**Transportation Pooled Fund Program**

**Quarterly Progress Report**

**Lead Agency (FHWA or State DOT):** Indiana Department of Transportation

**Instructions:**
Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.

**Transportation Pooled Fund Program Project #**
*TPF-5(258)*

**Transportation Pooled Fund Program - Report Period:**
- x Quarter 1 (January 1 – March 31)
- □ Quarter 2 (April 1 – June 30)
- □ Quarter 3 (July 1 – September 30)
- □ Quarter 4 (October 1 – December 31)

**Project Title:** Traffic Signal Systems Operations and Management

**Name of Project Manager(s):**
James R. Sturdevant

**Phone Number:**
(317) 691-9091

**E-Mail:**
jsturdevant@indot.in.gov

**Lead Agency Project ID:**
TPF 5(258)

**Other Project ID (i.e., contract #):**

**Project Start Date:**
January 1, 2012

**Original Project End Date:**
December 31, 2014

**Current Project End Date:**
December 31, 2014

**Number of Extensions:**
0

**Project schedule status:**
- X On schedule
- □ On revised schedule
- □ Ahead of schedule
- □ Behind schedule

**Overall Project Statistics:**

<table>
<thead>
<tr>
<th>Total Project Budget</th>
<th>Total Cost to Date for Project</th>
<th>Percentage of Work Completed to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>$700,000</td>
<td>0</td>
<td>0</td>
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**Quarterly Project Statistics:**

<table>
<thead>
<tr>
<th>Total Project Expenses and Percentage This Quarter</th>
<th>Total Amount of Funds Expended This Quarter</th>
<th>Total Percentage of Time Used to Date</th>
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<tbody>
<tr>
<td>0</td>
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Project Description:

Signalized arterials represent a substantial component of the highway transportation network in the United States. The National Transportation Operations Coalition (NTOC) in their 2007 Traffic Signal Report Card noted that nationally 5 to 10 percent of all traffic delay is caused by improper traffic signal timings along major roadways. In 2007, the National Report Card for overall traffic signal systems operations was a D. The situation is not expected to improve as travel demand is forecast to grow significantly faster than network capacity. The increase in national attention on sustainable and livable communities necessitate a concentrated effort be placed upon improved management and operation of our nations traffic signal system inventory.

The Transportation Management Center (TMC) Pooled fund study (SPR-2(207)) initiated in 2000, has been very successful at generating consensus on best management practices for traffic management centers oriented mainly towards freeway operations. It is desirable to develop a similar pooled fund study oriented toward traffic signal operations and management that would complement SPR-2(207) and engage a broad cross section of agencies on the leading edge of active traffic signal management.

Project Objectives

Develop a network of transportation agencies to i) develop consensus on operational standards of performance, ii) define a central management model that can leverage commercial wireless IP offerings that can be competitively outsourced, and iii) asset management principles for using a central system to identify when and where resources are most needed to maximize return on investment.

The level of participation and associated funding commitments will allow for additional opportunities over time or in parallel to explore additional traffic signal initiatives beyond those described herein. For example, the evaluation of adaptive control field deployments and associated systems engineering guidance documents under development by FHWA.
Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):

A meeting with held with the FHWA Representative (Rick Denney) in January to discuss coordination with FHWA initiatives and plan a kick off meeting.

Over the past two months, Indiana has reached out to Minnesota and Utah to help identify strategic discussion Points for inclusion in the kick off meeting.

On April 19th, Jim Sturdevant sent following email to project panel to get the project underway

Good afternoon, everyone;

Earlier this year at the TRB, our FHWA Pooled Fund Liaison, Rick Denney, and I met to discuss the first steps in launching a successful study. Rick suggested holding a face to face, technical representative panel meeting in Indiana, with travel expenses covered by the study. **An all day meeting has been tentatively scheduled for June 14th in downtown Indianapolis.** To ensure full participation for the entire day will require attendants arrive on June 13rd and depart on June 15th.

Please provide a single response from each agency’s technical representative regarding the following three items:

1. **Confirmation of your concurrence to allocate Pooled Fund Study funds for expenses associated with this meeting.** Your concurrence will be needed prior to initiating a task with Purdue to organize the meeting logistics and to coordinate your travel and reimbursement for attending the panel meeting.
2. **Confirmation that you will be the ongoing technical contact on the panel representing your organization.** It is assumed that those listed on the “to:” line of this e-mail are the technical representatives. If somebody else in your organization will be serving as the technical contact, please let me know and I will contact them.
3. **Confirmation that you or your representative can participate in the June 14th meeting, either in person or via teleconference.**

Although travel expenses will be covered, some members may have travel restrictions that preclude their ability to attend in person. To accommodate those with travel restrictions, **a toll free dial in # and webinar connection will be provided.**

Anticipated work next quarter:

Preparing for the June 14th kickoff meeting and developing a detailed scope of work that reflects panel consensus.
Significant Results:

Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).
Potential Implementation: