The MiniSim is a PC-based driving simulator with powerful scenario editing and data acquisition capabilities that is based on over a decade of research and driving simulation experience at the University of Iowa’s National Advanced Driving Simulator (NADS).

The MiniSim simulator can be configured in a variety of ways, including ¼ cab with plasma or projection displays.

The cab is of robust design with realistic pedals, real truck steering wheel and seat, and manual transmission shift lever with software configurable transmissions.

The instruments on the dashboard are displayed on an LCD, enabling fast and cost-effective customization to simulate different vehicles. As an option, a pitch/surge motion base is available to provide onset braking and acceleration cues to the driver.

Using a driving simulator helps...

... drivers experience and prepare for the unexpected in a simulated and controlled environment.
... routinely exercise skills to enforce safe practices.
... improve driver confidence and boost morale.
... lower insurance costs.

... reduce insurance claims.
... save time and money by sharing a mobile unit.
... reduce turnover costs.
... reduce operational costs. (fuel / repair / tire wear / ...)
... achieve fewer crashes.
... address CSA 2010.

Most of the research findings on adult learning and instructional technology from the last 30 years have not been incorporated into many commercial driver training enterprises.

Source: Effectiveness of Commercial Motor Vehicle Driver Training Curricula and Deliver Methods, A Synthesis of Safety Practice, Transportation Research Board of the National Academies, Sponsored by the Federal Motor Carrier Safety Administration

Source: Paducah Area Transit System (PATS) driver study, 2008

Simulator training at least once a year showed in the first full year of training, drivers had a 64% reduction in preventable accidents and a 44% decrease in overall accidents.
Significant safety benefits have been reported by a transit agency using a bus simulator. In 90 days following the training, the accident rate for the drivers trained on the simulator was 18 percent; the accident rate for the drivers trained conventionally was almost 32 percent.

Even more significantly, the tasks specifically trained on the simulator - left and right side vehicle passing, and collisions with fixed objects - resulted in 17 accidents for drivers trained on the simulator, and 137 accidents for the contentiously trained drivers.

Source: TCRP Report 72, p. G-3-4; “MTA NYC Transit’s Bus Simulator: Design, Delivery, and Results”

It provides the benefit of training and testing drivers on potentially risky on-the-road scenarios and difficult climatic conditions like rain, fog, and snow that are difficult or dangerous to conduct in real life, thus saving time, cost and lives. Drivers of trucks are required to operate in urban areas as well as in less populated places, thus raising matters of safety and environmental pollution when training is required. Any vehicle driven by a novice is likely to require higher than average visits to maintenance and repair workshops, while fewer instructors would be needed to staff a simulator facility than to accompany student drivers on public roads.

Simulator training has reduced accidents per mile, decreased driver turnover, increased fuel mileage by 15% and provides a tool to reduce insurance premiums.

Source: Jim Van Der Elzen - Business News 2/1/2010

In addition, simulated environments can also be tailored to suit specific requirements, including geospecific locations and custom object models.

Please contact us for more information: