SAFE•Sim™

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Keller's

SAFE·Sim™

Truck Driving Simulator   **TRAINER'S GUIDE**

Interactive Training for:
- Hazard Perception
- Defensive Driving
- Extreme Conditions
- Emergency Maneuvers
- Crash Avoidance

Challenging Real Drivers in a Virtual World™

J. J. Keller
& Associates, Inc.

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Keller's SAFE·Sim™ Truck Driving Simulator software program is designed to give drivers a simulated driving experience in order to help trainers teach various safe driving skills. Attempts have been made to make the behavior of vehicles, hazards, weather and other factors in the program realistic enough for this purpose. However, due to the infinite number of variables in the real world; it is not possible to accurately and completely simulate real world truck driving using this or any other computer program.

J. J. Keller & Associates, Inc. therefore does not warrant that this program accurately depicts any particular driving situation or vehicle behavior. Professional driver trainers should use this product as a training aid, but rely on their own experience and judgment when coaching drivers on how to safely operate a real truck.

Keller's SAFE·Sim™ Truck Driving Simulator Trainer's Guide

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Welcome

Welcome to Keller's SAFE·Sim™ Truck Driving Simulator *Trainer's Guide*. This guide will help you set up Keller's SAFE·Sim™ for your drivers and offer suggestions on how to use the simulator.

Keller's SAFE·Sim™ allows drivers to experience real-world hazards before they experience them on the road. Like flight simulators for pilots, Keller's SAFE·Sim™ provides truck drivers a method for performing and improving their skills in a safe, "virtual" environment.

Keller's SAFE·Sim™ allows professional drivers to apply a variety of skills in routine, extreme and emergency situations. As a trainer, you can use the simulator to identify driver deficiencies and provide the necessary useful training to improve upon or correct them.

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Getting Started

To begin using Keller's SAFE·Sim™, the simulator must first be set up according to the specifications in this section.

Materials Needed for Setup

■ Computer meeting minimum requirements for running simulator software

■ SAFE·Sim™ software (CD)

■ SAFE·Sim™ steering wheel label (included in back pocket of 3-ring binder)

■ Force feedback steering wheel and foot pedals (software included)

Technical Requirements

■ CPU: 2.5 GHz Intel® Pentium® 4 processor with USB Port

■ Windows®: 2000 or XP

■ RAM: 1 GB RAM, minimum

■ Video Card: 128 MB Video Card—ATI Pro recommended, nVidia Ultra compatible

■ Sound System: Sound Card, Stereo System with speakers

■ Hard Drive Space: 1 GB Free Hard Drive Space

■ CD-ROM Drive: Required

■ Mouse: Required

■ Keyboard: Required

■ Monitor: Required—19" recommended

■ Steering wheel (with force feedback and gear stick) and foot pedals: included. *Note: You may want to keep the software and instructions at hand in the back inside pocket of the 3-ring binder for future reference.*

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Setting up Keller's SAFE·Sim™ Truck Driving Simulator

■   Set up the steering wheel and foot pedals

Follow the setup instructions in the box accompanying the steering wheel and foot pedals for proper installation or to make steering wheel adjustments (Note: We suggest setting the center spring strength at 50-60% under the Options drop-down menu under Global Device Settings using the software that accompanies the steering wheel). Be sure to apply the SAFE·Sim™ labels before using. Due to the adhesive nature of these labels, it is essential that they be applied with care.

•   Steering wheel controls
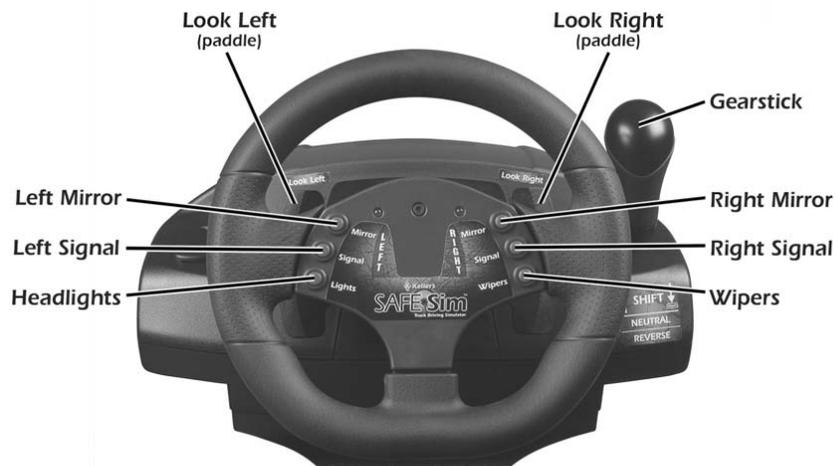
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- o Front buttons:
    - • Left mirror
    - • Right mirror
    - • Left turn signal
    - • Right turn signal
    - • Headlights
    - • Windshield wipers
- o Paddles on back of steering wheel:
    - • Look left
    - • Look right
- o Gear stick
    - • Forward = shift up
    - • Back = shift down
    - • Neutral = between forward and reverse
    - • Reverse = down from neutral
- o Foot pedals

- • Brake
- • Accelerator

Note: To keep the foot pedals stationary on the floor, setup the unit for the appropriate type of floor surface. For use on a carpeted surface, flip the unit over and press the button to extend the carpet grabbing teeth. For use on a smooth

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floor surface, press the button on the bottom of the unit and push the carpet grabbing teeth inside the unit.

■   Set the screen resolution to at least 1024 x 768 pixels

To change your screen resolution, right click on the screen (desktop), click on **Properties**, choose the **Settings** tab, and move the slider in the "Screen Area" box to at least 1024 x 768 pixels. Make sure you are using "Small Fonts" by clicking the "Advanced" button located under the "Screen Area" slider.

■   Reset the screen saver setting

Set the screen saver wait period to at least 60 minutes or turn your screen saver off. To change your screen saver settings, right click on the screen (desktop), click on the **Properties**, choose the **Screen Saver** tab, and in the **Wait** field, change the number to at least 60. To turn your screen saver off, select **[None]** in the **Screen Saver** field.

■   Setup ergonomics

•   Make sure the screen is within 5" of the steering wheel.

•   Position the foot pedals so the brake (left) pedal is directly under the steering wheel and both pedals can be maneuvered comfortably.

Notes:

- Position the chair to the appropriate height to the desktop for comfortable reach to the wheel, pedals, and computer.

- Position hands at 9 and 3 o'clock so that the buttons on the steering wheel can be reached with the thumbs (the buttons on the front of steering wheel) and fore- or middle fingers (the paddles on the back of steering wheel).

Program Installation

Note: Before installing the software, close all applications.

To install Keller's SAFE·Sim™ Truck Driving Simulator:

1. Insert the CD in your CD drive.

2. The SAFE·Sim™ setup program will start automatically. Follow the instructions for each message box displayed. Skip to step 7 unless the setup program did not start automatically (some computers are set to disable this capability).

3. From the Taskbar, click **Start**, then select **Run**.

4. In the *Open* dialog box that appears, type:

   d:\setup

   *Note: If **d:** is not the CD-ROM drive, use the appropriate letter to designate the CD-ROM drive on your computer.*

5. Click **OK** or press the **Enter** key on the keyboard.

6. Follow the instructions for each message box displayed.

7. Register Keller's SAFE·Sim™ as directed on the screen.

   Note: After you complete the installation, you must restart your computer before running Keller's SAFE·Sim™ Truck Driving Simulator.

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Notes:

Program Startup

To open Keller's SAFE·Sim™ Truck Driving Simulator, double-click the SAFE·Sim™ icon on your computer screen. Or, access Keller's SAFE·Sim™ through the *Start* menu, by clicking on **Start**, then **(All) Programs**, **Keller's SAFE·Sim™,** and **Truck Driving Simulator.**

> **Note:** *If you are using Keller's SAFE·Sim™ for the first time, a username and password are provided (already filled in) when you first log on. If these are not present, please type in:*
>
> *Username: safesim*
> *Password: safesim*
>
> *Once you are logged on, the system will take you to a "Driver Information" screen where you can add yourself (including username and password) to the system for future logins.*

Program Help

Click the **Help** option from the menu bar, or press the **F1** key on your keyboard to get answers to your questions about the program. Or, contact Technical Support at the phone number or Web site address below.

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KELLER TECHNICAL SUPPORT

www.jjkeller.com/kssupport

Kellersoft@jjkeller.com

1-800-346-4812

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Proper setup of Keller's SAFE·Sim™ Truck Driving Simulator, including the software installation and setup of the steering wheel and foot pedals, must be completed before using. Once done, you're ready to get your drivers "on the road!"

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General Program Information

In order to understand how Keller's SAFE·Sim™ Truck Driving Simulator can help your driver training program, it is important to understand its purpose. It is also import to understand the drivers who can most benefit from using it, how they can benefit from it, and the challenges it offers to your drivers as an effective training tool.

Keller's SAFE·Sim™ challenges a driver to operate a semi or straight truck safely in a variety of trainer-selected conditions, such as busy interstates, two-lane highways, congested city streets, mountain roads and high-risk environments. Drivers of all levels will benefit by sharpening their hazard perception, defensive driving, and crash avoidance skills.

Keller's SAFE·Sim™ is also an important driver assessment tool, as an assessment feature tracks driver infractions and allows the trainer to identify areas for improvement.

As a training tool, Keller's SAFE·Sim™ is one of many options in your trainer's "toolbox." It **does not** and **cannot** replace forms of training, such as classroom training, driving on a range or on-the-road training. Rather, Keller's SAFE·Sim™ works hand-in-hand to supplement your training efforts by providing a practical, no-risk method of training and assessment on routine and high-risk driving situations. These scenarios would otherwise be too costly and too dangerous to replicate in real trucks on real roads with other motorists.

Purpose and Objectives

■   **Purpose**

The purpose of Keller's SAFE·Sim™ is to provide drivers a method for practicing and improving their driving skills in a safe, "virtual" environment.

This approach allows drivers to experience real-world hazards *before* they experience them on the road. This type of experience-based driver training may also reduce the frequency and severity of crashes. Crash reduction lowers operating costs due to lower insurance premiums, personal injury, liability/litigation, vehicle repair and vehicles placed out of service. In turn, lower operating costs mean more profit.

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- **Objectives**

  - Allow drivers to practice a variety of skills in routine, extreme, and emergency driving situations, including:

    o Hazard perception (seeing hazards)

    o Speed and space management

    o Braking

    o Use of mirrors

    o Backing

    o Cornering

    o Emergency maneuvers

    o Skid control and recovery.

  - Identify driver deficiencies and provide experience-based training to improve upon or correct those deficiencies.

  - Teach hazard perception, defensive driving, and speed and space management skills, in particular.

  - Augment traditional classroom and behind-the-wheel training, providing critically important high-risk situational training that neither form is able to provide effectively.

Intended Audience

- Drivers of tractor-trailer combinations and non-articulated straight trucks, for the purpose of assessing, learning or improving driving skills.

- New hires, for the purpose of driver assessment or new driver training.

- Drivers needing refresher or post-incident/crash training, for the purpose of improving driving skills.

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Trip Descriptions

Numerous "trips" may be selected from three primary routes, including:

- Colorado Route (Rifle to Longmont),

- Ohio Route (Cleveland, OH to Pittsburgh, PA via Wheeling, WV), and

- New Jersey Route (East Orange, NJ to Philadelphia, PA).

Keller's SAFE·Sim™ Truck Driving Simulator offers many types of real-world driving environments and hazards. Each may be specifically pre-selected (by the trainer or administrator) and set up appropriate to the drivers' needs. Driving environments, time-of-day, weather conditions and specific hazards may be pre-selected.

The types of driving environments include:

- City

- Two-lane highways

- Urban freeways

- Interstates

- Mountain roads.

Time-of-day and weather conditions include:

- Day

- Night

- Dusk/dawn

- Dry pavement

- Rain

- Snow

- Ice

- Black ice

- Fog.

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The types of high-risk or emergency situations include:

■ Vehicles/objects blocking roadway

■ Construction zones

■ Sliding on ice

■ Deer/livestock entering roadway

■ Pedestrians entering street

■ Slow moving vehicles

■ Vehicles running stop signs/red lights

■ Erratic passenger vehicles

■ Aggressive drivers.

Keller's SAFE·Sim™ is a resource for driver training that can go where other forms of training can't: allowing drivers of all skill levels to test their hazard perception and speed and space management skills by driving in a variety of "virtual" environments.

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Trainer Information

Now you're probably asking yourself, "So how do I start using Keller's SAFE·Sim™ Truck Driving Simulator? How do I incorporate Keller's SAFE·Sim™ into my driver training program? How do I address the needs of my drivers?" The answers to your questions are all in this section, and can help you better utilize the capabilities of Keller's SAFE·Sim™ and prepare you for how you use the simulator as part of your driver training program.

Training Guidelines

As a trainer, you know that every driver learns in their own way, and that various topics and skills are best taught in different environments with a variety of tools—whether it be classroom discussion, video, driving range or on-the-road experience. Keller's SAFE·Sim™ is unique from other training tools in that the simulator itself is the environment for learning. Utilized in a variety of ways, the simulator is able to assess or improve skills, or to provide "virtual" experience with situations that are difficult to replicate.

Whether you have single or multiple stations set up, your drivers will learn by *experiencing*—driving the simulator itself.

Here are some things you can do to facilitate what your drivers practice and learn.

