## NEW ENGLAND TRANSPORTATION CONSORTIUM QUARTERLY PROJECT PROGRESS REPORT – SEPT 2018

**A. PROJECT NUMBER AND TITLE: NETC 15-2:** "Using the new SHRP2 Naturalistic Driving Study Safety Databases to Examine Safety Concerns for Teens and Older Drivers"

### B. PRINCIPAL INVESTIGATOR(s) & UNIVERSITY(s):

**Principal Investigator (PI):** Michael Knodler, Ph.D., University of Massachusetts Amherst **Co-Investigator:** Song Gao, Ph.D., University of Massachusetts Amherst

- C. WEB SITE ADDRESS (If one exists): http://www.ecs.umass.edu/hpl/
- **D. START DATE** (*Per NETC Agreement*): 01/01/2017
- E. END DATE (Per NETC Agreement): 12/31/2018

# F. ANTICIPATED COMPLETION DATE: 12/31/2018

If different from the END DATE in paragraph E., the reason must be given. It is the responsibility of the Principal Investigator to ensure that the project, including review of the draft report by the Project Technical Committee and the printing of the Final Report, is completed prior to the Agreement End Date. Costs incurred after the Agreement End Date cannot be reimbursed. Requests for extensions of the Agreement End Date must contain the reasons for the request and be submitted so as to arrive in the Coordinator's office at least 90 days prior to the Agreement End Date.

### **G. PROJECT OBJECTIVES:**

To examine SHRP2 NDS and identify primary concerns with older driver safety as older drivers navigate left turns at permissive and protected signalized intersections.

### H. REPORT PERIOD:

July 1st to September 30th, 2018

#### I. ACCOMPLISHMENTS THIS PERIOD:

- A conference call meeting was held on September 20th with the project's Technical Advisory Committee to discuss project progress and the latest analysis and results, and to get feedback from committee members. We prepared a Powerpoint presentation for the meeting.
- The project research team members met to develop additional models and strategies for analyzing the SHRP2 data from VTTI.
- We created additional statistical and machine learning models for predicting the (a) crash/near crash risk for all drivers (ages 30-49, 65+); (b) crash risk for all drivers not including near crashes; (c) crash risk for older drivers (age 65+); a driver's age group based on their driving behaviors.
- We completed scoring of the additional video footage obtained from VTTI for left turns where the video sent from VTTI to UMass ended before the completion of the left turn.
- **J. PROBLEMS ENCOUNTERED (If any):** If the project is behind schedule, a detailed description of why must be included in this quarterly report.

  None.

- **K. TECHNOLOGY TRANSFER ACTIVITIES:** List any reports, papers, presentations published/presented during the report period or anticipated for the next quarter. None yet.
- L. STATUS BY TASK: Show Work Task Number, description and % complete for each task including those completed, those underway, and those not started.
  - Task 1 complete
  - Task 2, 60% complete

#### M. PERCENT COMPLETION OF TOTAL PROJECT: 70%

Approximately 70% of the total project has been completed.

## N. ACTIVITIES PLANNED FOR NEXT QUARTER:

The following activities are planned for the next quarter:

- At least two conference call meetings will be scheduled with the Technical Advisory Committee.
- Continued analysis and modeling of the SHRP2 data from VTTI, including models incorporating more driver demographics and the results of the pre-study questionnaires, and more roadway and intersection characteristics.
- Preparation of the draft report on the results of the data analysis, for the Technical Advisory Committee's review.
- Preparation of the project's final report, with edits based on Technical Advisory Committee feedback.

#### O. FINANCIAL STATUS:

As of: September 30, 2018

**Total Project Budget: \$ 150,000** 

Total Expenditures to date: \$146,000

Note: This report should not require more than 2-3 pages & should be e-mailed to the NETC Coordinator so as to arrive no later than fifteen (15) working days after the end of each calendar quarter.