
Larry Head
TRB Signal Systems Committee (AHB25)
2006 Annual Meeting Workshop
January 22, 2006
Agenda 8:30-4:30
Workshop Objectives

- Understand the national, regional, and local issues related to traffic signal system performance
- Identify state-of-the-art in measuring and assessing performance
- Identify existing and emerging technology for monitoring system performance
- Identify critical research issues that need to be addressed
AHB25 Workshop Program

- Committee identifies critical and emerging topics, e.g.
  - Adaptive Signal Control, Transit Priority, Principles of Signal Timing, Performance Measures
- Summer workshop in coordination with Summer Meeting
  - July 2005 – Las Vegas: Performance Measures
  - July 2006 - ??? (Come to Committee Meeting)
    - Monday 1:30-4:30, Marriott - Wilson B & C
    - Summer Meeting: July 10-13, 2006 (Woods Hole, MA)
- Annual Meeting Workshop
  - Refined program
Why Performance Measures?

- How are we doing?
  - Declining funding
  - Lack of political support
  - Stock answers
    - 10 percent improvement
    - 3-5 year retiming
    - Adaptive is (great/too expensive)
      [chose one]

- Quantification of Performance

(T. Urbanik: Summer Workshop)
Session #1: Perspectives on System Performance Measures for Traffic Signal Systems

- National Perspective (Rich Taylor)
  - NTOC National Report Card
- US DOT/FHWA Perspective (Jeff Lindley)
  - SAFETEA-LU
  - FHWA Directions
Session #2: Approaches to Measuring Performance
(Moderator: Ali Eghtedari)

- Travelers Perspective (Jane Lappin)
- Evaluation of Signal Systems Improvements (Mike Hunter)
- Traffic Engineers Perspective (Bill Kloos, Portland, OR)
- Safety Measures (Joe Bared, FHWA)
- Simulation Performance Measures in System Design (Erica Wygonik and Bob Chamberlin)
Lunch

- **12:00 – 1:30 Lunch (on your own)**
Session #3 Measurements from Signal Systems

- Sensor System Measurements (Darcy Bullock)
- Real-time Performance Measures: ACS Lite Data MIB (Douglas Gettman)
- PeMS for Arterials (Karl Petty)
- NGSIM Arterial Data Set (Alex Skabardonis)
- Aerial Data Collection for Intersection Evaluation (Mark Hickman/Alejandro Angel)
Session #4 Research Topics in Signal System Performance Measures

- Performance Measures for Urban Street Applications NCHRP 3-79 (Peter Koonce)

- Discussion and Development of Research Problem Statements