QUARTERLY PROGRESS REPORT

Fiscal Year 2014/2015, Quarter 4th

Caltrans Task Manager: Bradley Mizuno  Task ID/Project ID (for Caltrans use only):

Task Order No.: 006  Contract No.: 65A0529

1. Task Title: Automated Assessment of Safety-Critical Dynamics in Multi-Modal Transportation Systems

2. Describe last quarter’s tasks/deliverables:

Task 1:
--Conducted a literature review of several multi-modal safety studies of signalized intersections

Task 2:
--Developing definitions for the relevant mode-specific behaviors to be studied in the project

Task 4:
--Analyzing historical data obtained from Sensys, and collected 2 hours of video and sensor data to establish ground truth

Task 5:
--Developed an intuitive interface to visualize the sensor activation at the intersection
--Calibrating the video analysis software (Traffic Intelligence) using the video data obtained for the intersection

3. Describe next quarter’s tasks/deliverables and their due dates:

Task 4:
--Collect more sensor and video data to supplement the development of analysis techniques.

Task 5:
--Use the sensors in the vehicular lanes to infer automobile counts.
--Develop algorithms to classify events on the crosswalk as events triggered by automobiles, pedestrians and/or cyclists.
--Validated the results of the classification algorithm using the ground truth obtained from the videos.
--Suitably modify the video analysis software to infer trajectories of the different modes.

4. Describe Project Status:

• Are you on time with your schedule?
  ☑ YES
[☐] NO

• Are you on budget?
  [☒] YES
  [☐] NO

• Are you on scope?
  [☒] YES
  [☐] NO

If the answer to any of the above is NO, please explain below:

5. Estimated percent of work completed: 20%
   Estimated percent of budget expended: 6%

6. What are your expenditure projections for the next four quarters or until the project’s end?

<table>
<thead>
<tr>
<th>FY 15/16; Q1</th>
<th>FY 15/16; Q2</th>
<th>FY 15/16; Q3</th>
<th>FY 15/16; Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>$31,000</td>
<td>$31,000</td>
<td>$31,532</td>
<td>$0</td>
</tr>
</tbody>
</table>

Use this area for any additional information. Clearly identify which Section this information applies to.

Submitted By: Offer Grembek
Date: 08/03/2015