

Memorandum Date: June 17, 2008
Order Date: June 25, 2008

W. 4. D. 4.

TO: Board of County Commissioners
DEPARTMENT: Public Works
PRESENTED BY: Celia Barry, Transportation Planning
AGENDA ITEM TITLE: ORDER/In the Matter of Authorizing Application for Funding from the Oregon Department of Transportation (ODOT) for Congestion Management and Safety Improvements On Delta Highway

I. **MOTION**

Move approval of the Order (Attachment A).

II. **AGENDA ITEM SUMMARY**

\$8 million in federal funding is available through ODOT for congestion-reducing demonstration projects. Eligible projects include "Intelligent Transportation Systems" (ITS) such as Variable Message Signs (VMS). A VMS system can serve more than one purpose, be connected with other VMS/ITS systems, and provide multiple types of information.

Public Works staff requests approval to apply for up to \$2 million of the funding. The proposal would be to fund a VMS on Delta Highway Northbound, just south of the Goodpasture Island Road exit. The funding would be programmed through the 2008-2011 Statewide Transportation Improvement program and would come from the state and/or federal highway funds, for projects that reduce congestion and/or improve freight mobility on the Oregon State Highway System. The VMS would be innovative because it would communicate with a similar system on Beltline Highway being constructed west of the River Road exit, and therefore be of benefit to the state system as well as Delta Highway.

III. **BACKGROUND/IMPLICATIONS OF ACTION**

A. **Board Action and Other History**

A fatality near the Goodpasture Island Road exit in the recent past prompted a request from Representative Nathanson to address the safety and congestion issue on Delta Highway. Often high speed northbound traffic approaches congestion ahead, unaware of slow or stopped vehicles, especially during peak travel times. This results in numerous rear-end collisions and is a serious safety issue.

B. Policy Issues

TransPlan is the Eugene-Springfield Metropolitan Area Transportation System Plan and includes the following Finance Policy #3: *Set priorities for investment of Oregon Department of Transportation (ODOT) and federal revenues programmed in the region's Transportation Improvement Program (TIP) to address safety and major capacity problems on the region's transportation system.*

The Lane County Transportation System Plan (TSP) adopted by the Board in June 2004 provides supportive policy language as follows:

Goal 1: Maintain the safety, physical integrity, and function of the county road network through the routine maintenance program, the Capital Improvement Program, and the consistent application of road design standards.

Policy 1-c: Safety shall be the first priority in making decisions for the Capital Improvement Program and for roadway operations, maintenance, and repair.

C. Board Goals

The following Strategic Plan Goal statement relates to this Board item:

- *Contribute to appropriate community development in the areas of transportation and telecommunications infrastructure, housing, growth management and land development.*

D. Financial and/or Resource Considerations

The anticipated amount requested would be approximately \$1.5-\$2 million and would cover design, construction, and evaluation of the safety and traffic counting improvement results. No match is required. Minimal overhead is involved. Staff time would be associated with preparation of the funding application materials and any follow-up processing, such as intergovernmental agreements, as well as incorporating the project into the Capital Improvement Program. The funding is for a capital project that would be designed by ODOT and put out to bid as a capital project. County field engineering staff would inspect contractor's work, with funding for this staff time incorporated into the request. No new or additional county staffing needs would result. ODOT would operate the sign using existing technology and operations in Salem. Lane County would maintain the components. If solar technology can be used, electrical maintenance would be minimized.

E. Analysis

The proposal would include funding to install the VMS structure, as well as traffic sensors, cameras, and other communication components, and interconnection with a similar system on Beltline Highway. Components would include but may not be limited to the sign itself, a sign support bridge, electronics, fiber optics, and cameras. The proposal is described and diagrammed, and examples are provided, in Attachment B.

More specific details of the system would be designed as part of the funding application development and engineering design phase. The application is due June 30, 2008. Projects must be ready to construct during the 2008-2011 period.