- **Training Tips**

  - Identify your drivers and their needs

    Ask yourself the following questions about your drivers:

    o What is the (average) experience level of the driver(s)?

    o Why are they using Keller's SAFE·Sim™?

      ■ To identify potential bad habits or tendencies in pre-employment screening?

      ■ To evaluate an experienced driver's skills?

      ■ To refresh drivers' skills on annual or seasonal topics, such as driving in snow?

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■   To orientate new drivers?

■   To focus on a specific problem area or areas after an incident or crash?

■   Have they driven Keller's SAFE·Sim™ before?

•   **Set objectives for drivers**

Instructional objectives map out what you want your drivers to know and do. Starting with defined objectives enables you to evaluate whether these goals have been met.

Identify what you want each driver to perform, and at what skill level. For example, "A driver will be able to drive in a city driving environment with no more than three infractions."

•   **Be prepared—a checklist**

o   Make sure the time and/or setup works for the drivers in such a way that is least disruptive to their schedules (and yours).

o   Confirm that Keller's SAFE·Sim™ is set up correctly on the computer(s), and that the steering wheel, foot pedals and chair are positioned appropriately.

o   Know who and how many drivers (if multiple stations) will be using the simulator.

o   Make sure you have entered the information necessary for your drivers to use the simulator—including driver information; vehicle specifications and assignments; trip specifications and assignments; and environmental specifications and hazards for each trip.

o   Review any guidelines or traffic laws that may come up during the simulator training, such as those related to speed and space.

o   Drive the trip(s) you have specified for your drivers before they are provided access to it.

o   If it is the driver's first time driving Keller's SAFE·Sim™, have them take an "Orientation Drive" as

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well as a "Practice Drive" before driving the trip(s) you have created for them.

- **Document the training**

    Keller's SAFE·Sim™ allows you to keep track of and print out driver trip results. This documentation can help you keep track of your efforts and may be needed as part of an internal quality system. Documentation may also be required as a way of verifying that training was completed.

    The documentation from Keller's SAFE·Sim™ may also be considered for use in performance reviews based on your own corporate guidelines, or to identify the need for refresher training.

- **Evaluate the effectiveness of training with Keller's SAFE·Sim™**

    Evaluating the effectiveness of training with Keller's SAFE·Sim™ helps you determine if the program is meeting its objectives. If utilizing the simulator has not been effective, you can improve it by making adjustments to the vehicle and trip specifications.

    Training with Keller's SAFE·Sim™ may be evaluated by:

    o   Reviewing driver trip results

    o   Observing drivers using Keller's SAFE·Sim™

    o   Having drivers demonstrate specific skills on Keller's SAFE·Sim™

    o   Asking supervisors or the safety director if safety performance has improved.

■ **Training Setups for Keller's SAFE·Sim™**

There are a number of considerations as you prepare to use Keller's SAFE·Sim™ as a training tool for your drivers.

First, consider the environment where the Keller's SAFE·Sim™ truck driving simulator stations are located. Keller's SAFE·Sim™ may be used as a single station or in a classroom environment with multiple simulators. An administrator may set up the training environment (drivers, trips, hazards, etc.) from one location and then have that

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setup transferred to simulators at other locations. Visit the Keller Technical Support website for how-to information.

Next, consider the needs of your drivers and your objectives for their use of Keller's SAFE·Sim™. Will the driver(s) need your help some or all of the time? Or do you simply need to tell them to log in and complete a trip?

- **One-on-one Training:**

   You may want to consider working one-on-one with a driver when you only have one station and he or she has never used Keller's SAFE·Sim™ before, or you want to work on that driver's development of a specific skill(s).

- **Coaching/Facilitating:**

   Consider coaching/facilitating when you have one or more drivers using Keller's SAFE·Sim™ who have some experience driving the simulator. In this scenario, you may offer help as needed to assist the driver(s) learning the skills being practiced.

- **Self-paced Training:**

   Self-paced training allows drivers to use Keller's SAFE·Sim™ on their own schedule. This option works well when a station is already set up and drivers have already used the simulator and are familiar with its controls.

- **Group Review**:

   A group review allows students to comment on a pre-driven trip. To do this, have students review a trip that you or a student (not identified) has driven. This is done through the replay feature (see below). Or, you can have a live group review of your or another experienced driver's trip.

Unlike other training tools, Keller's SAFE·Sim™ provides "hands on" experience for drivers to face specific situations before they experience them on the road. However, it is especially important to understand your drivers' training needs. Have a plan for how you will use Keller's SAFE·Sim™ that is most appropriate for each of your drivers.

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Simulator Applications

Keller's SAFE·Sim™ truck driving simulator has numerous applications in a driver safety program, including driver assessment, new driver training, refresher training and remedial (post-incident/crash) training. Different skills may be assessed or sharpened depending on your drivers' needs.

There are four basic ways to use Keller's SAFE·Sim™ for your training program:

1. Driver assessment **(Level 1)**

2. New driver training **(Level 2)**

3. Refresher training **(Level 3)**

4. Remedial (post-incident/crash) training **(Level 4)**.

The assigned levels 1–4 for each purpose are based on drivers' experience with Keller's SAFE·Sim™, their driving experience with your company and the difficulty of the simulation.

Trip Directional Signs

Drivers begin trips at freight terminals. Each trip will be marked throughout with blue directional arrow signs. Drivers simply turn where the arrows indicate in order to stay on course to their destination.   If they miss a turn or go the wrong direction, a pop-up dialog box will alert them that they are off course. Keller's SAFE-Sim™ will then return their truck to the proper course, so that they can continue their trip.

Terminating a Trip

Drivers complete a trip when they arrive at their destination (freight terminal) and park their vehicle in the location indicated by the blue "Park Here" sign. Drivers should back into docks when those are marked as the parking area. Their vehicles must be within the parking or dock lane lines marked on the pavement in order to register in the system as parked.

When the vehicle is properly parked, Keller's SAFE-Sim™ will notify the driver. A list of infractions will be displayed. The driver will then be taken to the SAFE·Sim™ main menu where he or she may choose to replay the recorded trip or drive another trip assigned by the trainer. You or the driver will be able to replay any part of the trip or sections of the trip where specific infractions occurred. (See the Assessing Driver Performance section on page 41 for more information on the Trip Replay feature.)

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Once a driver has completed a trip, the trainer may view the infractions which occurred during that trip and print out a hard copy for reference, discussion with the driver or for the driver's file. The trainer will find this trip report printing function by entering Keller's SAFE-Sim™ through the **Training Administration** button on the main menu and selecting **Reports** from the "Administration Setup Areas" screen.

■ **Driver Assessment (Level 1)**

Driver assessment is typically an initial assessment run for a driver, whether it is for pre-employment screening or new drivers. In Level 1, your goals are to acclimate the driver to the simulator and use the simulator to see how the driver handles the driving environment in order to give you a feel for the person you just hired or are about to hire.

• **Guidelines**

When assessing new drivers or conducting pre-employment screening, you may want to test for skills that are appropriate to the vehicles and environments that are typical for your drivers.

You may also want to assess driver tendencies, such as following too close, failing to signal when changing lanes or insufficient use of mirrors.

Consider the following to create a trip or set of trips for driver assessment:

o What types of vehicles do drivers need to be able to operate safely?

o What kinds of environments do drivers need to be able to drive in safely (city, mountains, rain, snow, fog)?

o What times of day do drivers need to be able to safely drive (night, dawn/dusk)?

o What are some typical hazards that your drivers face based on environmental factors or conditions common to the routes they may travel (deer, aggressive drivers)?

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o   What is the driver's level of experience driving truck (straight truck, semi, flatbed, tanker)?

o   What is the driver's level of experience driving Keller's SAFE·Sim™?

o   Why are you doing this training for new driver orientation (or for a prospective hire)?

o   What do you want the driver to learn based on your company's incident/crash history?

Note: Think about what you want to set up and what you want to achieve from it.

- **Tips for Choosing Trips**

When choosing trips for assessment of new drivers or for pre-employment screening, be sure to make adjustments for those with less experience driving truck or drivers who have never used the simulator before. Increase the level of difficulty as they become accustomed to the simulator.

o   Begin by using **simpler vehicles**: pick a straight truck with an automatic transmission or a day cab with automatic transmission and a shorter, 28´ trailer to facilitate easy adaptation to Keller's SAFE·Sim™.

o   Consider **easier routes**: pick a two-lane or interstate trip segment, a daytime environment, clear and dry (or moderate) weather conditions, and a few hazards, such as:

■   an aggressive driver

■   a construction zone

■   a car pulling out.

o   **Do not overdo** the number or severity of hazards, or pick a mountain trip (unless necessary for your own environment; if you do pick a mountain trip, keep it simple).

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■ **New Driver Training (Level 2)**

New driver training may be conducted for drivers who are new to the company, new to driving truck, or those making a transition from driving one type of truck to another. In Level 2, your goals are to assess drivers' skills for certain vehicles and environments, as well as review and improve upon those skills.

• **Guidelines**

Create a number of trips that are increasingly difficult. These trips may have similar types of hazards, but the hazards may increase in frequency, or the weather may worsen.

• **Tips for Choosing Trips**

Ideally, begin with Level 1 to acclimate them to Keller's SAFE·Sim™.

Assign the easier trips to newer drivers. As they improve their skills, increase the difficulty of the trips assigned with more advanced vehicle/road/hazard selections. Do the same for vehicles. Begin with a straight truck, then move to bigger, longer tractor-trailers with manual transmission as appropriate.

Eventually, assign trips with vehicle(s), common terrain, weather, and hazards based on your company's incident and crash history (trending).

■ **Refresher Training (Level 3)**

Consider refresher training with Keller's SAFE·Sim™ for training sessions that are regularly scheduled, perhaps annual or seasonal training to review specific skills, such as winter driving or skills needed on specific routes (mountains, city). In Level 3, the purpose is to maintain or improve skills in preparation for real trips.

• **Guidelines**

To create trips appropriate for refresher training, consider the following:

Trainer's Guide

o   What environments need to be reviewed (city, mountain driving)?

o   What hazards need more attention and review (erratic drivers, heavy traffic)?

o   What weather conditions need to be reviewed (rain, fog, snow)?

o   What skills need to be refreshed (speed and space management, defensive driving)?

- **Tips for Choosing Trips**

    When choosing trips for refresher training, consider your vehicles, your common environments (weather and routes/trips), and likely hazards your drivers can encounter based on your company's incident and crash history (trending). You may throw in a few surprises, but be sure not to overwhelm your drivers. Find the balance of hazards that they are likely to encounter and set the likelihood of those hazards slightly higher than what they would expect in a typical day of driving. Focus on hazard perception, speed and space management and defensive driving.

    Typical hazards may include:

    o   Ice and snow

    o   Fog

    o   Night driving

    o   Deer

    o   Vehicle running stop sign or traffic light.

■   **Remedial (Post-incident/crash) Training (Level 4)**

Remedial, or post-incident/crash training may be conducted when a single incident or number of incidents has happened to a driver or set of drivers (and delivered either to a specific driver or set of drivers). The purpose of Level 4 training is to correct, or remedy specific driver behaviors based on what has already happened.

Keller's SAFE·Sim™ Truck Driving Simulator

There are four basic types of training in Level 4:

o   *Training for one driver* following an incident or crash

o   *Training for one driver* following two or more incidents or crashes

o   *Training for two or more drivers* following one or more types of incidents/crashes

o   *Training for two or more drivers* following two or more incidents or crashes.

- **Guidelines**

  Trips created for the purpose of remedial training should be focused on the problem area, such as following distance (a common concern), backing or right turns.

  Create trips that focus on a specific problem area to review and improve upon those skills. However, don't be afraid to set the trip up with a hazard or two that would be unexpected by the driver.

- **Tips for Choosing Trips**

  Some suggested selections to include on your customized trips include:

  o   City driving

  o   Aggressive and timid drivers

  o   Slick road conditions (rain, snow, ice, black ice)

  o   Poor visibility – heavy fog, rain, either or both at night.

When deciding how to use Keller's SAFE·Sim™ for your training program, remember to ask yourself *why* you are training, *what* you hope to achieve (from both your perspective and the drivers'), and consider *how* you are going to accomplish your goals for training. Using the guidelines provided in Levels 1-4, you should be able to set up and adapt Keller's SAFE·Sim™ for a number of needs in assessment and training. Most importantly, communicate your rationale and goals to your drivers so that they understand the context of the training. This will help them work to reach those goals as well.

Trainer's Guide

Trainer Administration Settings for Keller's SAFE·Sim™

After you have Keller's SAFE·Sim™ Truck Driving Simulator set up—the computer, and the software installed, you are ready to use the simulator. With no other set up, you or your drivers may take an "orientation drive" or a "practice drive," which uses pre-selected trips, vehicles, environments, and hazards. However, to assess the skills of your drivers and provide specific trip and vehicle assignments, you will need to complete the simulator setup as described on the following pages.

Once you have completed the simulator setup, specified drivers and assigned them to specific vehicles and trips, you're set!

- **Simulator Setup**

  Before you start your drivers on Keller's SAFE·Sim™, you first enter and set up the drivers, and then specify vehicles and trips (including environmental conditions and hazards) for those drivers.

  To start Keller's SAFE·Sim™ Truck Driving Simulator, double-click the Truck Driving Simulator icon on your computer screen.
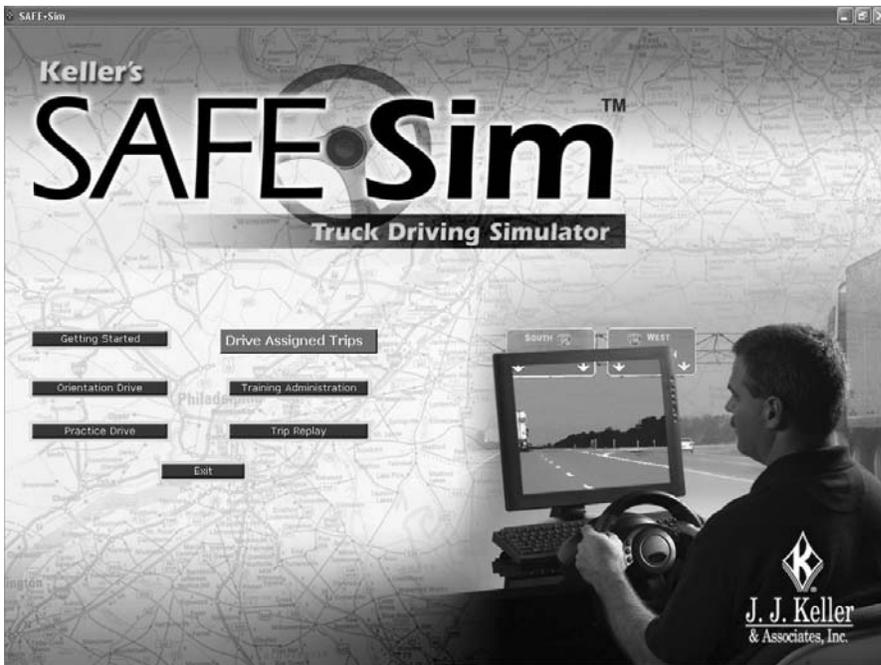
Keller's SAFE·Sim™ Truck Driving Simulator

Notes:

The main screen has seven options:

- **Getting Started:** Drivers or others may click here to access an electronic version of the "Driver Information" section of this Trainer's Guide.

- **Orientation Drive:** The Orientation Drive is helpful for first-time drivers who have never used the simulator before. Like having a driver instructor at the driver's side, prompts appear on screen during the trip to help the driver learn the controls and environment of Keller's SAFE·Sim™.

- **Practice Drive:** Drivers or trainers may click here to practice using the simulator. Drivers will have a limited list of trips and vehicles to choose from that vary in degree of difficulty and number of hazards. This drive allows drivers to see what the simulator is like, including the steering, acceleration, and braking, before driving on an assigned trip.

- **Drive Assigned Trips:** Drivers with assigned trips entered into Keller's SAFE·Sim™ database begin using the simulator by clicking here.

- **Training Administration:** Trainers and training administrators click here to enter driver and trip information. *This information must be entered prior to drivers using the simulator.*

  You may want to create a generic default driver name (such as J. Doe) to use when evaluating prospective new drivers.

- **Trip Replay:** Drivers or trainers click here to replay trips that have been previously driven and recorded.

- **Exit:** Trainers or drivers need to click here to leave the main screen and exit the software application.

Trainer's Guide

Training Administration: Setting Up Trip Specifications for Drivers, Vehicles and Trips
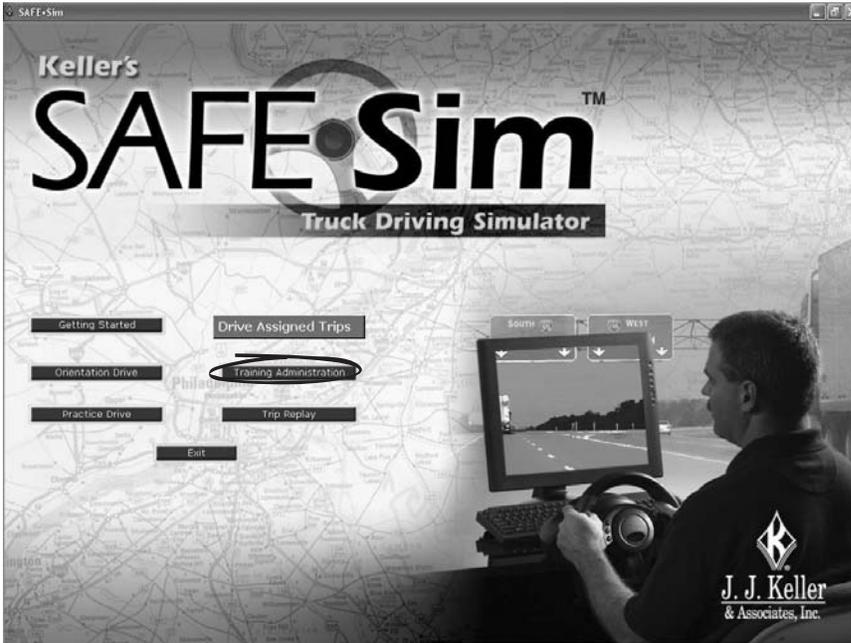
To begin setup, click the **Training Administration** button. You will be asked for a username and password. When first entering the Training Administration section, use the administrator username and password that are already pre-entered.

> *Note: You will be prompted to enter a new username and password to use in the future.*
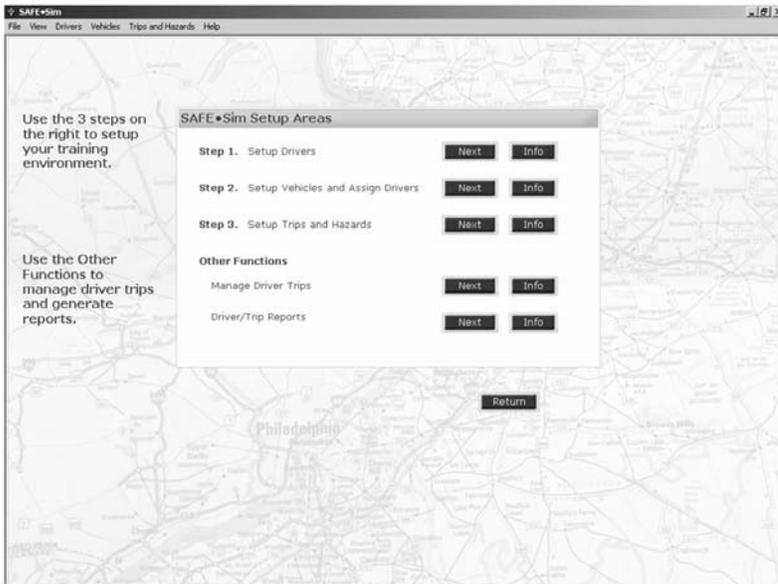
> *Note: This is the SAFE·Sim Setup Areas main screen.*

Keller's SAFE·Sim™ Truck Driving Simulator

Notes:

■   **SAFE·Sim Setup Areas**

To setup drivers; assign drivers to vehicles; setup trips, environmental conditions, and hazards; assign drivers to trips; and access driver reports, follow the steps outlined by clicking the **Next** button next to the item you need to complete.

When first using Keller's SAFE·Sim™, be sure to start with "Step 1. Setup Drivers." Follow Steps 2 and 3 to setup vehicles, assign drivers to vehicles, and setup the trips that the drivers will drive. On subsequent uses, you may modify driver, vehicle and trip information as needed.
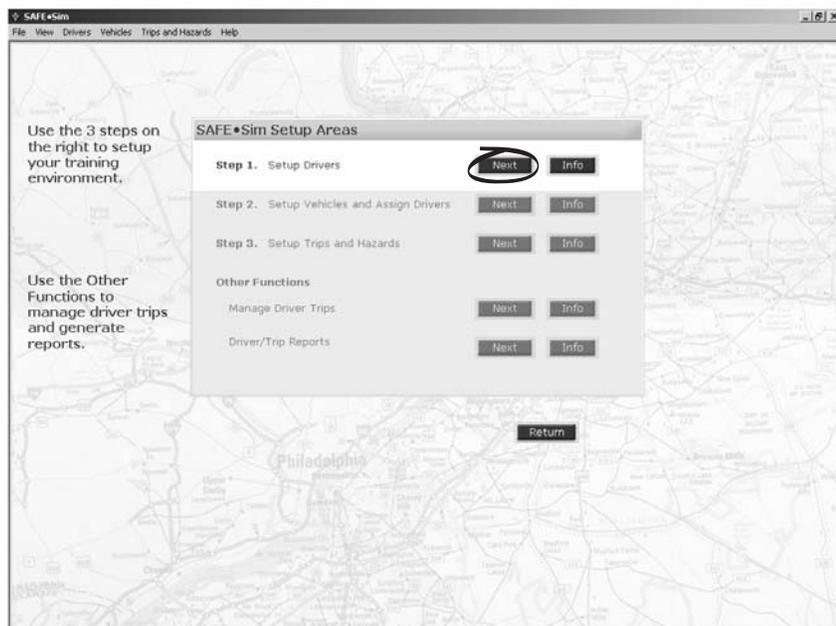
Trainer's Guide

Step 1: Setup Drivers

Before using Keller's SAFE·Sim™, you must enter information on the drivers that will be trained using the simulator. The Setup Drivers and Driver Information screens allow you to enter the necessary driver information.

On the Setup Drivers screen, select the **Location** of the drivers from the drop-down menu to view the drivers by location. Employees entered into the SAFE·Sim™ database are displayed by employee name, along with ID number, if they have administrative privileges, if they are a driver, and their location.

Keller's SAFE·Sim™ Truck Driving Simulator

Notes:

To add an employee, click the **Add New Drivers** button. Enter the employee information as appropriate.
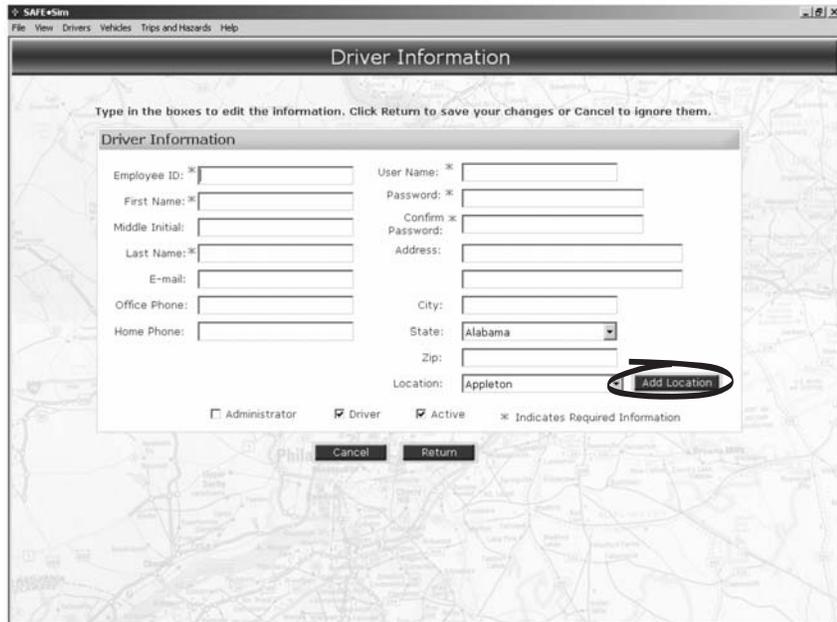
Trainer's Guide

Click the **Return** button to return to the Setup Drivers screen.

To edit a driver's information or remove a driver, select the driver's name from the list of employee names and click **Edit Selected Driver** or **Remove Selected Driver** as appropriate.

Keller's SAFE·Sim™ Truck Driving Simulator

Drivers may also be imported from an import file. See the "Reference" section at the back of this Trainer's Guide for how-to information.

> *Note: Driver information must be entered prior to assigning drivers to trips.*

To return to the SAFE·Sim Setup Areas main screen, click the **Return** button.

