

## **Project Information Form**

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



| Describe Implementation of  | Alternative foundation design approved by FDOT.                            |
|-----------------------------|--|
| Research Outcomes (or why   | 2. New Contractor quotations.  |
| not implemented)            | 3. Database programming.   |
| (Attach Any Photos)         | 4. Simulation dataset developed.   |
|                             | 5. Routing algorithm tested.   |
|                             | Research has developed a plan to expedite the project and plans to install |
|                             | solar and camera systems this quarter.                                     |
| Impacts/Benefits of         | An inexpensive and automated method for Origin/Destination data            |
| Implementation (actual, not | collection.  |
| anticipated)                |  |
|                             |  |
|                             |  |
| Web Links                   | Attached report.   |
| <ul><li>Reports</li></ul>   |  |
| ·                           |  |
| Project website             |  |