

Advanced Road Hazard Simulator Executive Summary

Car accidents are the leading cause of death among teenagers and young adults in America -- over 24,000 driver and passenger deaths in addition to over 400,000 serious injuries in 2006. According to the National Highway Traffic Safety Administration, these horrifying statistics have been reduced by about 10% in 2008 due to defensive driver courses and increased awareness of the problem.

The Advanced Road Hazard Simulator advances driver training and defensive driving instruction to a whole new level. The value of training simulators in preparing airline pilots, astronauts, military personnel and emergency responders for critical situations was dramatically underscored by the January 2009 "Miracle on the Hudson" U.S. Airways safe water landing. Using this same training concept, our simulator will prepare drivers for dangerous, and potentially deadly, driving scenarios by allowing them to experience a variety of randomly presented road hazards and practice correct procedures and maneuvers to avoid or minimize the impact of traffic crashes that claim the lives of so many young drivers. Facing a life-threatening situation is not the time to think about what you should do -- reactions must be instantaneous and this can only be done by practice. Immersed in a photorealistic simulator, the trainee will experience heightened awareness of driving behaviors and external situations that contribute to traffic accidents.

While software based driver training exists, there is currently no affordable, mass market product that goes beyond the basics of learning to drive. The Advanced Road Hazard Simulator is designed to pick up where traditional driving instruction ends. With a primary target market of 24,000,000 current drivers in the high-risk driver pool and with 8,000,000 new drivers each year, the opportunity to impact the death and injury statistics for drivers in 16 -- 24 yr. old age group by simulation training is tremendous. The NHTSA states that 95% of fatal car crashes are caused by driver error.

While primarily aimed at young drivers, this simulation training will have a positive impact on drivers of any age. To reach this huge market, we are seeking to partner with automobile insurance companies and driving schools using a licensed software model.

Insurance companies directly benefit by a decrease in number and severity of claims while policyholders can benefit by reduced insurance premiums. By incorporating a scoring model within the simulator, we can provide insurance companies with a metric which they can use to offer policyholders premium discounts for successfully completing training much as they do now for defensive driving courses.

Driving schools will benefit through an additional revenue stream by offering advanced training courses. With the trend of high school driver education courses outsourcing instruction to established commercial driver's ed. schools, the opportunity for additional software licenses for classroom use will grow.

By building on the original product concept, future growth will be fueled by additions and modifications to accommodate additional markets such as the commercial trucking industry, law enforcement pursuit training and overseas markets. Recognizing the immense popularity of gaming console systems such as the Wii, we are currently in the conceptual design stage of a more video game-like version of the simulator to extend a more subtle form of training to instill safety awareness to the pre-driving age group.