

Transportation Research Board Workshop
on
Operating Traffic Signal Systems in Oversaturated Conditions

Sunday, January 21, 2007
Marriott Hotel, Washington Room - B4
Washington, D.C.

Sponsored by
Traffic Signal Systems Committee (AHB25)
Regional Transportation Systems Management and Operations (AHB10)

TIME	SESSION TITLE
8:30-9:30	<p>What is “Oversaturation?” – Defining the Problem</p> <ul style="list-style-type: none"> • <i>Oversaturation: What Do We REALLY Know?</i>, Tom Urbanik, University of Tennessee • <i>Dealing with Oversaturation on a Day-to-Day Basis</i> – Gary Piotrowicz, Oakland County Road Commission • <i>Signal Timing Under Saturated Conditions: Update of FHWA’s Research Efforts</i> – Eddie Curtis, Federal Highway Administration
9:30-9:45	BREAK
9:45-10:45	<p>Measuring and Modeling Oversaturation at Traffic Signals</p> <ul style="list-style-type: none"> • <i>Issues Associated with Modeling Oversaturated Conditions at Traffic Signals</i> – Jim Dale, PTV America, Inc. • <i>Analytical Procedures for Estimating Vehicle Delay and Stops at Under- and Oversaturated Signalized Approaches</i> – Hesham Rakha, Virginia Tech. • <i>Multi-Objective Approach for Operating Oversaturated Signals</i> – Montasir Abbas, Virginia Tech
10:45 – 11:00	BREAK
11:00 – 12:00	<p>Case Studies in Managing Oversaturated Conditions</p> <ul style="list-style-type: none"> • <i>Retiming of NC 54 at I-40 and Farrington Road in Durham, NC: A Case Study in Oversaturated Control</i> – Steven Click, Tennessee Tech University. • <i>Strategies to Mitigate Gridlock on High Volume Arterials in Sacramento County, CA</i> – Ziad Sabra, Sabra, Wang & Associates, Inc. • <i>Ongoing Efforts to Coordinate an Oversaturated Corridor in Lebanon, New Hampshire</i> – Robert Chamberlin, Resource Systems Group
12:00 – 1:15	LUNCH
1:15 – 2:15	<p>Signal Controller Features and Strategies for Managing Oversaturated Conditions</p> <ul style="list-style-type: none"> • <i>Impacts of Oversaturation on Traffic Signal Detector Design and Operations</i> – Nader Ayoub, Texas Highway Products • <i>Seeking the Bag of Tricks for Saturated Intersections</i> – Rick Denny, ITERIS • <i>A Magician’s Secrets for Operating Traffic Signals During Oversaturation</i> – Gerry de Camp
2:15 – 2:30	BREAK
2:30 – 3:30	<p>New Ideas for Managing Oversaturated Conditions</p> <ul style="list-style-type: none"> • <i>Applications and Benefits of Adaptive Traffic Signal Control in Oversaturated Conditions</i> – Peter Martin, University of Utah • <i>Timing Strategies for Managing Oversaturation in Harris County, TX</i> – Eric Nelson, Harris County • <i>Measuring Split Failures and Controller Performance at Oversaturated Intersections</i> – Ed Smaglik, Purdue University
3:30 – 4:00	Where Do We Go From Here? – Identification of Research Needs