Step 2: Setup Vehicles and Assign Drivers

Trainer Information-18
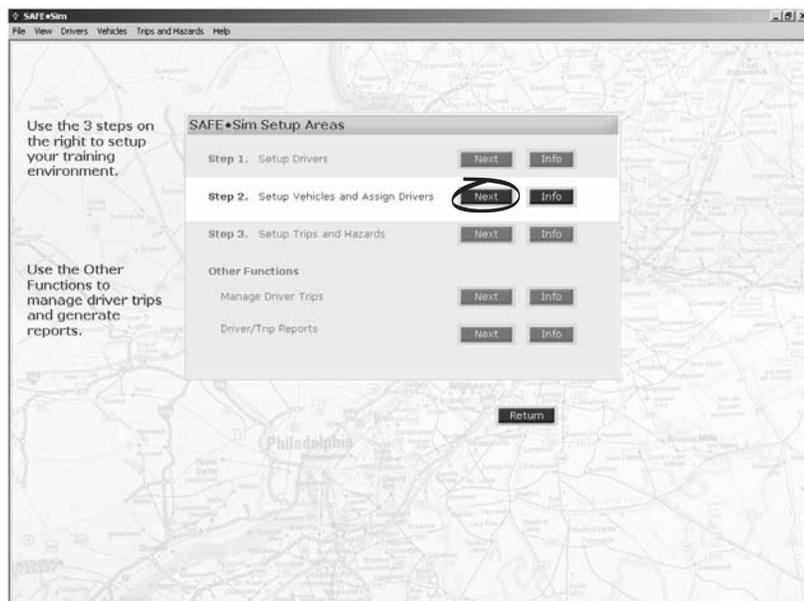
Trainer's Guide

Follow the steps outlined on the screen to create new and select vehicles and vehicle specifications available for drivers. If a change is made to a vehicle, you will be prompted to name and save the vehicle you have specified.
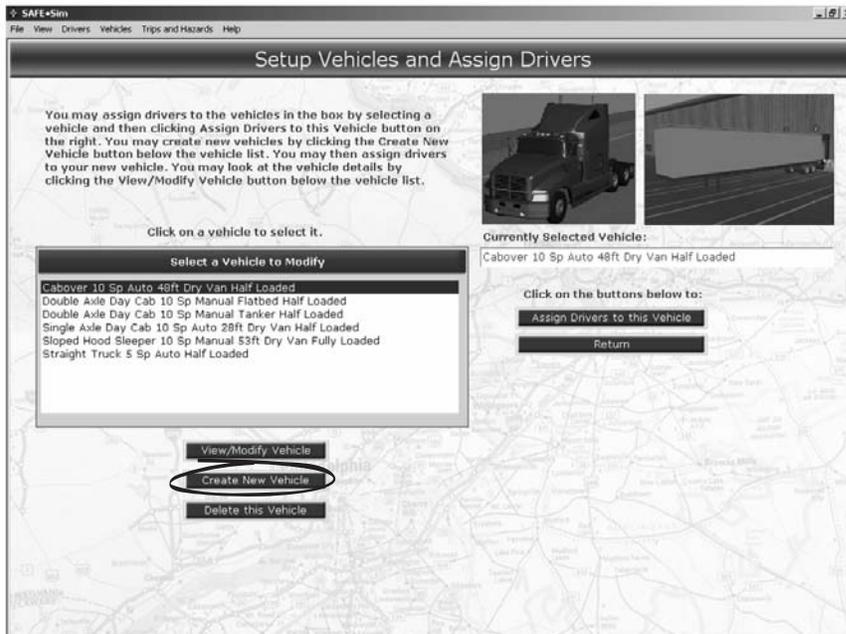
Keller's SAFE·Sim™ Truck Driving Simulator
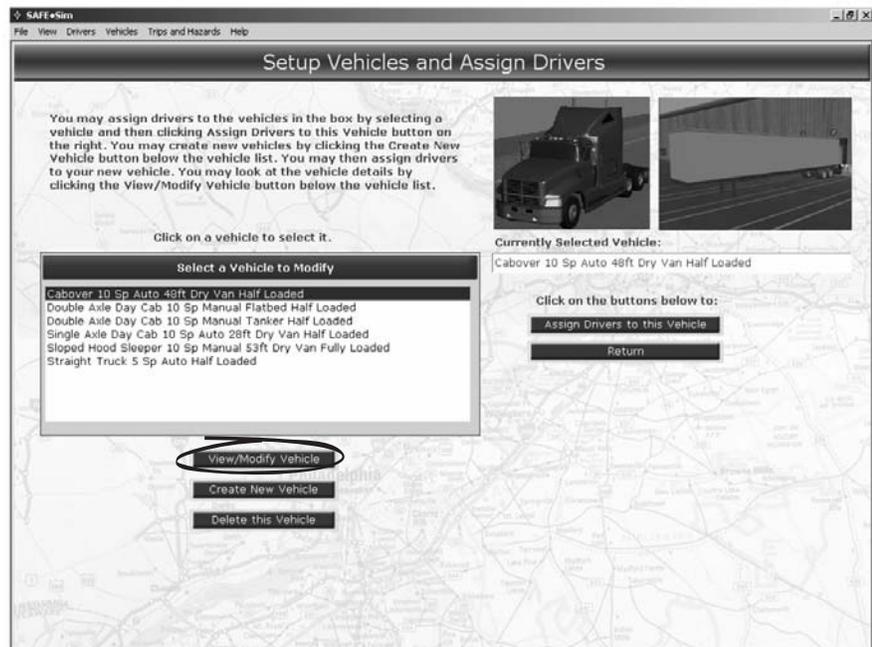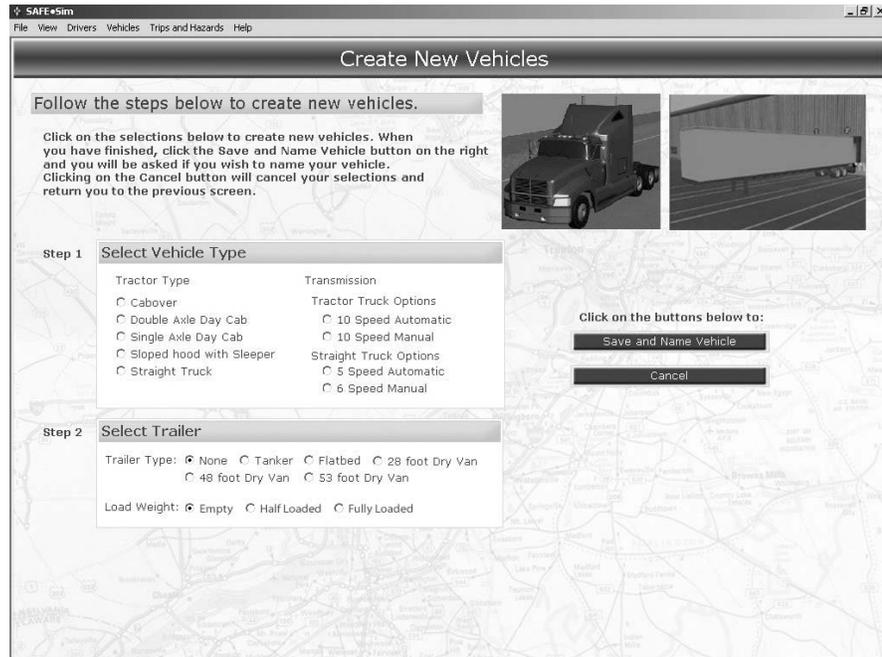
Notes:

Trainer's Guide
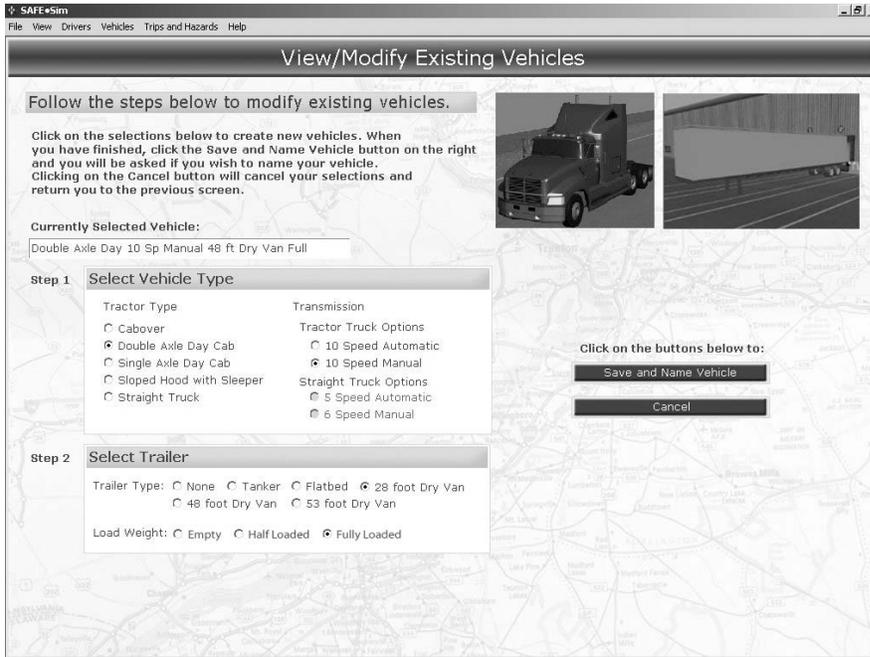
> *Note:* Use logic based on the vehicles your company has and/or other vehicles you want your drivers to have experience with. Typically, assign vehicles and trips that drivers either have experience driving, or need practical experience driving for the purpose of the job.

After selecting a vehicle, you may assign drivers to the vehicle by clicking on the **Assign Drivers to this Vehicle** button.
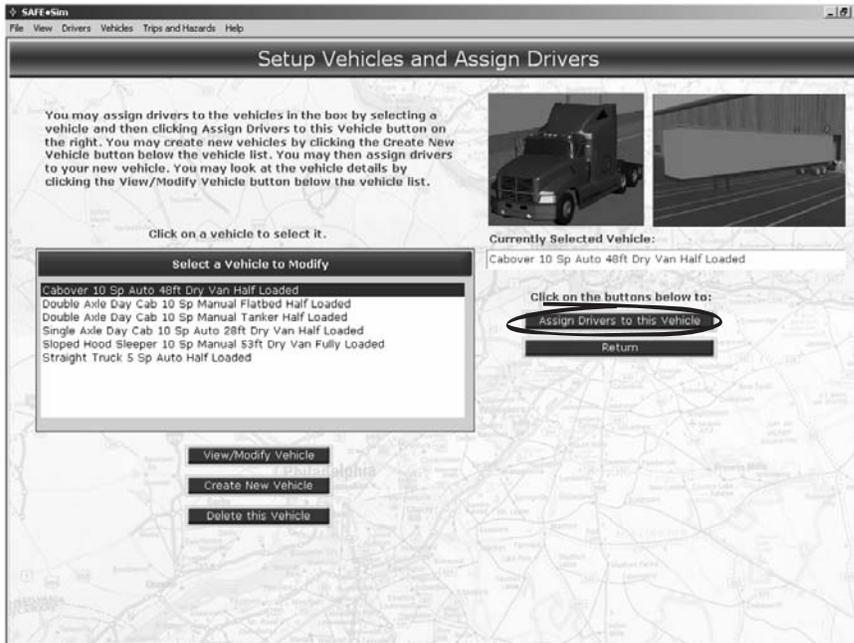
Keller's SAFE·Sim™ Truck Driving Simulator
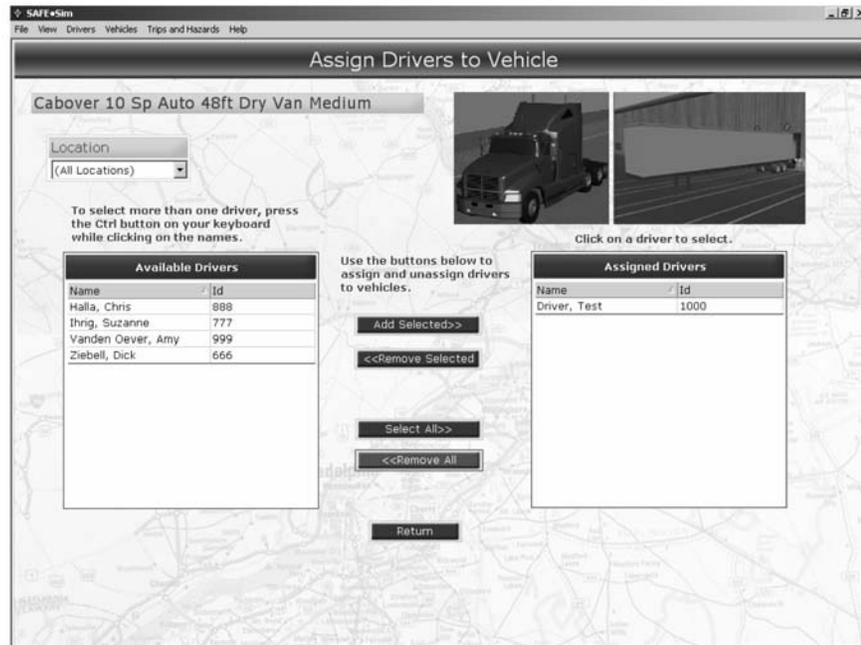
Assign Drivers to this Vehicle:

A screen with lists of available drivers and assigned drivers will appear. If necessary, sort by name or ID by clicking the header at the top of the column.
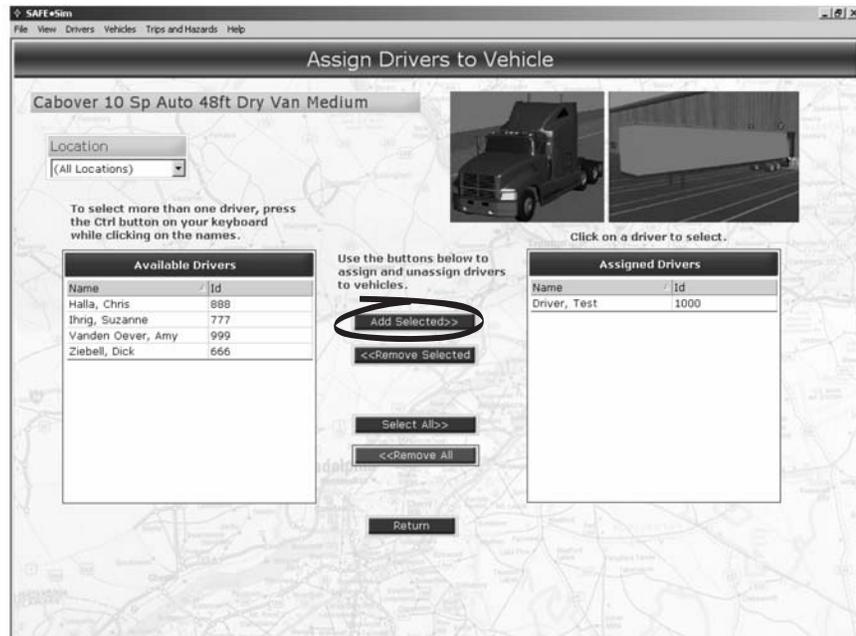
To assign a driver to the vehicle, click on the driver's name under "Available Drivers." Click the **Add Selected** button to move that driver's name to the "Assigned Drivers" list. Each driver can only be assigned to one vehicle at a time.

Trainer's Guide
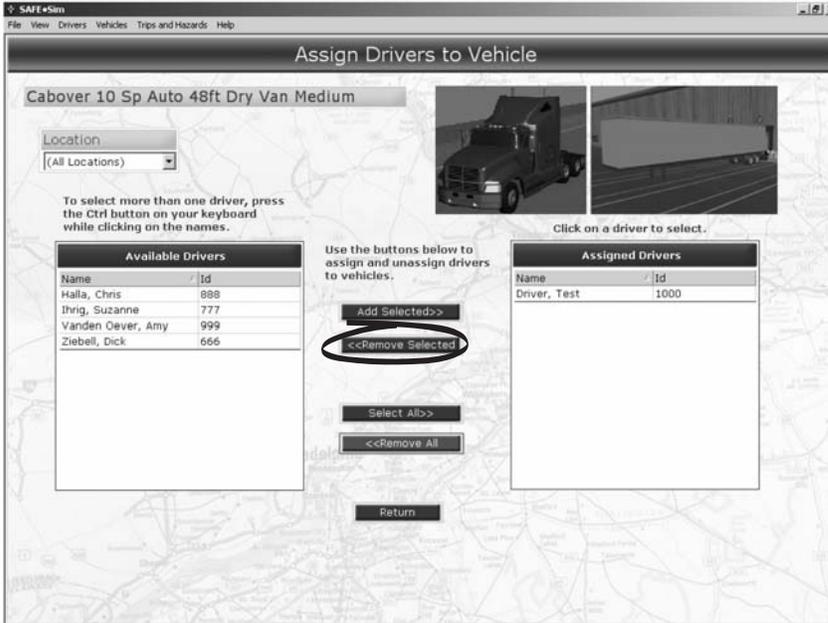
To remove a driver from the "Assigned Drivers" list, click on the driver's name. Click the **Remove Selected** button to move that driver's name back to the "Available Drivers" list.

To select more than one driver, press the **Ctrl** button on your keyboard while clicking on the names. To select all of the drivers, click the **Select All** button.

You may also remove all assigned drivers by clicking the **Remove All** button.

> ***Note:*** *Use logic when assigning vehicles to drivers. Typically, assign vehicles that drivers either have experience driving, or need practical experience driving for the purpose of the job.*

Click the **Return** button to exit this screen and return to the SAFE·Sim Setup Areas main screen.

Step 3: Setup Trips and Hazards
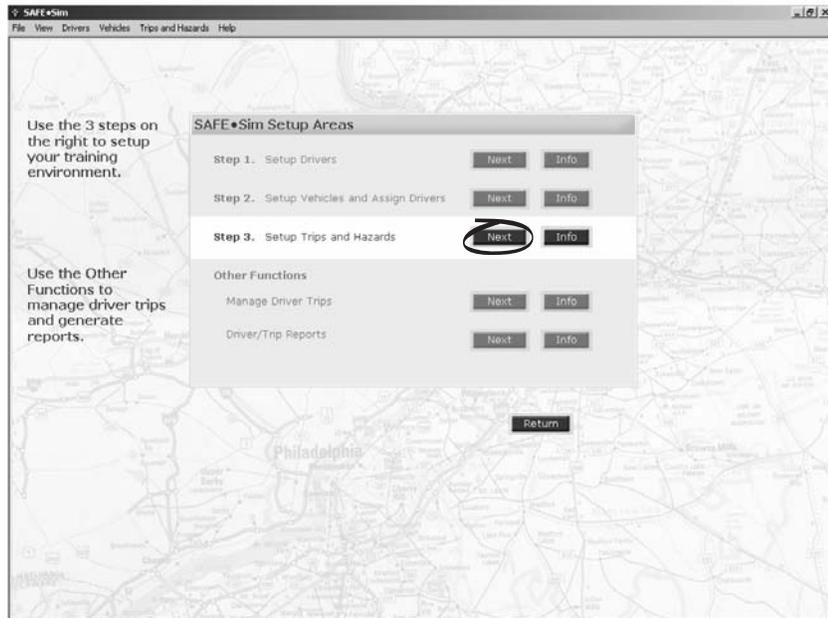
In order to set up a trip (or multiple trips), you must first select a route from which the trips will be based on.
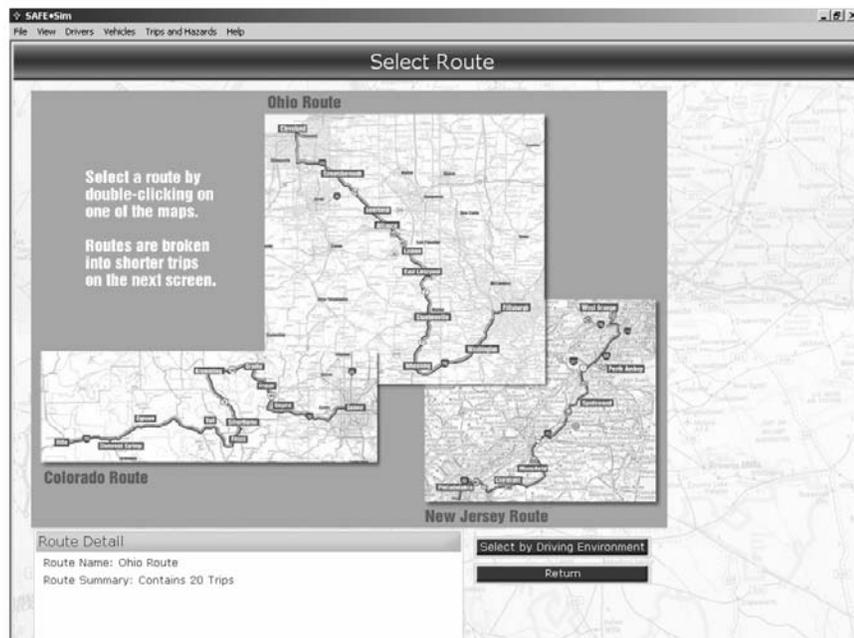
The Select Route screen displays a map with identified routes.

Trainer's Guide

Keller's SAFE·Sim™ includes three routes, each with a number of trips. Click on a route on the map to select it, or click the **Select by Driving Environment** button for trip options. (See page 33.)

Setup Trip by Route

To set up a trip by route, double-click on a route on the Select Route screen.
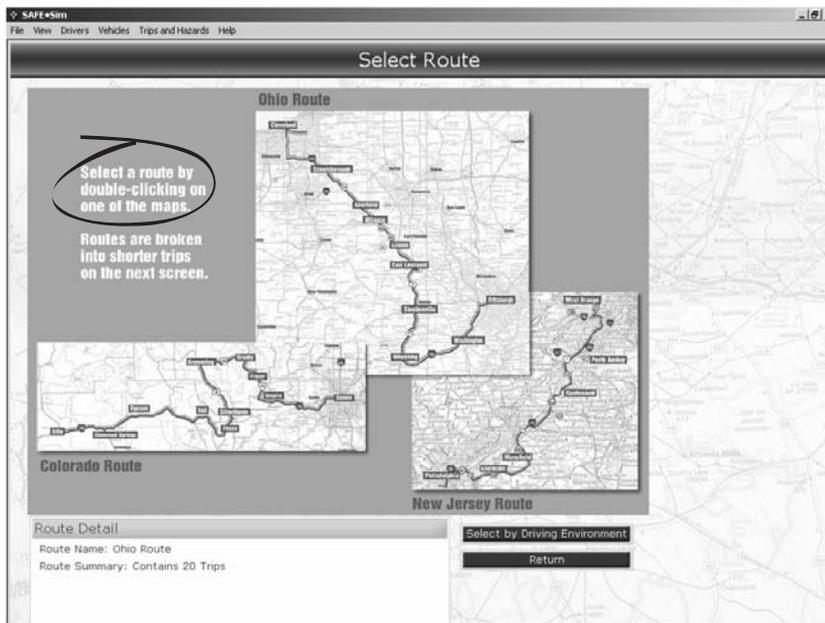
Keller's SAFE·Sim™ Truck Driving Simulator

The Setup Trips and Hazards screen appears. Complete the steps as indicated on the screen. An explanation of each of the setup steps follows.
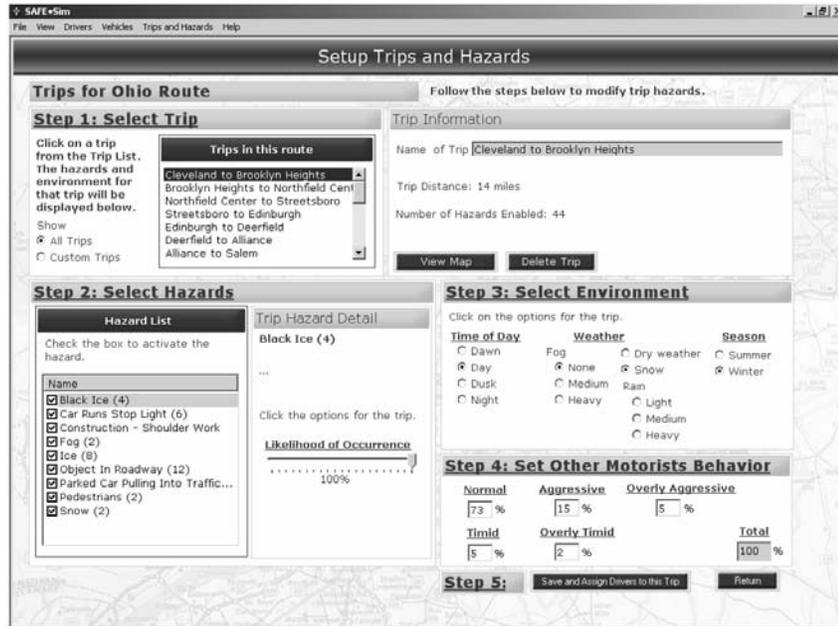
Step 1: Select Trip

A "trip" is a segment of a route. Specify a trip by clicking on the name of a trip to highlight it in the Trip Detail section of the screen. To narrow the list of trips shown, you may click on the radio button to show All Trips or only the Custom Trips.
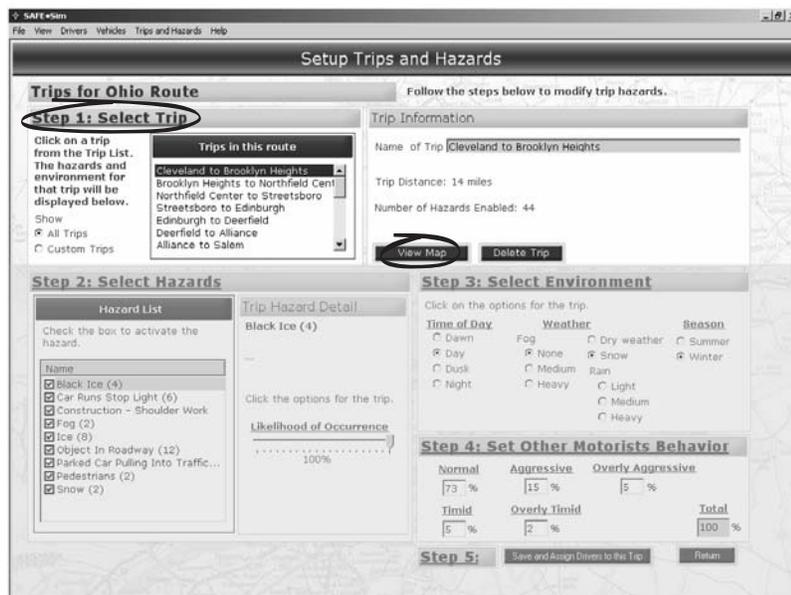
Trainer's Guide

To aid in your trip selection, you may want to click the **View Map** button to view a map of this route.
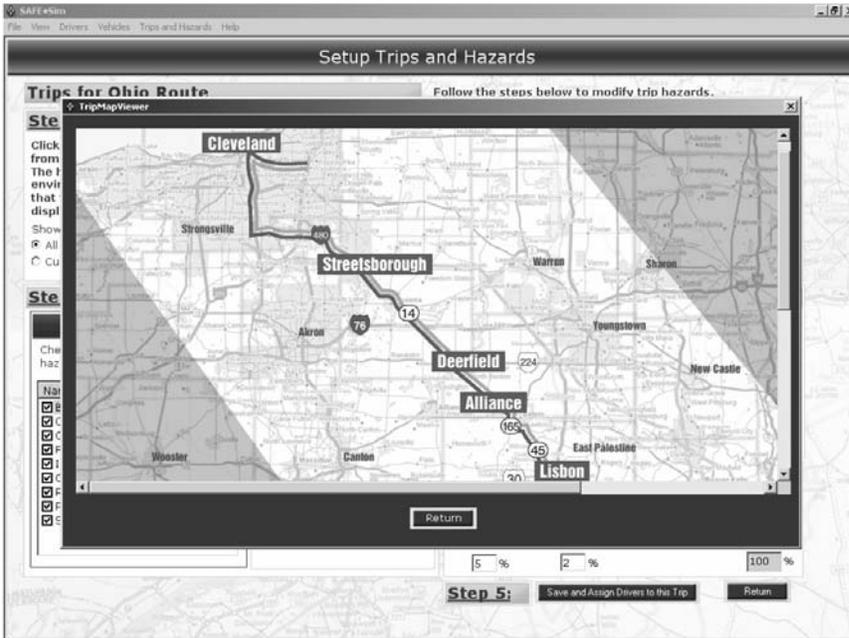
Click on the **Return** button to return to Step 1 of the Setup Trips and Hazards screen.

From here you may also click on the **Delete Trip** button.

> ***Note:*** *Default trips provided by* SAFE·Sim™ *may not be deleted. Only trips that you have customized and saved may be deleted.*

Step 2: Select Hazards

To specify the hazards for the trip, click on the box next to the name(s) of a hazard(s) you'd like to appear in the trip.

> ***Note:*** *Some hazards and environmental conditions may already be set up for the trip selected.*

> ***Note:*** *Remember to use logic when choosing these hazards. Choose hazards that are realistic to the environment you want to simulate or help the driver sharpen their skills in a certain area. Be careful not to "overload" drivers who are new to the simulator with too many hazards.*

Keller's SAFE·Sim™ Truck Driving Simulator

Notes:
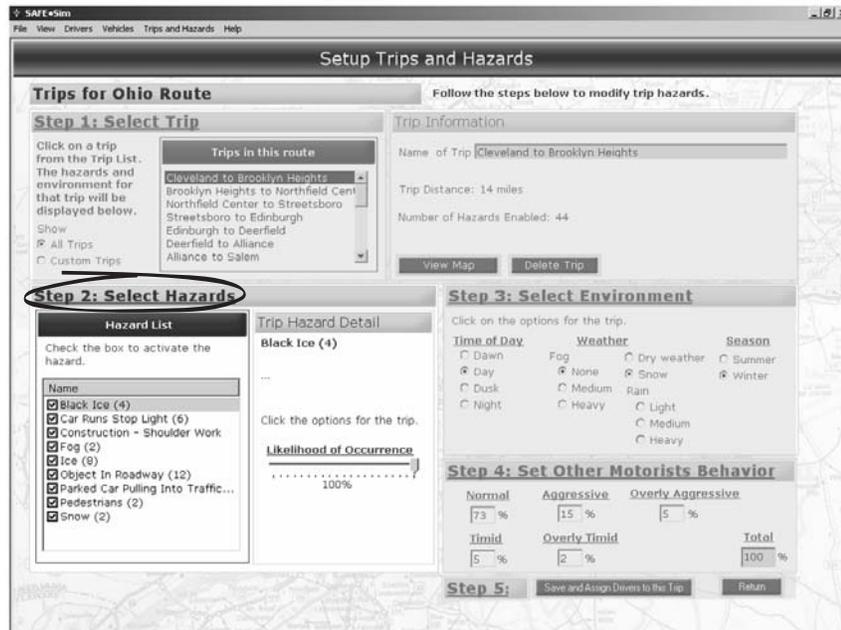
To further specify the nature of the hazard, click on the name of the hazard to highlight it. The Trip Hazard Detail will display information and options for that hazard.

> *Note: For more information on the hazards available, see the Reference section.*

After viewing the information on the hazard, specify the likelihood of occurrence by pressing on the slider bar and moving the arrow to the left or right.

Click on any other specifications as necessary for the hazard.

Step 3: Select Environment

Click on the radio buttons to specify the time of day, weather, and season for the trip. (See next page.)

Trainer's Guide
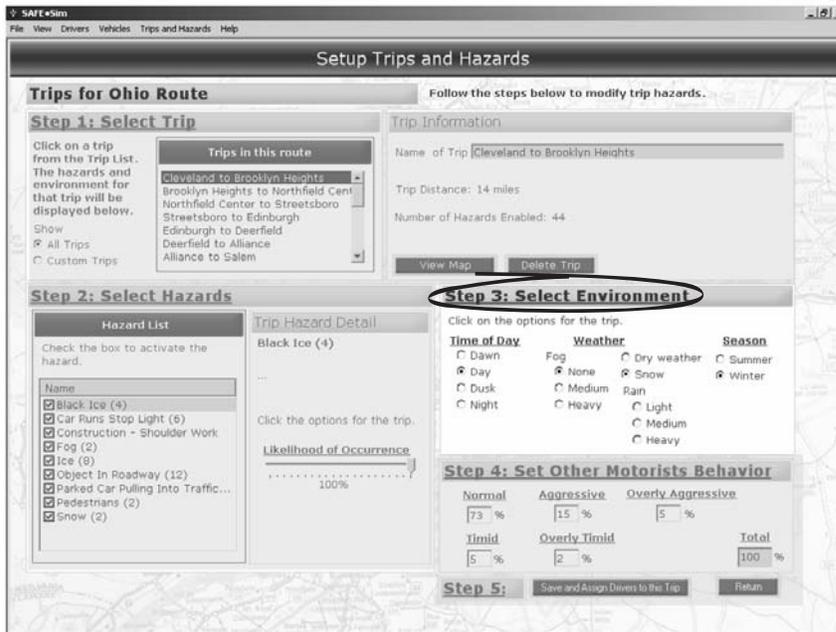
Step 4: Select Other Motorists' Behavior

Click in the fields and specify the percentage of occurrence for Normal, Aggressive, Overly Aggressive, Timid or Overly Timid motorists to be encountered during this trip.
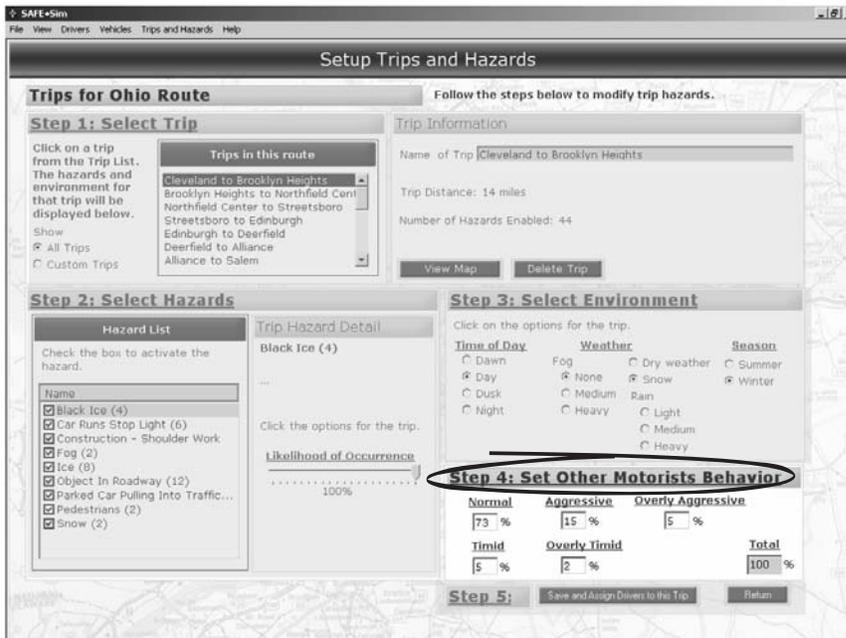
Keller's SAFE·Sim™ Truck Driving Simulator

Step 5: Assign Drivers to this Trip

Assign drivers to the trip by clicking the **Save and Assign Drivers to this Trip** button.
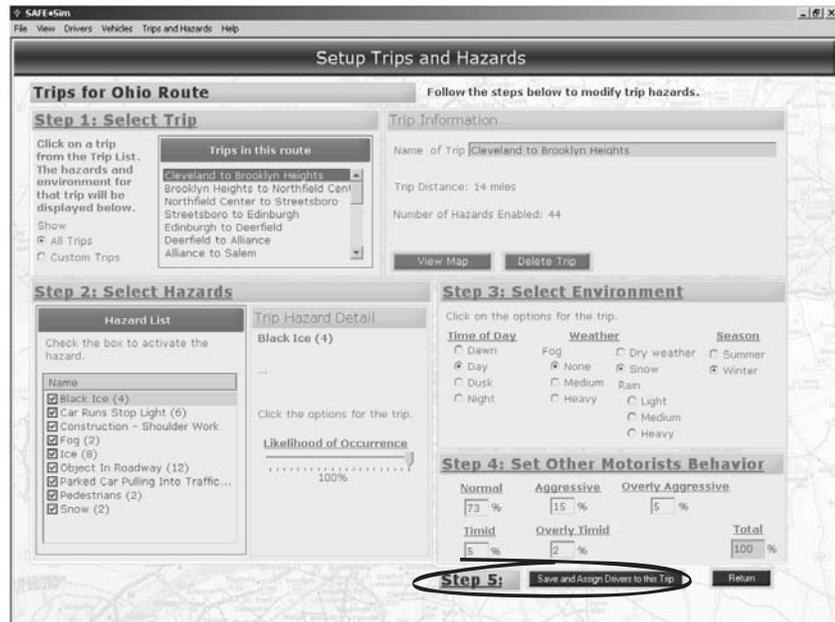
The Assign Drivers to Trip screen appears.
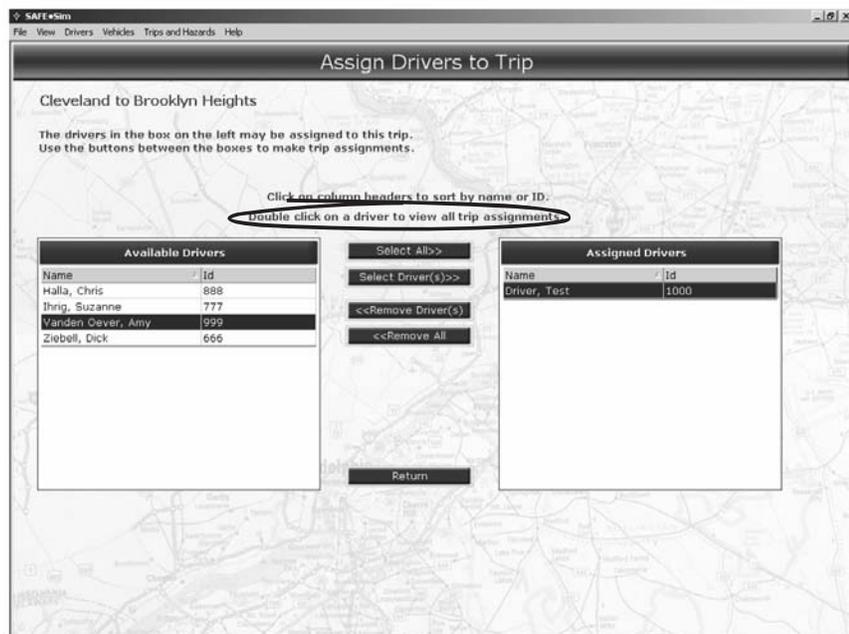
A screen with lists of available drivers and assigned drivers will appear. If necessary, sort by name or ID by clicking the header at the top of the column.

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For information on the trips assigned to a driver, double-click the name of the driver. A screen appears displaying the trips assigned to that particular driver.
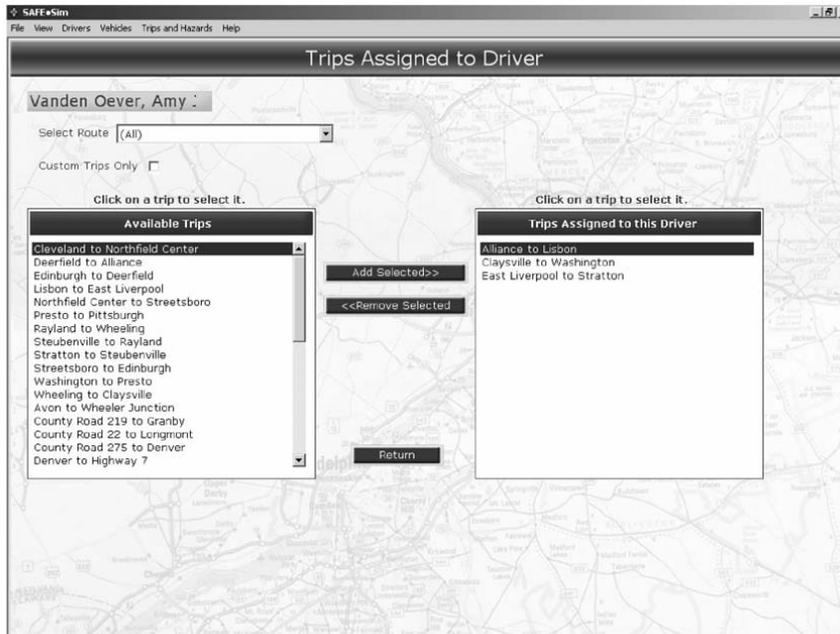
Click **Return** to return to the Assign Drivers to Trip screen.