Addressing the safety issue could be accomplished to a lesser extent and with less elaborate systems, but investing in additional improvements could increase the effectiveness of the system with regard to safety and its functionality to provide information that will be useful in transportation planning, analysis, and future safety enhancement endeavors. Traffic counting, cameras providing 24/7 information about what is occurring on the highway, and ability to change the message on the board to warn of crashes and congestion on Beltline Highway are some of the benefits that would result. A less elaborate system would not likely qualify as it would be less likely to be “innovative”, as required by the funding program.

ODOT staff have expressed an interest in seeing this project funded. A concurrent effort is underway to elevate the proposal on the state Oregon Transportation Commission Earmark Request List for 2009 Federal Highway Bill funding. That earmark prioritization effort appears to have strong ODOT support but must go through the political process, and the Federal Highway Bill is yet to be enacted. Hence we are proposing to submit this funding application. ODOT staff, EWEB, and Representative Nathanson’s office are anticipated to provide letters of support for the proposal.

IV. Alternatives/Options

1. Approve the proposed Order
2. Approve a modified version of the Order
3. Decline to adopt the proposed Order

V. TIMING/IMPLEMENTATION

June 30 is the deadline for submittal of the application materials. Projects must be ready to construct during the 2008-2011 period.

VI. RECOMMENDATION

Option 1 is recommended. Public Works Transportation Planning staff is making the recommendation. It is supported by the Public Works Director and incoming Director, as well as ODOT staff and Representative Nathanson’s office. The concurrent earmark priority list effort, including this and several other ITS proposals, was developed by Lane Council of Governments staff in cooperation with staff from ODOT, Eugene, and Springfield, and therefore the proposal enjoys multi-jurisdictional support. Approval of the motion is recommended.

VII. FOLLOW-UP

The Board Order is written so as to authorize the County Administrator to sign an intergovernmental agreement with ODOT to proceed. If the application is successful, we will likely incorporate the project into the next Capital Improvement Program adoption process.

VIII. ATTACHMENTS

- A. Board Order
- B. Variable Message Sign System Project Information
- C. ODOT Press Release for Funding Opportunity

IN THE BOARD OF COMMISSIONERS OF LANE COUNTY
STATE OF OREGON

ORDER NO.) ORDER/In the Matter of Authorizing Application for
) Funding from the Oregon Department of Transportation
) (ODOT) for Congestion Management and Safety
) Improvements On Delta Highway
)

WHEREAS, ODOT has invited applications for congestion-reducing demonstration projects due June 30, 2008 with a suggested maximum amount per project request of \$2,000,000; and

WHEREAS, Delta Highway, a Lane County facility, has known congestion and safety issues; and

WHEREAS, Lane County staff prepared a preliminary cost estimate for an innovative congestion reducing Intelligent Transportation System to be constructed on Delta Highway North, with estimated costs up to \$2 million; NOW THEREFORE, BE IT

ORDERED, that the County Administrator or designee be authorized to sign an application requesting funding for up to \$2 million; and

ORDERED, if the request is approved, the County Administrator is authorized to sign an intergovernmental agreement with ODOT to proceed with the project.

DATED this _____ day of July, 2006

Faye Stewart, Chair
Lane County Board of Commissioners

APPROVED AS TO FORM
Date 6/18/06 Lane County
[Signature]
OFFICE OF LEGAL COUNSEL

Delta Highway (Northbound) - Road #1740-10

System Detection & Variable Message Sign

Estimated Cost: \$ 700,000-\$1,000,000

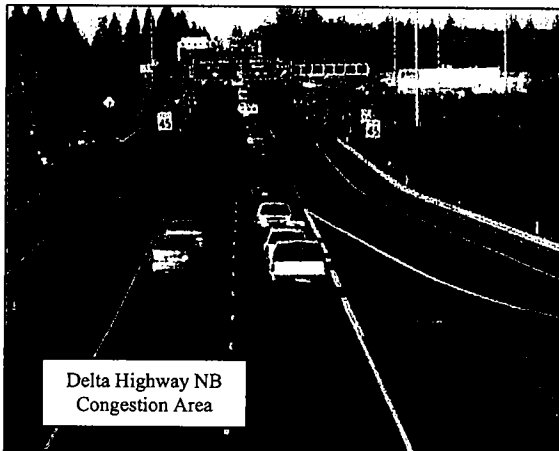


PRELIMINARY PROJECT SCOPE: Install two radar sensors and Variable Message Sign (VMS) to detect and warn of traffic congestion on Delta Highway (MP 0.50 to 1.05).

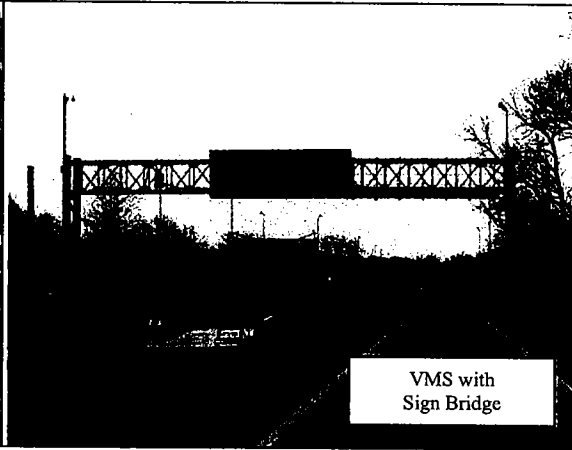
	ADT* (year)	PCI**	Avg. Width (ft.)	Reported Crashes (5 yr)	Functional Class
Existing Conditions	19,714 ('05)	100 ('06)	38-54'	305* 78% (278) rear-end related	9

*Average Daily Traffic

**Pavement Condition Index (1-100)



Delta Highway NB
Congestion Area



VMS with
Sign Bridge

<p>Define the Problem: The road experiences heavy traffic volumes during peak periods. Congested traffic, leads to a high number of rear-end related traffic crashes.</p>	<p>Proposed Solution: Install two radar sensors to detect slow or stopped traffic. Install Variable Message Sign (VMS) in advance of congestion, to warn motorist of conditions.</p>
--	---

Project Status: Unknown.

