

Traffic Signal Systems Committee

TRB Annual Meeting – Washington, DC
Monday, January 22, 2007, Marriott Lincoln 2

Annual Meeting Minutes
www.trbsignalsystems.org
(ID=member; password=valid)

1. Welcome and Call to Order

- Larry Head called the meeting to order at 1:30 pm.
- Attendants introduced themselves

2. Approval of Minutes

- The minutes from July 2006 (**Attached**) were unanimously approved
- Password and Member Name were/will be eliminated

3. TRB Staff Report (Rich Cunard)

- TRB Hotels are changing, redevelopment of the Marriott is going to start after our meeting.
- TRB's Annual Meeting in 2007 is setting a new record of near 11,000 attendees.
- Poster sessions are half of the sessions, 147 this year.
- Paper submittals topped 3,000. 2,000 were on August 1st and TRB is looking at improved submittal process. Alternatives include: 1) do nothing; 2) congesting pricing approach; 3) stagger submittals by topic.
- CD ROM is now 2 CDs, 1,800 papers, moving to DVD.
- Revisiting Transportation Research Record opportunities. TRR will be sold by individual paper online. Accessibility of papers is of critical concern.
- This section of TRB had cuts (\$1M) but the growth continued in participation, there was additional costs associated with that and higher registration fees.
- Webinars are upcoming and the topics are due February 1st. Submit those to Rich Cunard via email (rcunard@nas.edu). Started in March-April timeframe. Are workshops capable of becoming a webinars. 2-3 speakers, 90 minutes roughly in Powerpoint.
- Research Problem Statements database will be linked to a new website and they will be searchable by topic area. Example of HCQS Research Circular XXXX, Jim Powell will be talking later about this.
- Conference in Athens, Greece on Applications in Technology, May 27, 2008, RFP is on the streets.
- Next year's TRB will be January 13-18th, 2008. Vendor booths and commercial exhibits will be available next year. Contact Rich for more information or visit trb.org.

4. NCHRP Report (Ray Derr)

- Two projects currently ongoing NCHRP 3-66 and 3-79 see TRB website. Additional funds have been requested by each project.

5. FHWA and other Related Reports

- Raj Ghaman, ongoing research – ***Attached word document***
 - ACS Lite project is active, evaluations have been completed – full report is attached.
 - Marketing of ACS Lite will be through the vendor.
 - Vehicle Infrastructure Integration is planned to work through DSRC to trade info between vehicle and signal. CICAS is a subset of that. Detroit will be showcase later this year. Travel time info, ramp meter communication, Gary Piotrowicz is involved.
 - New program on Urban Partnering is part of the DOT initiative on Congestion Initiative is to establish grants to cities and states (private entities can participate) to achieve congestion reduction. Emphasis on TDM and costing (pricing).
 - \$10M advance research program published in Federal Register. For infrastructure and public safety.
 - Integrative Corridor Management is ongoing.
- Eddie Curtis, ***Presentation Attached***
 - Arterial Management Road Map is consistent with previous Signal Operations Map.
 - Information can be found at: (**Attached**) www.ops.fhwa.dot.gov
 - Regional Traffic Signal Operations – developing cooperative agreements across boundaries
 - Staffing and funding levels to operate and maintain signal systems
 - Traffic detection webinars
 - Research on arterial travel times for public consumption.
 - Future Opportunities: FY 08-09 Plan: Roadmap comments for next 2 weeks
- Paul Olson – Systems engineering effort through FHWA and Caltrans is posted online at www.fhwa.dot.gov/cadiv/segb
- Gene McHale – CICAS Update – ***Presentation Attached***
 - 3 main programs: Violations at signals and signs, gap & stop sign assist, gap & left turn assist. Focusing on 2009 completion.
 - Concept of Operations document is attached. Interface to the traffic signal controller is occurring in Michigan and California (sniffer vs. logic).
 - Much of the work is being done in VA, MI, CA

6. Subcommittee Reports

- A. Paper Review (Larry Head)*
- 63 Papers submitted, 29 for presentation and poster (1 presentation session), 5 reviews for each paper. Less than 25% Approval, Decision of publication is February 1st.
- B. Best Paper Award (Paul Olson)*
- 5 excellent papers to choose from, but the winner was entitled "**Recasting Dilemma-Zone Design as a Marginal Cost and Benefit Problem**" (07-1001), [Anuj Sharma](#), [Darcy M. Bullock](#), [Srinivas Peeta](#), Purdue University
 - Past winners are on the list.
 - Volunteers can request to participate.
- C. Committee Website (Monty Abbas)*
- Will remove password presentation from the minutes.
 - Monty would like to update links on the website, send an email to Monty.
 - Website has documentation of presentations from 1997.
- D. Signal Timing (Peter Koonce)*
- **Presentation attached**
- E. Simulation (Brian Park)*

- **Presentation attached**

F. January Workshop (Kevin Balke)

- **Notes Attached**
- **Presentations will be posted to the website**
- Oversaturation definition: coming from Research on the topic
- Future workshops with notes will be more beneficial, we'll ask presentors for that.

G. Strategic Plan (Urbanik)

- TRB Triennial Plan will be completed by April 2008
- Susan Langdon, Mark Dunzo, Paul Olson, Eddie Curtis, Peter Koonce

H. Controller Architecture (Larry Head)

- Mission defined for the group, **minutes attached**

I. Problem Statements (Jim Powell)

- *Statements due Sept – Voting in March 2008*
- New RPS – Systems based approach to Oversaturated control (field studies)
- Synthesis statement about HILS and SILS – Brian Park
- Traffic Signal Timing Manual Version 2 – Peter Koonce
- Signal Timing Applications Guide - ???
- Research on Signal Timing Systems – Performance Monitoring – Paul Olson
- ATIS for Arterials – Mark Dunzo – extension of NCHRP 3-79? – March 1st
- RPS – 2 to 3-page state of the art and description of needs. Move towards RPS after this.
- Detection, Controller hardware and processing, performance measurement – similar to freeway operations effort – meet by June deadline for TRB.
- Entry of ideas on the website.

7. MOST Program (Mike Kyte)

- **Presentation attached**
- Developing laboratories and demonstrations for Mobile Hands On Signal Timing (MOST)
- Software in the Loop Simulation ASC3 to VISSIM Connection.
- Training of trainers may be part of the system, lessons are available on the NIATT website. Universities are encouraged to adopt these in their programs.

8. 2007 Summer Meeting (Brian Park)

- Location – Palo Alto, CA
- Date – July 22-24 – Subcommittee meetings on Sunday afternoon, Monday Workshop, Tuesday Joint, Business Meeting
- Vehicle Infrastructure Integration (Joint with ITS Committee)
- Goal of the meeting: outreach to provide signal operators' perspective
 - What can we get from them (data for signal systems)?
 - Presentation of Day One Operations of Signals
 - SAE DSRC, VII, Auto manufacturers, 3-66
 - Back and forth between the Vehicle
 - Research/data needs should be summarized by the Committee prior to the meeting.

9. New Topics – Do we need two topics?

- a. New Control Algorithms using VII

- b. Best Practices in Signal Timing
- c. Approach to Education
- d. Signal Control Priority
- e. Signal Systems Standards (Hardware/Procurement)
- f. Pedestrians (joint with Peds)
- g. Automated Enforcement (Combined Use of Signals)
- h. Arterial Management –
- i. Ramp Metering (joint with Freeway)
- j. Geometry and Signal Timing (Context Sensitive Design) - Pedestrians
- k. Data needs – how is it collected?
- l. Performance Measures (joint with HCQS, ITS), Simulation
- m. Naked Streets? (Reducing Traffic Control... Signal Removal)
- n. Signal Timing Process (Policies, Design, Coordination, Performance Measures, K, F, B, L)

10. Other Business

- Field evaluation of D-CS (Abbas)
 - Naztec sites. Looking for 12 sites. Wei Zhang is the FWHA PI.
- Longtime Committee member, Les Kelman is retiring later this month
- 8th International Conference on Walkable Cities is in Toronto this Fall, October 1-4, 2007
– Call for Papers at:
- Outreach to connect RPSs to the remainder of the profession.
- Should we meet on another topic. Subcommittee meeting could describe Timing Manual activities, Education and future research.
 - Do we need a joint subcommittee on Education
- Opportunity to get data from Mobile Phone

The meeting was adjourned at 5:18 PM.