## Project Information Form

<table>
<thead>
<tr>
<th><strong>Project Title</strong></th>
<th>Automated Data Collection for Origin/Destination Studies of Freight Movement</th>
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<tbody>
<tr>
<td><strong>University</strong></td>
<td>University of Central Florida</td>
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<tr>
<td><strong>Principal Investigator</strong></td>
<td>Amr A. Oloufa, Ph.D., P.E.</td>
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<td><strong>PI Contact Information</strong></td>
<td>Department of Civil, Environmental &amp; Construction Engineering 4000 Central Florida Blvd. Orlando, FL 32816 (407) 823-3592</td>
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<tr>
<td><strong>Funding Source(s) and Amounts Provided (by each agency or organization)</strong></td>
<td>Florida Department of Transportation $150,000.</td>
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<tr>
<td><strong>Total Project Cost</strong></td>
<td>$250,000</td>
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<tr>
<td><strong>Agency ID or Contract Number</strong></td>
<td>DTRT12GUTC12</td>
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<tr>
<td><strong>Start and End Dates</strong></td>
<td>May 2013 - December 2014</td>
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| **Brief Description of Research Project** | The collection of reliable Origin/Destination data for freight has profound consequences for a large range of applications in both planning and operations. Indeed, in both research and practice, a large number of applications rely heavily on such data. This project has four major objectives:  
   1. Assess gantry-mounted cameras and OCR technology for collecting large sets of O/D Data.  
   2. Develop a database-based system for O/D data archival and analysis.  
   3. Design and deploy a hardware system for rapid installation in a large number of installation scenarios on highway gantries.  
   4. Design and deploy a solar-based system for power. |

Quarterly Progress Report
Technology Deployment for a O-D Study

Submitted By

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Period of Performance: January 2014

Tasks Performed During This Period:

1) For Location 3, a slight modification was requested to ensure that solar panels do not reflect glare onto incoming drivers’ eyes. The location of the panels was changed and the problem was resolved as shown in the diagram below. New site drawings were prepared and submitted.

2) A simulated dataset was developed to test the database algorithm. Results are pending.

3) An installation permit was received from District Five of the Florida Department of Transportation.

4) Quotations were obtained from several general contractors for the installation of the solar panel structure foundations and the solar panel support structure. Quotations ranged from $24,000 to $44,000, which far exceeds the allocated budget. The research team will seek to change the foundation design.
Location 3
| Describe Implementation of Research Outcomes (or why not implemented) (Attach Any Photos) | The project was delayed due to the requirement for:  
1) Installation drawings form FHW.  
2) Signed and Sealed drawings for Structure foundations.  
3) Permit from Florida DOT  
4) Needed Quotations from contractors.  
All the above steps were accomplished during this reported period. |
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<td>Impacts/Benefits of Implementation (actual, not anticipated)</td>
<td>An inexpensive and automated method for Origin/Destination data collection.</td>
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| Web Links | We will attach a report explaining what was done to date.  
- Reports  
- Project website |