U.S.Department of Transportation Federal Highway Administration

Workshop: Modern Bottleneck Identification & Practical Mitigation Solutions

FHWA is funding practical research on modernized congestion identification, and cost-effective mitigation strategies that are not dependent on advanced vehicle technology.

BACKGROUND

U.S. traffic congestion is worsening, and the associated economic damages are increasing. States are being asked to manage their transportation problems with minimal funding. When transportation investments are made, it is critical to demonstrate a clear return on those investments, based on methods that are scientific and not anecdotal. Given that a large portion of congestion is caused by bottlenecks, mitigation of bottlenecks is a top priority. New technologies (e.g., real-time data) and ideas (e.g., dynamic lane use) are giving us a new set of possible solutions.

NEW RESEARCH AND PRACTICAL MITIGATION STRATEGIES

This workshop will present a number of new strategies and ideas for congestion identification, diagnosis, and mitigation. Bottleneck intensity and frequency can now be precisely identified, in both space and time, in ways that account for visibility and weather. New software tools can analyze annual trends, and allow states to customize their definition of congestion. Data-driven methods of congestion classification, which determine congestion causalities more accurately, are now being developed.

Regarding the bottleneck mitigation strategies, researchers have developed a comprehensive playbook of solutions for 70 specific bottleneck causes, across seven classification categories. In addition, five of the most promising solutions were selected for detailed micro-simulation studies, and benefit-cost analysis. Further, researchers investigated a newer set of innovative bottleneck treatments, which have not been deployed before.

WHEN & WHERE

Wednesday, June 17th, 2015 | 10:00 AM – 3:00 PM Oregon Department of Transportation 123 NW Flanders St. Conference Room A/B Portland, OR 97209

To register for this free event and/or see a detailed agenda, visit the event page at <u>http://goo.gl/gOMIQR</u>, or scan the QR code below.

OREGON SECTION

AGENDA

- 1. Congestion and bottleneck concepts
- 2. Congestion and bottleneck identification methods
- 3. Congestion causal pie chart
- 4. Cost-effective bottleneck mitigation strategies
- 5. Innovative bottleneck mitigation strategies
- ODOT presentation of recent Corridor Bottleneck Operations Study (CBOS)
- Roundtable discussion: How does FHWA research apply to current and future efforts in freeway bottleneck management?

EXPECTED OUTCOME

Participants should gain additional knowledge on how to evaluate and improve the performance of their roadways. The modernized causal pie charts may provide new insight into the causes of congestion. Participants will also receive a preview of practical tools, which can provide scientific justification for transportation system investments.

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