sup> Not a site photo. The picture shown as an illustration and was downloaded from the FHWA website.