

**TRANSPORTATION POOLED FUND PROGRAM  
Quarterly Report**

**PROJECT TITLE:** Program to Support the Development and Deployment of Infrastructure IntelliDrive Applications

**OBJECTIVES:** To provide a means to conduct the work necessary for infrastructure providers to play a leading role in IntelliDrive

**PERIOD COVERED:** April – June 2010

**PARTICIPATING AGENCIES:** California DOT, FHWA, Florida DOT, Michigan DOT, New York DOT, Texas DOT, and Virginia DOT

**PROJECT MANAGER:**

**SP&R PROJECT NO:**

**PROJECT IS:**

**LEAD AGENCY:** Virginia DOT

Planning

**PRINCIPAL INVESTIGATOR:**

Research & Development

**ANNUAL BUDGET:** \$350,000

**PROJECT EXPENDITURES TO DATE \$152,570**

**WORK COMPLETED:**

Project Management

1. *Face-to-face meeting held at the ITS America annual meeting*
  - A face-to-face meeting of the pooled fund study members, associate members, liaisons, and the selected contractor was held in Houston, Texas on Wednesday, May 5<sup>th</sup> 1:00-5:00PM CDT.
  - Major items discussed/presented at the meeting were:
    - The pooled fund study restructuring, and
    - Updates of the three year 1 projects.
  
2. *A follow-up conference call held on June 2<sup>nd</sup>*
  - To follow up on the discussions from the face-to-face meeting, a conference call was held on June 2<sup>nd</sup> 2:15-4:00PM EST.
  - Major items discussed/presented at this call were:
    - Organizational/process changes,
    - Proposed process for project selection, and
    - Planning for year 2 program discussions.
  
3. *A face-to-face meeting held on June 22<sup>nd</sup>*
  - In conjunction with the AASHTO meeting, a face-to-face meeting took place at 8:30-12:00EDT on June 22<sup>nd</sup> in Dulles, Virginia.
  - At this meeting, the designated chairs of four technical committees shared their initial thoughts on the proposed activities for the year 2 research program.
  
4. *Coordinated on-going Year 1 Application Projects*

IntelliDrive<sup>SM</sup> Traffic Signal Algorithms

1. *Algorithm coding in VISSIM network*
  - The project team continued coding the platoon-based and network optimization

algorithms in C# using VISSIM COM. Both will continue to refine the algorithm after viewing simulation runs and reviewing preliminary results.

2. *Preliminary Results*

- The oversaturated conditions algorithm completed coding in a theoretical two-intersection, one-way street network. Based on the IntelliDrive-based strategy used in the algorithm, simulation showed a maximum possible improvement in throughput (5.7% - 25%) for the side street, at the affected intersection, compared to fixed time signal control. The project team will test further, perform sensitivity analyses, and is preparing a conference paper based on this algorithm.

3. *SAE J2735 Standard Review*

- The project team continues to track development of the SAE J2735 standard, the primary standard governing IntelliDrive Message Set Dictionary.
- The project team is also attending SAE J2735 subcommittee's conference calls to monitor developments not yet included in the current standard.

Pavement Maintenance Support Application

1. *First quarter report submitted*

- A report summarizing the progress of the first quarter was submitted and being reviewed by the pooled fund study management team. This report will be distributed to the pooled fund study members for feedback.

Signal Phase and Timing Data Application

1. *Task1 report delivered*

- A draft report for Task1 Review of SPAT Data was delivered and being reviewed. This report will also be sent out to the pooled fund study members.

**SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:**

- In the next quarter, a list of activities for the year 2 program of the pooled fund study will be finalized and funding will be allocated. Target timing for this decision is the end of September.
- Work will continue on the IntelliDrive Signal System Application, Pavement Maintenance Support Application, and Signal Phase and Timing Data Application based on the schedule provided in the project plans.

**STATUS AND COMPLETION DATE:**

Percentage of work completed to date for total project

Project is: 21 %

X on schedule \_\_\_ behind schedule, explain:

Expected completion Date: June 30, 2011