

Outreach Activities to Create Safety Awareness Using UPRM Driving Simulator

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- The UPRM Driving Simulator was center stage at the Convention Center of Puerto Rico during this event.
- Participants learned the benefits of performing research and how the driving simulator operates, giving them a hands-on experience.
- It helped professional civil engineers and students in the island become more aware of the research.

Introduction

- Seven activities were performed in 2015 to promote highway safety awareness to elementary and high school students, teachers, leaders and civil engineering professionals from the public and private sectors.
- The general topics of this outreach were: road safety, driving simulations, data gathering and analysis, and an explanation of the UPRM research project.
- The activity consisted of an initial overview of the driving simulation component and a hands-on experience, followed up by a presentation of driving simulator

2015 Summer Transportation Institute (STI)

AFETY RESEARCH USING SIMULATION

UNIVERSITY TRANSPORTATION CENTER

- The STI is a summer camp sponsored by the Federal Highway Administration (FHWA) and the Puerto Rico Transportation Administration (PRTA) to motivate tenth grade students to pursuit a career associate with transportation.
- The purpose of the students' project was to compare the behavior of a drunk driver and a regular driver using the UPRM driving simulator by creating simulated scenarios which took

 Ideas concerning the potential applications of the driving simulator were exchanged with top management officials from the island's main agencies (ATI, DTPW, PRTHA)

IMPACT: Approximately 1000 students, teachers, and Civil engineering professionals from the private and public sectors were exposed to the toll plaza driving simulation scenarios.





outputs and a exchange of ideas.

 Research was funded by the Research and Innovative Technology Administration (RITA). place in an urban area with signalized and non-signalized intersections to test the drivers.

• Drunk driver behavior was simulated with "Drunk Busters" goggles that visually impaired participants with a BAC of 0.16.

IMPACT: Over 100 students, leaders, teachers and parents were presented with the final project.



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UPRM Driving Simulation Outreach

MVC2015

Civil Engineering Freshman and Transfer Student Orientation





2015 Pre-Engineering Camp

- Junior and senior students from all around Puerto Rico were exposed to the UPRM Driving Simulator to promote highway safety.
- Using the Toll Plaza Scenario, the UPRM SAFER-SIM Team explained the on-going research and the importance of highway safety.
- Exchanged ideas of the driving simulation experience in order to enhance the models' safety and operational characteristics.

IMPACT: Approximate 85 students learned the benefits.



Pre-Engineering Camp PAEC Summer Camp

> 2015 Community Support and Engagement Program Summer Camp

• The UPRM SAFER-SIM Team created safety awareness in the next generations of drivers, starting with a representative group of 7-year-olds.

IMPACT: Over 30 students and teachers for the program learned the benefits of the driving simulator.

2015 Civil Engineering Freshman and Transfer Student Orientation

- Orientate the freshman students of the Department of Civil Engineering and Surveying about new technology and the importance of research to improve transportation systems using the UPRM Transportation and Driving Simulation Laboratory.
- Exposed second year transfer engineering students to the UPRM driving simulator scenarios to create safety awareness and to motive the to pursue career in transportation.
- The activity served to motivate future civil engineers to study transportation engineering.
- The event stand out the importance of research, specially in transportation.

IMPACT: Approximately 200 students were orientated.





Benefits/Impact

- For the fist time elementary and high school students, leaders, teacher and civil engineering professionals were exposed to UPRM driving simulator system to promote highway safety.
- Exchanging ideas with the participants to calibrate the UPRM Driving Simulator model and develop new scenarios.
- The UPRM SAFER-SIM Team has impact over 2,000 students and engineering professionals.