Keller's SAFE·Sim™ Truck Driving Simulator

To assign a driver to the trip, click on the driver's name under "Available Drivers." Click the **Select Driver(s)** button to move that driver's name to the "Assigned Drivers" list.
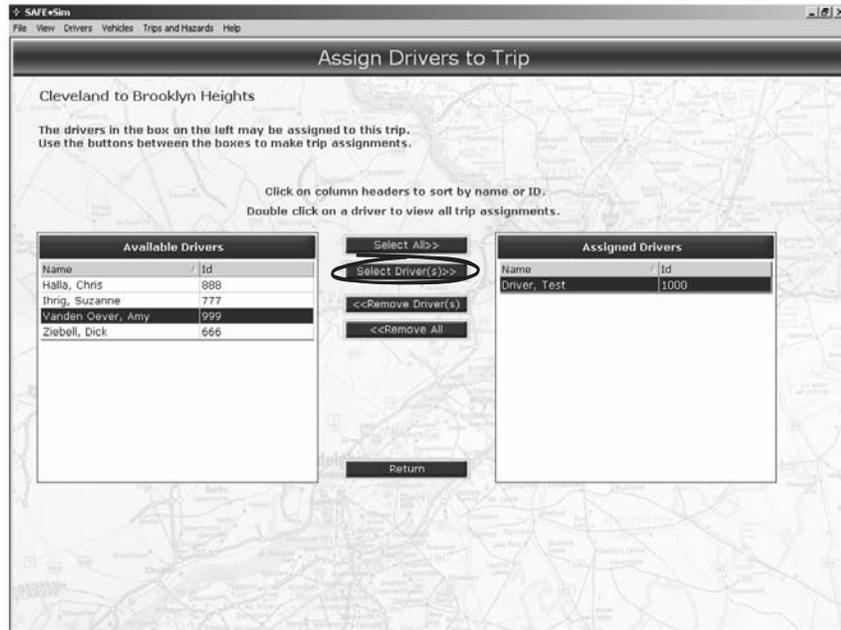
To remove a driver from the "Assigned Drivers" list, click on the driver's name. Click the **Remove Driver(s)** button to move that driver's name back to the "Available Drivers" list.
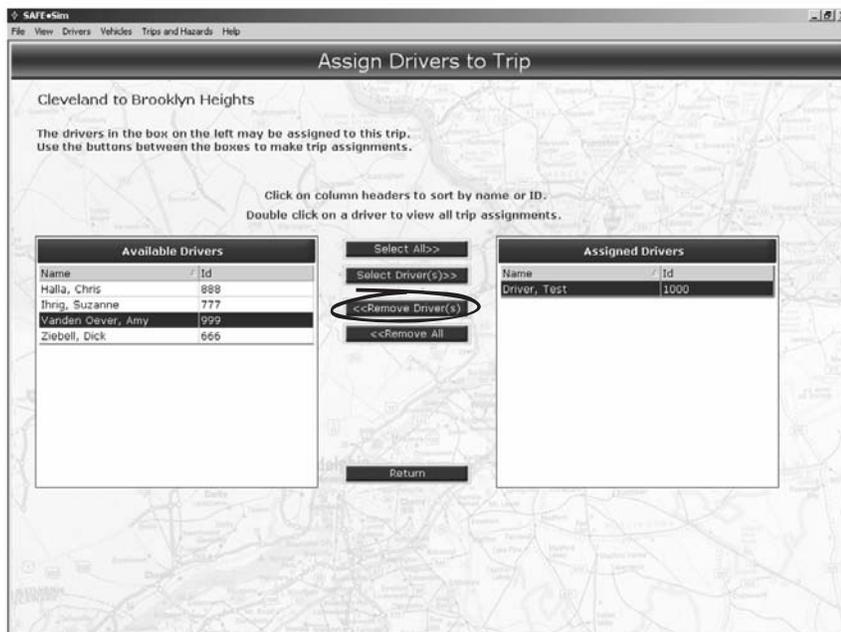
Trainer's Guide

To select more than one driver, press the **Ctrl** button on your keyboard while clicking on the names. To select all of the drivers, click the **Select All** button.

You may also remove all assigned drivers by clicking the **Remove All** button.

> *Note: Use logic when assigning trips to drivers. Assign trips that help the driver fulfill the goals for their use of the simulator.*

Click the **Return** button to exit this screen and return to the Setup Trips and Hazards screen.

Naming and Saving a Trip

Once you leave the Setup Trips and Hazards screen, either by clicking the **Return** button or the **Save and Assign Drivers to this Trip** button, a dialog box will appear if you have changed information on this screen. Fill in the fields for **Trip Name** and **Description** and then click the **OK** button to continue, or click the **Cancel** button if you do not want your changes saved.

From the Setup Trips and Hazards screen, click the **Return** button to exit this screen and return to the Select Route screen. Click on the **Return** button again to return to the SAFE·Sim Setup Areas main screen.

Set up a Trip by Driving Environment
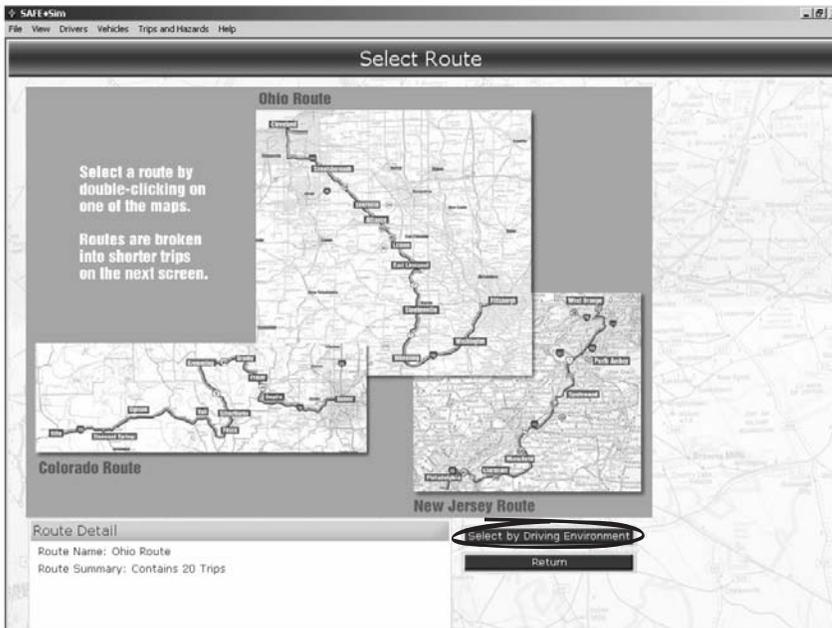
Keller's SAFE·Sim™ Truck Driving Simulator

Notes:
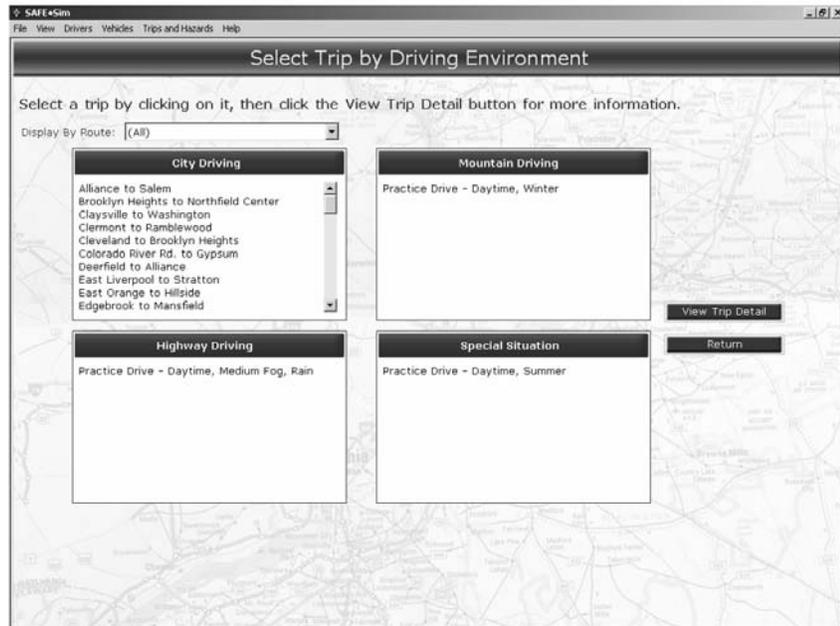
To select a trip by driving environment, you may filter them by the routes available using the drop-down menu. Trips available are divided into city driving, mountain driving, highway driving and special situation.
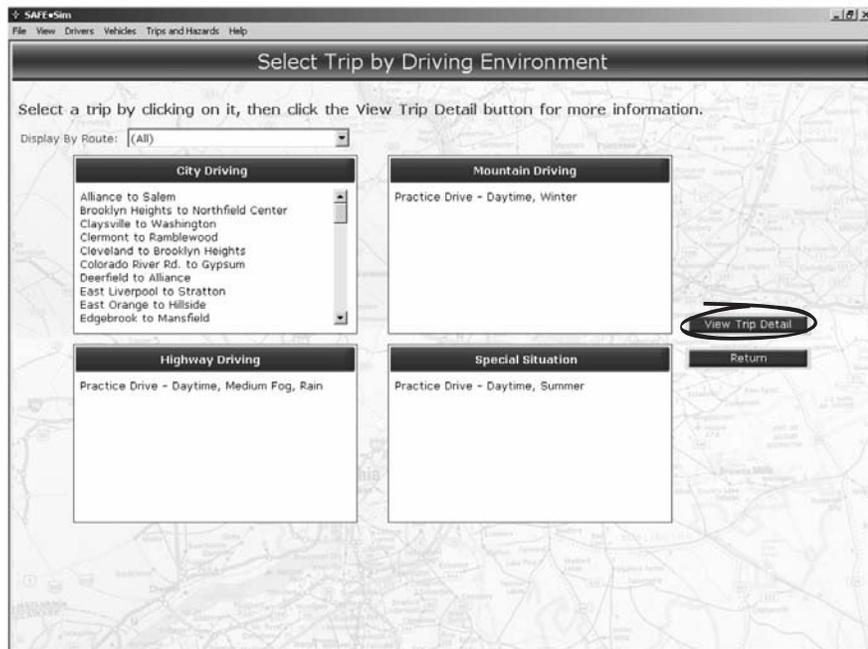
Trainer's Guide

For more information on a trip, click the **View Trip Detail** button. Refer to the Trip Information section in the upper right hand corner of the Setup Trips and Hazards screen.

Complete set up of the trip by clicking the **View Trip Detail** button. The Setup Trips and Hazards screen appears. Complete the steps as indicated on this screen.

Other Functions:

Manage Driver Trips
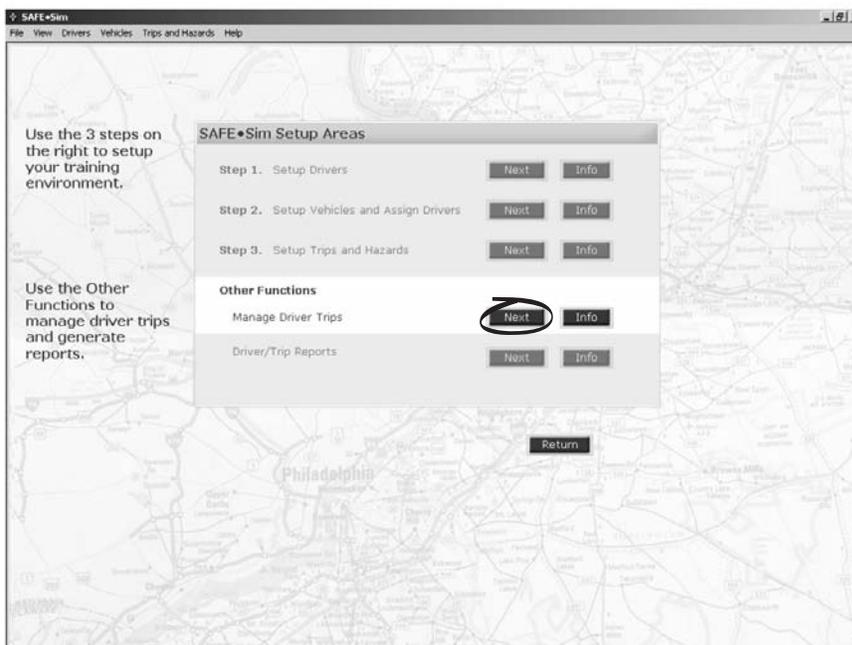
Keller's SAFE·Sim™ Truck Driving Simulator
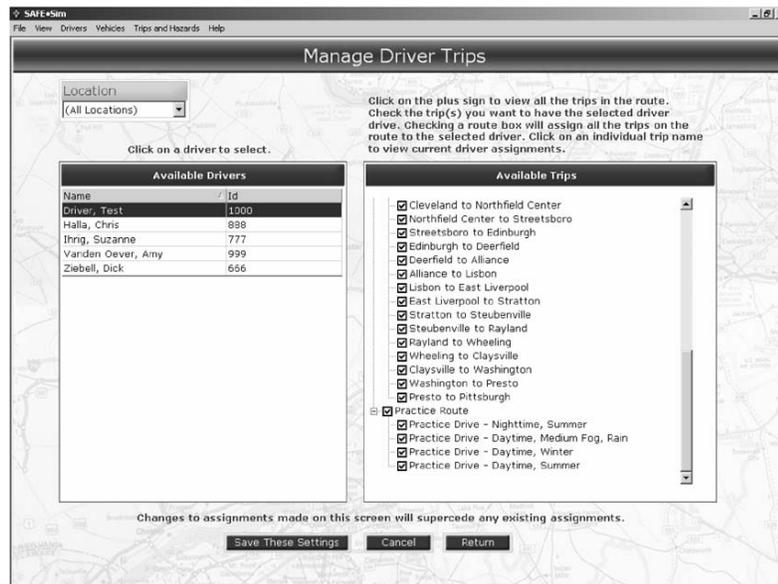
To assign drivers to trips, click on the name of a driver (or drivers by pressing the **Ctrl** key on your keyboard while clicking on the names of drivers) and then select trips under the Available Trips column. The Available Trips column is grouped by route. To expand a route to see the trips within that route, click the plus sign next to the route. You can either select individual trips within a route by clicking the check boxes next to the trip names or you can select all the trips within a route by clicking the check box next to the route name.

