

Project title

Developing a Highway Safety Fundamentals Course

Principal Investigators

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Project description

Although the need for road safety education was first recognized in the 1960s, it has become an increasingly urgent issue in recent years. To fulfill the hefty goal set up by the AASHTO Highway Safety Strategy (cutting traffic fatalities in half by 2020) and by the state (Destination Zero Death by Louisiana Strategy Highway Safety Plan), it is critical to have a work force that fully understands the fundamentals of highway safety. At the present time, the most experienced highway safety engineers acquire their expertise through on-the-job training. The retirements of those experienced professionals in the next decade will result in a gap in the roadway safety workforce development. Ensuring that newly-entering engineering students are equipped with a sufficient background in highway safety is critical to sustaining the progress of reducing the number of crashes in recent years. Therefore, one way to ensure such an adequate workforce is to develop a college level course to educate students, which has not been done in the past.

Although the NCHRP Project 17-40, "Model Curriculum for Highway Safety Core Competencies," has produced training materials on highway safety, it targets a broad audience of all levels of government, as well as representatives of the private sector and non-profits. The course titled "Road Safety 101" clearly shows that it is not intended for a systematic safety education in the field of engineering.

Preparing engineering students for future work in highway safety is particularly important in this region because of our poor performance in highway safety. The traffic fatality rate (fatalities per 100 million Vehicle-Miles-Traveled) in Louisiana and Mississippi has been persistently higher than the normal average. Traffic crashes bring a hugely negative impact not only on public health but also on sustainable economic development due to the lost productivities, lost wages and salaries, medical and long-term care cost, property damage, and travel delay. It is estimated that annually crashes cost about \$820.00 for every licensed driver in Louisiana. The need to improve highway safety is significant in this region.

The objective of this project is to develop a much needed roadway safety curriculum for undergraduate and graduate students for the NCITEC consortium universities. The developed course materials can be used for college education in the classroom setting or for workforce training in the workshop setting. By increasing the workforce short-and long-term competitiveness in highway safety in this region will help the sustainable regional economic development.