TSSC Research Problem Statement (RPS) Status
1/10/05

- Research programs
- Past NCHRP submittals & current research
- Functional requirements review
- Topics/statements review
- NEW RPSs
- Research coordination w/FHWA
- Web page review
Research Programs

• Regular NCHRP program
  – Due mid-September
  – Typically via a state DOT
  – Voted on by SCOR following March

• NCHRP Synthesis program
  – Due January 31
  – Anyone can submit via NCHRP web form
  – Selected in spring

• Other: FHWA?
REGULAR NCHRP PROGRAM RPSs SUBMITTED (via State DOTs) by TSSC

9 – AUTOMATED TRAFFIC SIGNAL TIMING PLAN GENERATION (Sep-04)

8 - TRAFFIC SIGNAL PHASE SEQUENCING FOR SAFETY AND EFFICIENCY (Sep-03)

7 - TRAVEL TIME AND QUEUE MEASUREMENT ON SIGNALIZED ARTERIALS (Sep-02)

Project 3-79, MEASURING AND PREDICTING THE PERFORMANCE OF AUTOMOBILE TRAFFIC ON URBAN STREETS

6 - INTEGRATED RAMP METER – TRAFFIC SIGNAL CONTROL (Nov-01)
REGULAR NCHRP PROGRAM SUBMITTALS (cont.)

5 - DYNAMIC PHASE SEQUENCING FOR SAFETY AND EFFICIENCY  
   (Nov-01)

4 - ARTERIAL INCIDENT DETECTION  
   (Nov-01)

3 - PEDESTRIAN TIMING STRATEGIES IN COORDINATED SIGNAL SYSTEMS  
   (Nov-00)

2 - ADVANCED DETECTION FOR CRITICAL INTERSECTION CONTROL  
   (Nov-00)

   Project 3-66, TRAFFIC SIGNAL STATE TRANSITION LOGIC USING  
   ENHANCED SENSOR INFORMATION

1 - IMPLEMENTATION GUIDELINES FOR ALTERNATIVE  
   TRAFFIC SIGNAL PHASING  
   (Nov-00)
NCHRP SYNTHESIS PROGRAM TOPICS SUBMITTED (via State DOTs) by TSSC

S3 - TRAFFIC SIGNAL DETECTOR APPLICATIONS

S2 - APPLICATIONS OF TRAFFIC SIMULATION MODELS TO TRAFFIC SIGNAL SYSTEMS

S1 - ADVANCED TRAFFIC SIGNAL SYSTEM CONTROL
On-Going Research

• NCHRP 3-66 - Traffic Signal State Transition Logic Using Enhanced Sensor Information - 1/8/05 Workshop

• NCHRP 3-79 - Measuring and Predicting the Performance of Automobile Traffic on Urban Streets

  Objectives:
  A) Techniques to measure urban street performance for real-time applications
  B) Update of HCM procedure for urban streets

  36-month, $625,000 project, started 9/30/04

  TTI, Jim Bonneson, PI
• *go to func req*
Research Coordination with FHWA

• Key people: Pam Crenshaw, Paul Olson, Jeff Lindley

• Process?
• go to Web page doc