



**Realtime Technologies'** (RTI) Driver Distraction Simulator brings the performance of mid- to high-fidelity simulators to cost-conscious consumers with implemented scenarios that allow simulator-based evaluations of new driver interfaces based on the Driver Distraction Guidelines provided by the National Highway Traffic Safety Administration (NHTSA). Using RTI's flagship SimCreator® product, complex validated simulation models are scaled and targeted to run on distributed and multiprocessor systems. Now, all the features traditionally reserved for expensive, high-end simulators are within reach to those with a more modest budget.

### Packaging

The Driver Distraction Simulator comes complete with the following hardware components:

- Fully instrumented open cockpit vehicle cab
- Three 42" monitors providing a 150 degree forward field of view
- Three visual computers for all visual displays
- A laptop based operator workstation

The software for the simulator will consist of the following components:

- SimCreator for control of the simulator system
- Operator's Experimental Interface for experimental control and collection of results
- SimVista for design and control of visual databases and behavior (optional)

## highlights

- High performance at a low cost
- Compact and portable configurations
- Pre-built driving database
- Easy to use scenario selection interface
- Standardized scenarios
- 60 Hz update rate, supporting smooth graphics presentation and rapid system response.

### Technology

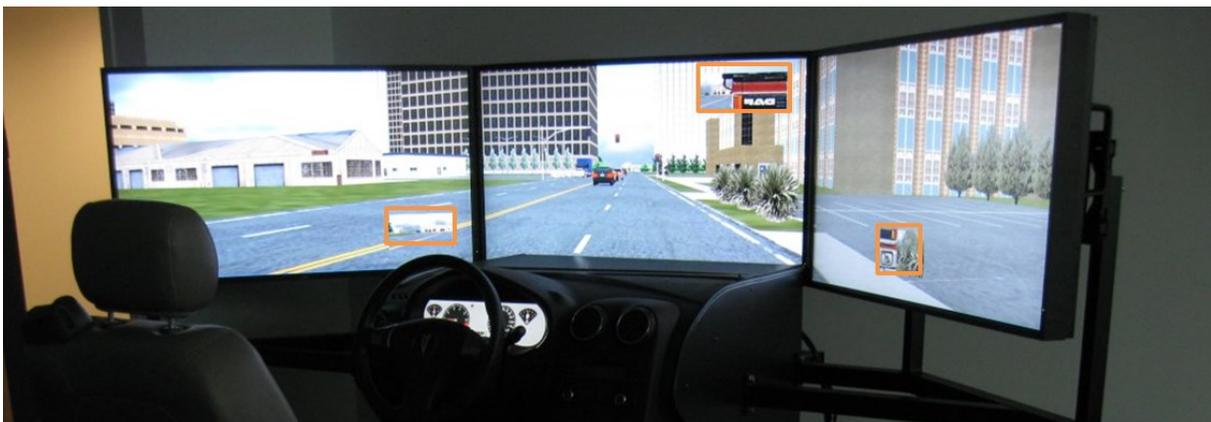
The Driver Distraction Simulator is powered by RTI's core driving simulator software, the same SimCreator and SimVehicle products that RTI delivers in its high-end research simulators. The software models have been validated and are used by vehicle manufacturers and suppliers around the world. SimCreator also makes it easy to interface other applications into the simulator for testing and development tasks.

The driving simulator software provides accurate vehicle responses to the driving environment. The simulator operates at a 60 Hz update rate and supplies high-quality graphics and audio cues.

### Content

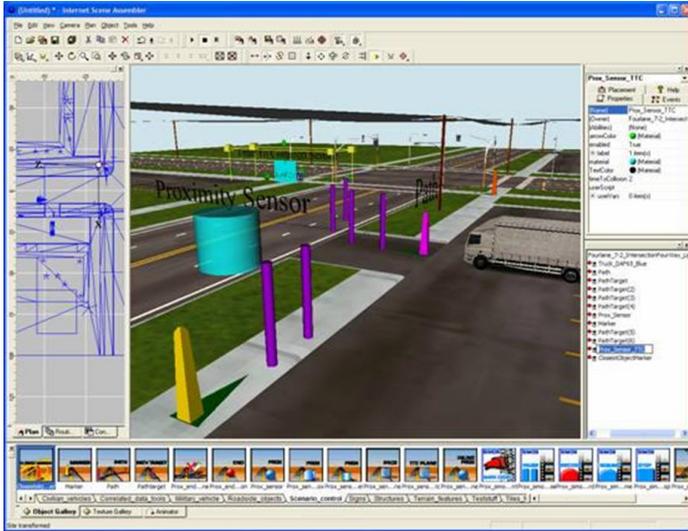
The Driver Distraction Simulator can be delivered with stand-alone databases complete with an ambient traffic model or with customized simulation scenarios. Stand-alone databases exist for free-way, city, and rural driving.

# Driver Distraction Simulator



Typical Front and Rearview scenes

Using the optional SimVista scene and scenario control package, customized scenarios can be developed. Several example scenarios are provided based on the



*SimVista Scene and Scenario Design Software*

SimVista tool set. These scenarios can be modified to run during the daytime or nighttime and with rain, snow or fog. Traffic volume is controllable in the scenario. Scenarios can be modified using the SimVista GUI. Scenarios will include driver distraction scenarios based on NHTSA guidelines. Software specifications include:

- Various driving scenarios (e.g., rural/urban/freeway, monotonous/moderate/complex roadway geometry, low/moderate/heavy traffic, night/day time, different weather conditions, etc.)
- Programmable software
- Easily modified scenarios (Traffic signage, Traffic volume, Vehicle type) with GUI
- Optional software upgrade and maintenance package.

For more information contact: [Clayne Woodbury](mailto:cwoodbury@simcreator.com)  
cwoodbury@simcreator.com

## SimCreator®

SimCreator is a graphical, hierarchical, real time simulation and modeling system. SimCreator allows users to develop distributed simulation models with speed and ease — without writing a line of C code. Please see the SimCreator product sheet for more.

## SimVehicleLT™

SimVehicleLT is a high-fidelity, multibody, real time vehicle dynamics model. SimVehicleLT can represent a variety of four-wheel vehicles using selectable input data files. It can be used in both operator-in-the-loop and hardware-in-the-loop simulators. Please see the SimVehicleLT product sheet for more.

## SimVista® (optional)

SimVista is a scene and scenario control subsystem. The SimVista graphical user interface (GUI) gives you the power to drag and drop objects into your virtual world and to give them scripted behaviors, bringing them to life.

Other objects that can be dragged off a palette and added to enhance the visual complexity of the scene include buildings, trees, parked vehicles, terrain features, signs, and construction barriers among many others.

Still more objects such as sensors, vehicles, and pedestrians can be introduced and assigned behaviors that will play out during scenario execution. With SimVista you can regulate nearly all aspects of virtual traffic, pedestrian movements and simulator operation.

SimCreator, and SimVista are registered trademarks of Realtime Technologies, Inc.

06.13



Realtime Technologies, Inc. (RTI), specializes in real time multibody vehicle dynamics, and graphical simulation and modeling. We offer simulation software applications, consulting services, custom engineering, software and hardware development. Realtime Technologies' customer base includes international, government and private entities. RTI was founded in 1998. For more information, visit us at [www.simcreator.com](http://www.simcreator.com).

332 E. Lincoln Ave. | Royal Oak, MI 48067 | 248.548.4876 | Fax: 248.548.6036  
10069 S. Jordan Park Circle | South Jordan, UT 84095 | 801.647.4672 | Fax: 801.254.5007