

**RESEARCH PROBLEM STATEMENTS (RPS) SUBMITTED TO REGULAR NCHRP PROGRAM
BY TRAFFIC SIGNAL SYSTEM COMMITTEE, 2000 TO PRESENT - AS OF JAN 4, 2009**

No.	RPS Statement Title	Final Submit. Date	RPS Identifier	Current Status
16	OPERATIONAL STRATEGIES TO REDUCE ARTERIAL FUEL CONSUMPTION AND EMISSIONS	Sep-08	2010-B-14	Will be voted on by SCOR in March 2009.
15	IMPROVING PEDESTRIAN OPERATIONS AND SAFETY AT TRAFFIC SIGNALS	Sep-08	2010-G-11	Will be voted on by SCOR in March 2009.
14	TRAFFIC SIGNAL RETIMING: TRIGGERS, METHODS, AND PRIORITIES	Sep-08	2010-G-17	Withdrawn due to overlap with other on-going research; may resubmit Sep-09.
13	UPDATE TO THE TRAFFIC SIGNAL TIMING MANUAL	Sep. -07	2009-G-07	Not selected by SCOR (March '08).
12	PEDESTRIAN ACCOMMODATION IN TRAFFIC SIGNAL SYSTEMS	Sep. -07	2009-G-20	Not selected by SCOR (March '08)
11	TRAFFIC SIGNAL SYSTEM CONTROL FOR CONGESTED CONDITIONS	Sep-06	2008-G-06	Approved for funding by SCOR, 3/07, resulting in Project 3-90, OPERATION OF TRAFFIC SIGNAL SYSTEMS IN OVERSATURATED CONDITIONS , a \$600,000, 27-month effort that began fall 2008. PI is Doug Gettman, Kimley-Horn & Assoc. See: http://www.trb.org/TRBNet/ProjectDisplay.asp?ProjectID=1610
10	ENGINEERING COUNTERMEASURES TO REDUCE RED-LIGHT VIOLATIONS AND RELATED CRASHES	Sep-05		Not selected by SCOR (March '06)
9	AUTOMATED TRAFFIC SIGNAL TIMING PLAN GENERATION	Sep-04	2006-G-07	Not selected by SCOR (March '05)
8	TRAFFIC SIGNAL PHASE SEQUENCING FOR SAFETY AND EFFICIENCY	Sep-03	2005-G-12	Not selected by SCOR (March '04)

No.	RPS Statement Title	Final Submit. Date	RPS Identifier	Current Status
7	TRAVEL TIME AND QUEUE MEASUREMENT ON SIGNALIZED ARTERIALS	Sep-02 (Process changed to single-submittal)	2004-G-14	Selected by SCOR, 3/03, then combined with 2004-G-02 resulting in Project 3-79, MEASURING AND PREDICTING THE PERFORMANCE OF AUTOMOBILE TRAFFIC ON URBAN STREETS , a \$625,000 project. Jim Bonneson of TTI has been the PI. Work began 10/04, final report submitted early 2008. Continuation work with Darcy Bullock of Purdue, PI, and \$225,000 budget, is addressing advanced detection using vehicle "signature" recognition and tracking, plus additional real-time performance measures under light and heavy traffic demand; 9/08 to spring 2010. See: http://www.trb.org/TRBNet/ProjectDisplay.asp?ProjectID=835
6	INTEGRATED RAMP METER – TRAFFIC SIGNAL CONTROL	Nov-01	2003-G-22	Not selected by SCOR (March '02)
5	DYNAMIC PHASE SEQUENCING FOR SAFETY AND EFFICIENCY	Nov-01	2003-G-09	Originally made contingency list of SCOR (March '02), but ultimately not selected.
4	ARTERIAL INCIDENT DETECTION	Nov-01	2003-G-08	Not selected by SCOR (March '02)
3	PEDESTRIAN TIMING STRATEGIES IN COORDINATED SIGNAL SYSTEMS	Nov-00	2002-G-24	Not selected by SCOR (March '01)
2	ADVANCED DETECTION FOR CRITICAL INTERSECTION CONTROL	Nov-00	2002-G-11	Selected for funding by SCOR (March '01) and combined with another RPS on railroad preemption into Project 3-66, TRAFFIC SIGNAL STATE TRANSITION LOGIC USING ENHANCED SENSOR INFORMATION , a \$700,000 project that began April '03, completed June 2007. Several TRR articles published as a result (see Web link below). Continuation Phase IV development and implementation work is nearing completion (\$400,000 budget.). Tom Urbanik, Univ of Tennessee, is PI. See: http://www.trb.org/TRBNet/ProjectDisplay.asp?ProjectID=820
1	IMPLEMENTATION GUIDELINES FOR ALTERNATIVE TRAFFIC SIGNAL PHASING	Nov-00	2002-G-01	Not selected by SCOR (March '01), edited & resubmitted May '01 as "Dynamic Phase Sequencing..." (see #5 above)

**RESEARCH PROBLEM STATEMENTS (RPS) SUBMITTED TO NCHRP SYNTHESIS PROGRAM
BY TRAFFIC SIGNAL SYSTEM COMMITTEE**

No	Synthesis Title	Date Submitted	Current Status
S5	ADAPTIVE TRAFFIC CONTROL SYSTEMS: DOMESTIC AND FOREIGN STATE OF PRACTICE	Feb-08	Selected by AASHTO vote, ~1-year project began Oct. 2008. Aleksandar Stevanovic, University of Utah, is PI. Synthesis Project 40-03. See: http://www.trb.org/TRBNet/ProjectDisplay.asp?ProjectID=2521
S4	TRAFFIC SIGNAL RETIMING PRACTICES IN THE US	Feb-08	Selected by AASHTO vote, ~1-year project began Oct. 2008. Robert Gordon, Dunn Engineering Associates, is PI. Synthesis Project 40-10. Web link pending.
S3	TRAFFIC SIGNAL DETECTOR APPLICATIONS	Jan-02	Not selected (April '02)
S2	APPLICATIONS OF TRAFFIC SIMULATION MODELS TO TRAFFIC SIGNAL SYSTEMS	Jan-01	Not selected (April,'01)
S1	ADVANCED TRAFFIC SIGNAL SYSTEM CONTROL	Jan-01	Not selected (April,'01)

Note: Any individual can submit an RPS to the Synthesis program, with due date of early February.
Go to <http://www.trb.org/Studies/Synthesis/SynthesesNCHRPNew.asp>