UTC Project Information	
Project Title	Confounding Factors of Commercial Motor Vehicles in Safety Critical Events
University	Oregon State University
Principal Investigator	Salvador Hernandez
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Funding Source(s) and Amounts Provided (by each agency or organization)	University of Washington PacTrans \$160,000 Oregon Department of Transportation \$80,000 Washington State University \$80,000
Total Project Cost	\$320,000
Agency ID or Contract Number	DTRT13-G-UTC40
Start and End Dates	December 16, 2016 – January 31, 2018
Brief Description of Research Project	The proposed study will seek to uncover existing relationships between observed HOS on likelihood of safety critical events (SCE) and a set of potential confounding factors related to Time-of-Day (TOD). This will be accomplished through (1) a comprehensive existing state-of-the-art and state-of-the-practice as it relates to CMV parking behavior and choice and heterogeneity based methods, (2) perform commercial motor vehicle operator and shipper surveys, (3) conduct statistical analyses and mine current data collected from a stated preference survey, and Oregon and Washington crash data to determine potential factors, (4) conduct factor analyses and estimate and validate heterogeneity based models using the 2/3rd of data prepared and identified in (2) and (3) using advanced econometric software. Once the models have been estimated the stability of the coefficient estimates of the models will be validated using 1/3rd of set aside data. It's envisaged that two journal manuscripts will result from this work, and (5) prepare a final report.

Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	The project outcomes have been implemented and are being utilized by an ongoing ODOT SPR810 study looking into the factors that lead to truck at-fault crashes in the state. This has led to an additional study that recently has been awarded by ODOT and slated to start in September of 2019.
Impacts/Benefits of Implementation (actual, or anticipated) Web Links	As mentioned earlier, this research project has led to an additional study that recently has been awarded by ODOT and slated to start in September of 2019.
 Reports Project Website	