

The Case For Driving Simulation



A practical guide for achieving ROI with a simulation-based driver training program.

Simulation-based training is a proven tool for pre-hire driver screening assessments, entry-level driver training, safety refresher training, and post-remediation training.

Emergency responders, military fighter pilots, and law enforcement use simulation to become proficient and prepared in mission critical skills. Professionals that work in these high-risk environments often receive hundreds of hours of simulation-based training, yet perform with the highest level of safety and standards.

Driving simulators provide hands-on experiential training for drivers, offering experience without risks to people or equipment. Simulation-based training allows you to expose your drivers to various challenging and hazard-laden scenarios in a controlled environment. The simulator-based training approach improves critical driving skills, enhances decision making abilities and increases the overall safety of your operations.

A PROVEN APPROACH

As mentioned earlier statistics confirm that 95% of incidents are caused by drivers making poor decisions.

- > Simulation immerses the student in a real life scenario.
- > Simulation introduces students to life threatening situations.
- > Allows you to make the bad decision in a controlled, risk-free environment to learn from their mistakes.

- > Allows instructors to observe, assess and correct the student.
- > Student is given the opportunity to practice and repeat the proper response.
- > Ultimately enhance stheir skills, improve their driving behavior and master decision making skills in stressful situations.

WHY SIMULATION IS DIFFERENT

Over 94.5% of crash incidents are a result of driver error and poor decision making.

- Simulators are not meant to replace behind the wheel training or teach drivers how to drive a vehicle.
 Simulation-based training focuses on improving decision making skills
- > Reinforce positive habits and behavior behind the wheel
- Driving simulators provide handson, experiential training offering experience that matters
- > Zero risk to people or equipment
- > As a training tool they have also been proven to help optimize and compress training through accelerated repetition of learning objectives

REDUCE NUMBER OF CRASHES:

- > Mid-Size Commercial OTR fleet: 10% reduction year over year
- > Large-size retail fleet: 36% crash rate reduction
- > Private fleet: 36% crash rate reduction over 2 year time frame

REDUCE SEVERITY OF CRASHES:

> Large-Size commercial fleet: 10% fewer 'major' crashes

IMPROVE OPS EFFICIENCY:

- > 80% improvement in space management
- > Reduced costs from \$1.2 million per crash cost down to average of \$141k
- > 97% drivers apply what they've learned on the job
- Crash rates reduced by 53%
 estimated \$375 million in potential savings at scale over five years. Estimated 102%
 annualized ROI based on pilot.

OPTIMIZE TRAINING TIME:

- > Driving school: Reduced training cycle time by 25%
- > Large-size commercial fleet: Reduced training time by 20 days = US \$1 million in annualized revenue



WHAT BENEFITS CAN BE GAINED BY USING DRIVING SIMULATION?

All customers have challenges they are trying to solve and they have recognized that a new direction and approach to training is key to realizing improvement. The most common problems clients seek a solution for include:

- > Reduce number of crashes
- > Reduce severity of crashes
- > Reduce training time
- > Reduce operational costs
- > Improve driver retention
- > Meet or exceed training regulations

In a recent survey, most customers confirmed the benefits and results they have realized by using a driving simulation solution. Fleets of all types and segments in the transportation industry experienced improvements whether they are small or large size carriers, over-the-road (OTR) freight or private, specialized fleets.

WHAT ARE BARRIERS TO SUCCESS AND HOW DO CUSTOMERS OVERCOME THEM?

Some customers experience barriers to success. The most common include:

- > Lack of leadership support
- > Poor alignment of safety goals with training
- > Poor evaluation of training needs/issues
- > Lack of courses/curriculum
- > Poor quality or inconsistent delivery of training
- > Poor record keeping
- > Using simulation training as a "one time" effort or with some but not all drivers
- > Downtime on simulator equipment

WHAT BEST PRACTICES ARE USED TO BENEFIT FROM SIMULATION?

When successful customers were asked they cited several best practices that, when applied, increase the probability of realizing immediate and long term return-on-investment from simulation training.

- > Leadership support
- Alignment of driver training efforts with safety goals and operational/productivity goals
- Quality of training program (i.e. standards based curriculum combined employing blended learning approach)
- Discipline and attention to consistency in the delivery of training (this is accomplished through choosing the right trainers, providing quality train-the trainer certification and perform ongoing assessment of trainers)
- > Embedding simulation into all types of driver training (new hire, remedial, safety initiative training, fuel MPG)
- Ongoing evaluation of training effectiveness (through surveys, skill assessments, driver performance records)
- > Having fully operational simulator equipment
- Quality and timeliness, of Driver Training Solutionscustomer service and support



HOW TO SUCCESSFULLY IMPLEMENT A SIMULATION-BASED TRAINING PROGRAM?

Successful customers apply a instructional systems design process model to ensure quality with their training. This includes a thorough training needs analysis, design, development, implementation and evaluation of a cutomer's training requirements.

Simply put, the most successful fleets implement a solid curriculum that is designed to address specific performance issues (safety or productivity related) and the training program is then delivered in a consistent way to maximize the results sought.

© 2025 Acron Aviation. | All Rights reserved | 04/2025