Project Category: Safety Improvements

Submitted By: Lane County Public Works

Roadway Jurisdiction: Lane County

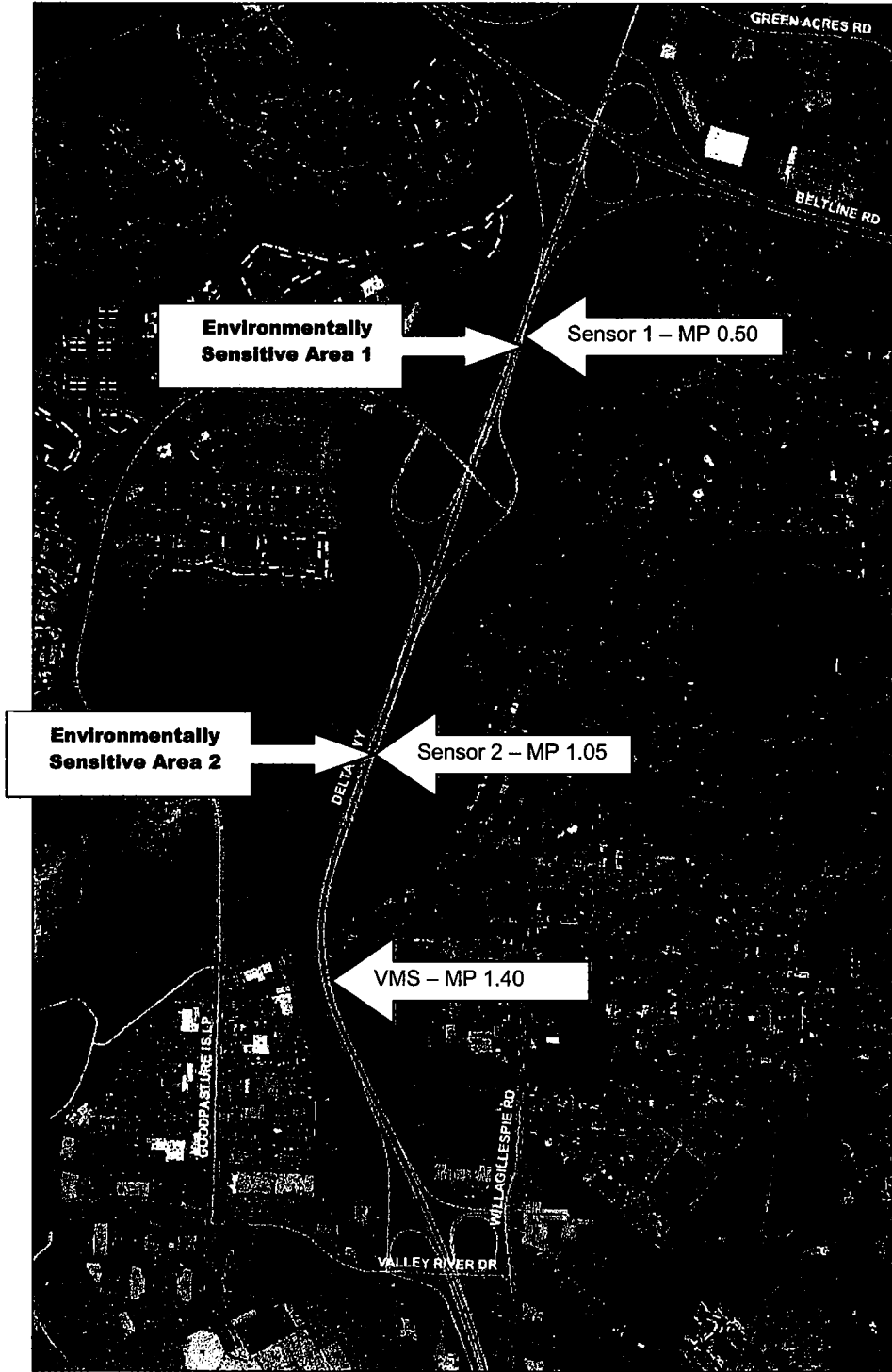
Delta Highway (Northbound) - Road #1740-10

System Detection & Variable Message Sign

Estimated Cost: \$ 700,000-\$1,000,000



System Diagram



Delta Highway (Northbound) - Road #1740-10

System Detection & Variable Message Sign

Estimated Cost: \$ 700,000-\$1,000,000



Project Cost Details

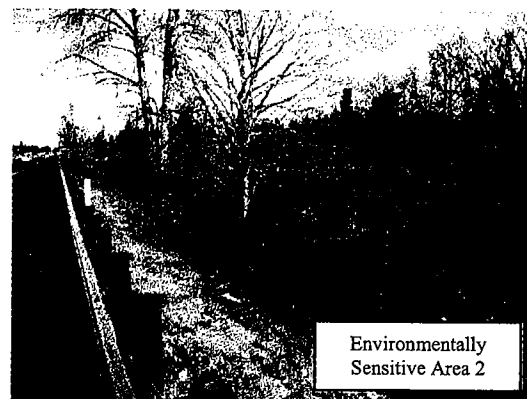
<i>Construction</i>	<i>R/W</i>	<i>Structures</i>	<i>Other</i>	<i>Total</i>
\$700,000-\$1,000,000	N/A	(Incorporated)	N/A	\$700,000-\$1,000,000

Prioritization Factors

Project	Prioritization Factors										Prioritization Level (achievements)	
	Structural Deficiency Improvement	Safety Enhancement	Road Performance/Congestion Improvement	Bike/Ped/Alternative Mode Improvement	Degree of User Benefit	Leverages Other Funds & Projects	Plan Consistency	Economic Development	Recreation/Tourism/Rural Promotion	Maintain/Preserve County Road & Bridge System		Public Support/Readiness
Delta Highway VMS		++	+		++		+				++	8

Other Issues:

1.) There are two environmentally sensitive areas where sensor mounting poles would be installed. Additional planning, permitting, erosion control measures and construction techniques may be required facilitate work in these areas.



Delta Highway (Northbound) - Road #1740-10

System Detection & Variable Message Sign

Estimated Cost: \$ 700,000-\$1,000,000

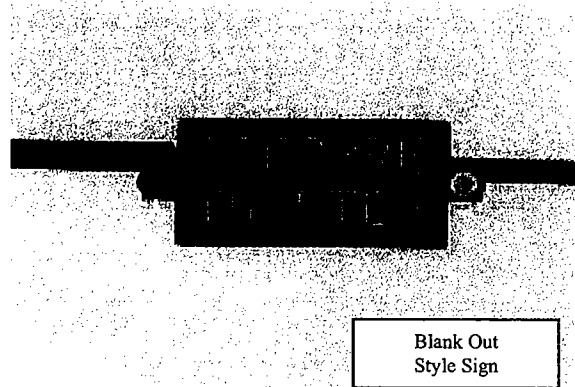


2.) Providing access to EWEB's fiber optic station has been factored into the preliminary estimate of this project. No other costs for integration into ODOT's ITS system have been calculated.

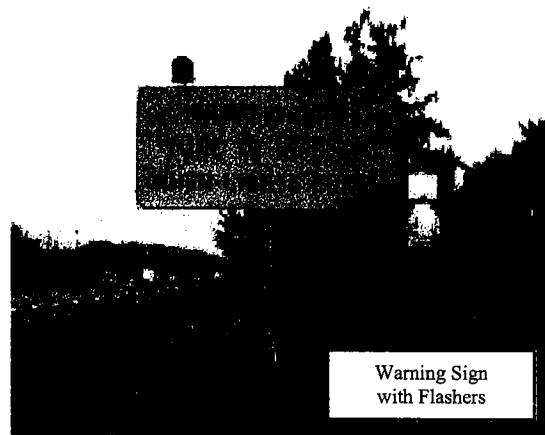
Alternatives:

The cost of this project could be significantly reduced (Approx. 50%) by eliminating the variable message sign (VMS) and sign bridge and replacing them with the following.

1.) Blank out signs. Blank out signs use LED's, neon, shuttered fiber, etc. for the display technology. The messages cannot be changed and are blanked out when not applicable. This type of sign would be compatible with the sensor system.



2.) Warning signs with flashers. This is the least expensive option. Flashers would indicate when conditions are warranted. This type of sign would be compatible with the sensor system.





April 9, 2008

08-069

For more information: Galen McGill, 503-986-4486
Or Shelley Snow, 503-986-3438

Funds available for congestion-reducing demonstration projects

The Oregon Department of Transportation is seeking innovative ways to help improve traffic flow throughout the state. Public agencies, and groups working in partnership with them, are invited to apply for \$8 million in funding for projects that demonstrate solutions for reducing congestion and improving freight mobility on the Oregon state highway system. Ideal projects will offer both operational benefits and transferability to other areas.

"Oregon is well-known for leading the way in transportation innovation," said Gail Achterman, chair of the Oregon Transportation Commission. "ODOT is launching the 'Transportation Operations Innovation and Demonstration Program' to encourage this spirit in addressing our growing traffic congestion problems. It is our hope that project concepts and technologies funded by this program form the basis for real world solutions to Oregon's transportation challenges."

The types of projects expected to be funded through this program include both new technology and process changes to improve the operation of the transportation system. Example project areas include, but are not limited to, improvements to traffic signal or freeway operations, traveler information systems, incident management, or ramp metering.

Applications will be accepted from Oregon public agencies. Private entities and non-profit organizations are encouraged to work with public agencies to identify and develop innovative project concepts. Grants will be awarded in amounts of \$50,000 to \$2 million for projects that can be completed in the 2008 – 2011 timeframe. Applications are available online at http://www.oregon.gov/ODOT/HWY/ITS/its_news_events.shtml and must be received by June 30, 2008. For more information about the project, contact Galen McGill, Intelligent Transportation Systems manager, at (503) 986-4486.

##ODOT##