**CE 650 C – Project Proposal**

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Previous research studies have generally shown various factors including geometric attributes, cross sectional characteristics, and environmental conditions. In addition, the segment volumes and the level-of-service of the segment on which a driver is driving has been found to affect drivers speed selection. The purpose of this study is to obtain and utilize appropriate probe data to examine two primary research questions: (1) How do weather conditions (i.e. temperature, precipitation, and snowfall) affect drivers speed selection on interstates in Iowa? (2) Is there any interaction between weather conditions and time (i.e. if weather conditions have variable impacts during different time of day, and day of week? These research questions will be examined based on available weather data. Data will be obtained for those periods when the conditions of interest occurred. Consequently, data will be also acquired for control cases under normal weather conditions controlling for other attributes. Additional data (e.g. geometric information and crash data) will also be obtained/collected if necessary.