Workshop on Signal Control Priority for Transit Vehicles  
Sunday January 13, 2002  
Location TBD

The Committee on Traffic Signal System is sponsoring this workshop with is designed to expand the understanding of signal control priority for transit vehicles. This is a “two sided” topic where those responsible for transit operations and those responsible for traffic signal operations have different needs. The program will include technical presentations from both the transit operators and traffic signal operators as well as researchers in the field with the intent of helping everyone better understand the particular needs of each. The program will also include discussion of the current state of standard development for signal control prioritization. This workshop is intended to be a dialog between the presenters and the audience with the goal of expanding everyone’s understanding of the issues involved and potential solutions. The preliminary program for this workshop is posted on TRB’s website for downloading.

The workshop is intended to be a presentation of what is being done in this field, NOT to conclude which is the best approach. The workshop presenters are also prohibited from discussing equipment brand names or manufactures.

Preliminary Program – SUBJECT TO CHANGE

9:30 – 9:45 Introduction of Workshop  
Mr. Paul R. Olson, FHWA,  
Western Resource Center, San Francisco

Session I – Principals of Transit Operations

Limit your discussion to XX minutes and explain the following principals. NO before and after studies.

This first session is intended to be a brief primer on Transit Operations for Traffic Signal Operators.

- Please define the meaning of “On-time” arrival
- Discuss the variability in bus arrivals at any point on a route.
- Discuss how existing signal operations are incorporated into transit schedules.
- What information is available on the bus.
- Describe how existing transit AVL systems operate and how this information might be useful to SCP.
• Describe the operation of other on-board systems.
• Describe from a transit operators point of view how SCP should work. This should include:
  o When is priority treatment needed.
  o What is the role of the bus driver.
  o Should it treat near side stops, far side stops and turning movements differently?
  o Should treatment of local buses be different than express buses.
  o Is a feedback link needed and what information may this be.
  o How might SCP impact schedules?

9:45 – 10:00 Transit Operator 1
Mr. Bill Koronenberger
Metropolitan Transit Authority
Houston, Texas

10:00 – 10:15 Transit Operator 2
Jon Lutterman,
Tri-Met, Portland Oregon

10:15 – 10:30 Transit Operator 3

10:30 – 10:45 Transit Operator 4

10:45 – 11:00 Q&A on Transit Operations

11:00 – 11:15 Break

Session 2 – Traffic Signal Operations

Limit your discussion to XX minutes and explain the following principals. NO before and after studies.

This session is intended to be a brief primer on Traffic Signal Operations for Transit Operators. It is intended that the following topics be addressed:
• Time space diagram basics.
• Signal timing parameters.
• Which parameters can be adjusted to provide priority service.
• Potential strategies that might be used to provide priority service.
• Discussion of signal operation at saturated conditions.
  o Delays
  o Queuing
  o Pedestrian
• Variability & Uncertainty
• Importance of maintaining good basic signal timing plans

11:15 – 11:30     Larry Head
  Siemens

11:30 – 11:45     Signal Operator

11:45 – 12:00     Signal Operations

12:00 - 12:15     Signals Operations

12:15 – 12:30     Q&A on Signal Operations

LUNCH BREAK

Session 3 – Existing Systems

Limit your discussion to XX minutes and explain the following principals. NO before and after studies.

The following presenters will provide a description of how several existing systems currently operate.

• Signal parameters adjusted
  o Green extension
  o Early green
Discussion of the results of NCHRP A-16A

2:00 – 2:15 Ron Atherly
   King County Metro
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2:15 – 2:30 ???????
   Cermak Road
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2:30 – 2:45 Sean Skean
   LADOT
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2:45 – 3:00 Willie Rotich
   City of Portland
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3:00 – 3:15 Q&A on Existing Systems
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Session 4 – Current Standards Development Work

Limit your discussion to XX minutes and explain the following principals. NO before and after studies.

- Presentation of the general model
- UML Diagramming efforts
- TCIP standards to date
- Messages/parameters
  - Time Service Desired
  - So on and so forth
- Communications between bus and traffic signal
3:15 – 3:30  Tom Urbanik
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3:30 – 3:45  Polly Okeunif
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3:45 – 4:00  Ron Atherley
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4:00 – 4:15  Bob DeRoche
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4:15 – 4:30  Discussion
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4:30  Happy Hour!!!!!