

CE 890 Graduate Seminar

- DATE:** November 05, 2008
- TIME:** 4:00 p.m. (refreshments served at 3:45 p.m.)
- PLACE:** Durland 1052
- SPEAKER:** Loshaka Perera, M.S. Student
- TOPIC:** “Highway Safety Issues of Older Drivers in Kansas”

ABSTRACT

The older population (>65 years) numbered 36.8 million in the United States in 2005. By 2030 there will be 71.5 million older people in the United States which is almost twice as that number in 2005. An increase in older population means an increase in older drivers as well. As a result of natural aging process, the possibility of being involved in crashes and getting severely injured increase according to the past findings. The objective of the study is to identify characteristics of older drivers in Kansas and associated safety issues which can be used to suggest potential countermeasures for improving safety.

Detailed characteristic analysis and statistical analysis were carried out for older, middle aged and younger driver involved crashes using crash data from Kansas Department of Transportation under number of categories. In addition, a questionnaire survey was carried out focusing on identifying older driver behaviors, potential problems associated and level of exposure to various conditions. From the statistical analysis for severities it was found that crashes occurred on rural roads are significantly severe compared to urban. Therefore a detailed study was carried out using the decomposition method to identify contributing factors to such an out come.

According to findings, number of older male drivers involved in crashes was higher compared to older female drivers even though older driver licensees’ data indicates the opposite. Most of the older driver involved crashes occurred at good environment conditions and at intersections. Survey data revealed that majority of them are having difficulties associated with left turn maneuvering and prefer to avoid high traffic roads and other demanding conditions. Exposure to inclement weather conditions and difficulties associated with merging, diverging, identifying speeds and distance of oncoming traffic have lead to higher crash propensity. Crashes occurred at rural arterials and at hill crests are critical causing severe injuries. In rural areas, driving in the wrong direction, failed to comply with traffic signs and signals and over speeding are identified as frequent contributing factors in severe crashes. These findings will be used to suggest possible countermeasures to improve safety of older drivers in future.