MISSION STATEMENT
It is the mission of the TRB - Traffic Signal Systems Committee to advance the technology and techniques of traffic operation systems on surface streets.
GOALS

A - To provide leadership in the research, development, model deployment implementation, operation and maintenance of traffic signal and integrated traffic management systems.

B - To promote traffic signal systems within integrated urban and regional systems that improve mobility, accessibility and livability, provide safety, and maximize the quality of the environment.

POLICIES

A-1 Proactive and interactive with other committees and agencies involved in ITS development and deployment.

A-2 Encourage and facilitate the integration of freeway and surface street traffic management programs.

A-3 Encourage research and development that is attentive to diverse multi-jurisdictional issues, air quality conservation and energy efficiency.
POLICIES (Continued)

- **A-4** encourage research and development that employs public-private sector partnership and cooperation.

- **A-5** encourage enhanced traffic signal systems training and education programs with emphasis placed in the areas of systems operations, maintenance and signal timing.

- **A-6** encourage research into technical products that are accessible to all levels of government and the private sector and work toward acceptance and development of an open architecture design.

- **A-7** encourage technology transfer among all sectors and agencies involved in traffic signal and integrated systems.
POLICIES (Continued)

- B-1 focus on urban traffic control system strategies for surface streets that are responsive and adaptive to changing traffic patterns.

- B-2 promote that existing traffic signal systems be brought up to an acceptable standard of operations and maintenance.

- B-3 promote that further enhancements to traffic control systems be made that incorporate appropriate features of ITS. This will include the application of demand management and two-way communications between the Traffic Management Center and the vehicle.

- B-4 encourage a cost efficient incremental deployment of ATMS and other related technology in accordance with the capacity and capability of the operating jurisdictions to operate and maintain to a satisfactory level.

- B-5 seek and identify opportunities to integrate new technologies into surface street control strategies
Policies (Continued)

- B-6 promote to the Metropolitan Planning Organizations the need to develop a ten-year plan for traffic signal operations within their region.

Three Year Implementation Plan

1. Update the Strategic Plan every three years.

2. Review the Problem Statement list in three-year intervals and recommend 6 problem statements to actively pursue.


3b. Establish a Traffic Signal Maintenance and Operations Short Course
THREE YEAR IMPLEMENTATION PLAN (cont)

3c. Review and comment on the necessary rules and procedures under the ISTEA as may be necessary to allow the use of Federal funds for operations and maintenance work on state/local traffic control systems and the Clean Air Act.

4a. Initiate a Workshop on Adaptive Traffic Signal Systems for large traffic signal systems

4b. Identify a strategy to integrate adaptive traffic signal control into small and medium size traffic signal systems

5. Establish a program that tracks NCHRP and TCRP projects and invites the project managers to make presentations on those projects which are pertinent to the Traffic Signal Systems Committee.

6. Develop a strategy to distribute a traffic signal system newsletter to all agencies involved in traffic signal operations based on activities in which the Committee members and friends of the committee are involved.
THREE YEAR IMPLEMENTATION PLAN (cont)

7a. Develop an education or outreach program that informs all of the agencies involved in traffic signal operations of the opportunities and advantages of adaptive traffic signal operation

7b. Develop a list of handbooks/manuals that should be developed or distributed as recommended practices.

7c. Develop a framework to engage other organizations such as IMSA, APWA, MPO’s that can assist and facilitate the distribution of handbooks/manuals and implementation of recommended good practices.

8. Cause to be developed a Primer on Traffic Signal Systems

9. Identify a Task Force to collect and summarize case history studies that illustrate safety advantages of traffic control systems
10. To investigate and summarize a list of the ongoing research projects concerning traffic signal systems.

11a. To produce a TRB Circular describing commonly used computerized traffic models and supporting software.

11b. To keep traffic model users continually informed of the commonly used traffic software packages.
AREAS OF INTEREST – IDEAS

1. Communication Networks
   - Fiber
   - Copper
   - Wireless

2. Controllers
   - NTCIP

3. Closed Circuit Television

4. Changeable Message Signs

5. Intersection/presence Detection

6. Arterial Surveillance
   - Vehicle Monitoring Stations
   - System Detectors

7. Central System Software
   - Closed Loop System
   - Central Signal Control
   - Adaptive Control Systems
AREAS OF INTEREST
– IDEAS (Continued)

- 8. Traffic Signal Timing
- 9. Technology Changes
- 10. Measures of Effectiveness (MOE) models
- 11. Traffic Safety
  - Red Light Cameras
- 12. Traffic Management Centers
- 13. Highway Advisory Radio
- 14. Design
  - PS&E
- 15. System Management
- 16. Contract Methods
- 17. Management and Operations
- 18. Lessons Learned
- 19. Project Status Reports