> *Note: Driver information must be entered prior to assigning drivers to trips.*

Click the **Save These Settings** button to save the trips you want assigned to a particular driver (or drivers).

When finished making trip assignments, click the **Return** button to exit this screen and return to the SAFE·Sim Setup Areas main screen.

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Driver/Trip Reports
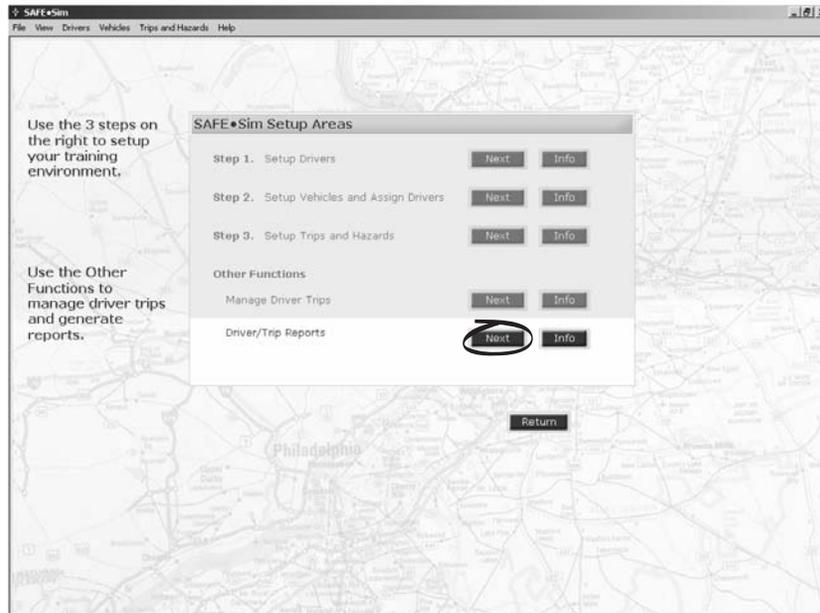
Reports

The Reports section provides information on your drivers' performance while using the simulator. Reports are automatically generated for all trips taken until the completion of a run or the trip is terminated. The exception to this is the "Orientation Drive."

To view reports on driver performance, click on the name of a driver to display information on the trips driven. Press the **Ctrl** key on your keyboard while clicking on the names of drivers to select more than one at a time. To find the name of a driver, you may choose to sort the list by Name or ID, as well as specify the location of the driver, if applicable.

Keller's SAFE·Sim™ Truck Driving Simulator
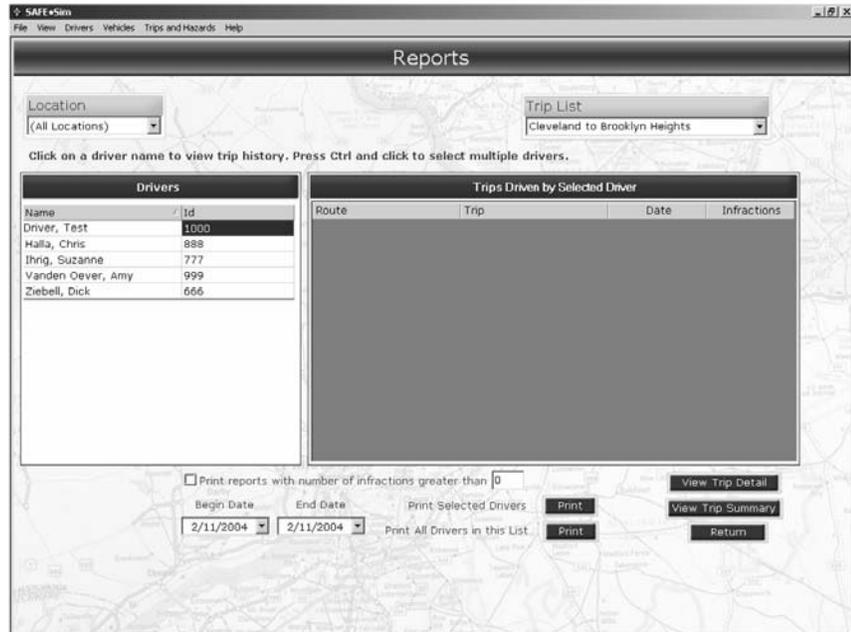
The Driver Trip Report will display the vehicle name, route name, trip name, date of trip, the infractions recorded for that trip and the location of where those infractions are encountered in the Trip Replay function.

The Trip Summary Report displays information specific to a selected trip. The report header will display trip name, distance and date range selected. The body of the report will list a record of each driving experience of the trip and will include the driver name, vehicle driven, date, number of infractions and time.

You may choose to print reports based on number of infractions, selected drivers, the current location and by date.

Click the **Return** button to go back to the SAFE·Sim Setup Areas main screen.

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Click on **Return** to exit this screen and return to the Home Screen of Keller's SAFE·Sim™. From the Home Screen, click on the **Exit** button to close out of the software application.
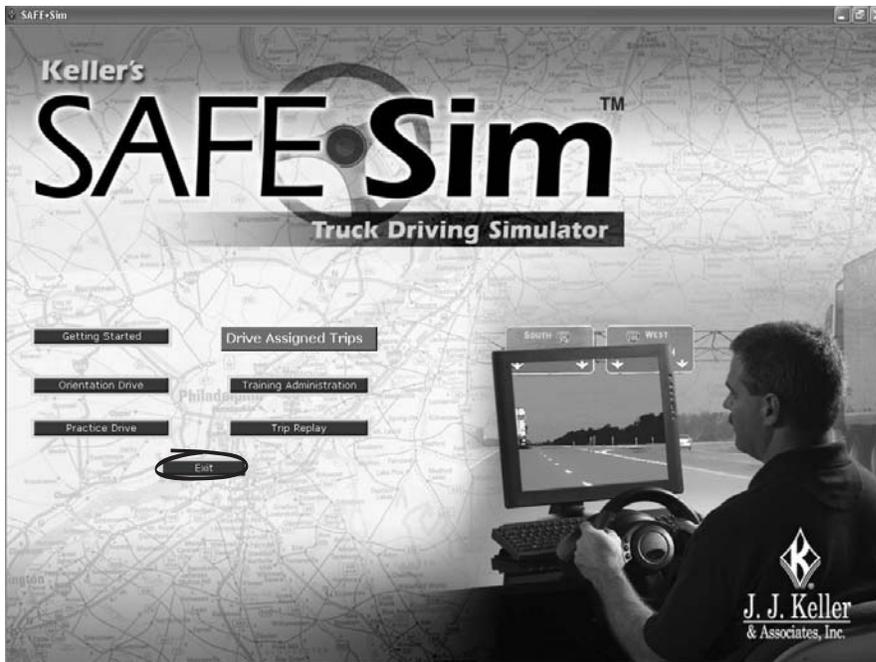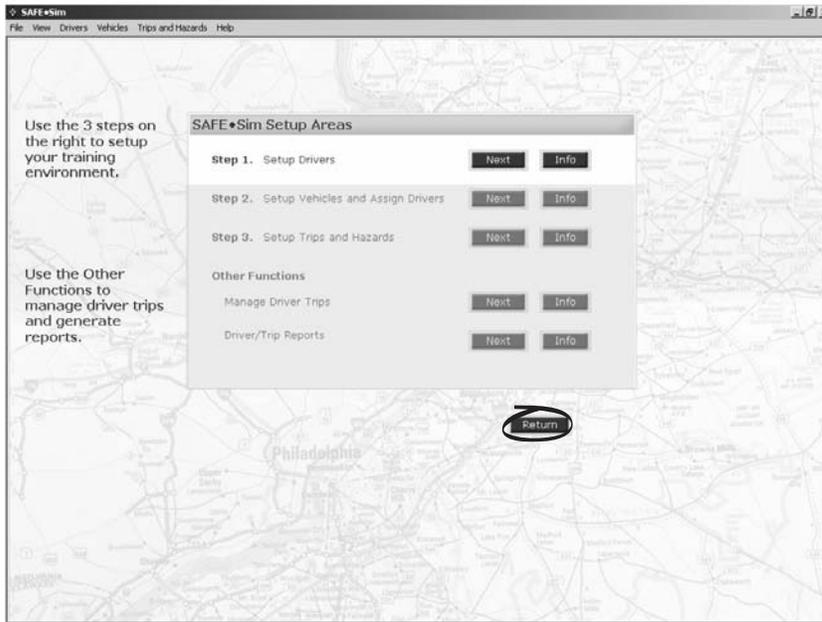
Keller's SAFE·Sim™ Truck Driving Simulator

Notes:

The Training Administration for Keller's SAFE·Sim™ allows you to enter driver information, set up and assign vehicles and trips, as well as view and print out reports on the performance of the drivers using the simulator. Initially, you may consider entering driver information and assigning them to trips and vehicles with default features. Later on, as you become more accustomed to the capabilities of Keller's SAFE·Sim™, you can alter trip hazards and environmental conditions as needed for your drivers' assessment and training.

Trainer's Guide

Assessing Driver Performance

Through the reporting feature and the trip replay feature in Keller's SAFE·Sim™, training administrators and supervisors can review driver performance on the simulator.

Keller's SAFE·Sim™ identifies skills used by the driver, and infractions as a result of not using those skills, such as:

■ Distance following vehicles ahead

■ Frequency of checking mirrors

■ Checking mirrors before changing lanes or turning a corner

■ Checking mirrors before passing

■ Using turn signals before turns

■ Using turn signals before changing lanes

■ Having lights on during inclement weather

■ Stopping for pedestrians

■ Driving the vehicle off the road or shoulder

■ Speeding—less than 10 mph over the speed limit

■ Speeding—more than 10, less than 20 mph over the speed limit

■ Speeding—more than 20 mph over the speed limit

■ Violating a yield sign

■ Violating a stop sign

■ Violating a stop light

■ Driving too fast for conditions

■ Incorrectly applying brake pedal pressure over time (such as riding the brakes, overheating them and causing brake fade).

Any infractions made by the driver are listed on the report, along with the frequency of those infractions. It is recommended that your company establish its own corporate guidelines as to what is acceptable or not acceptable.

For more information on viewing and printing driver reports, see the Training Administration section, Reports.

Keller's SAFE·Sim™ Truck Driving Simulator

To use the trip replay feature, click the **Trip Replay** button from the SAFE·Sim™ Main Menu. Enter your username and password and click **OK**. As an administrator, you can view trips from any driver. Select a driver from the left hand column and a trip from the right hand column. Non-administrators may only select their own trips.

Click on the **Play Selected** button to play back the trip. The trip will take a little time to load. Once the trip is loaded, click the **Play** button and the trip will start to play from the beginning. You can change to one of seven views by clicking the down arrow in the camera field and selecting a view. Trips are divided into parts. You can select which part of the trip to play by clicking on the down arrow in the Play field, selecting a part, and clicking the **Load Selected Part** button.

To fast forward, fast backward, stop or pause, click the corresponding button.

You can fast forward to the specific time point that an infraction or crash has occurred by referring to the Infraction Report. You can view an incident from several different angles by simply backing up, changing the view, and then pressing the **Play** button.

Menu Bar

The menu bar across the top of the Training Administration application allows you to access all the administration functions. A description of each item in the top menu bar follows:

File

> **Backup Data –** Backs up driver and trip data.

> **Import Drivers –** Imports drivers into the system.

> **Exit –** Exits the application.

View

> **Location –** Location Administration screen where you can enter specific information about the different locations in your company.

> **Driver/Reports –** Run reports function.

> **Training Setup Screen –** Takes you to the Training Administration Setup screen.

Trainer's Guide

Drivers

    Driver Setup – The Driver Setup screen.

Vehicles

    Vehicle Setup – The Vehicle Setup screen.

Trips and Hazards

    Lists the three routes in the simulator—Selecting one of the trips takes you to the Trip Administration—Hazard Selection screen.

Help

    Index

    Trainer's Guide (PDF) – Electronic copy of the Trainer's Guide and electronic copy of Procedural help file.

    Disclaimer

    License

    Product Support

    Product Suggestions – Product Suggestion online form on www.jjkeller.com.

    Registration/Update – Access the product registration function and access any online updates available for SAFE·Sim™.

    J. J. Keller on the Web – A link to the J. J. Keller & Associates, Inc. web site.

    About – Provides information about the product such as version number, copyright and product registration number.

Using the Menu Bar to Update Driver, Vehicle and Trip Information

You may also update driver, vehicle and trip information via the menu bar at the top of your screen.

Use this menu to quickly access and update information.

Keller's SAFE·Sim™ Truck Driving Simulator

Preparing Drivers for Keller's SAFE·Sim™

To prepare your drivers to use Keller's SAFE·Sim™:

1. Discuss the purpose and objectives for their use of the simulator, whether it is assessment of skills, or to practice specific skills, such as hazard perception.

2. Make sure they are set up and positioned at their station(s) correctly.

    *   Steering wheel, foot pedals and monitor placed correctly.

    *   Hands placed correctly.

3. Give each driver a copy of the "Driver Information" section located in this Trainer's Guide to assist with training and for a ready reference.

    > ***Note:*** *Permission is granted to reproduce the "Driver Information" section of the Keller's SAFE·Sim™ Truck Driving Simulator Trainer's Guide, as long as the copyright notice remains visible on all copies.*

4. Direct them to the **Drive Assigned Trips** button on the Home Screen.
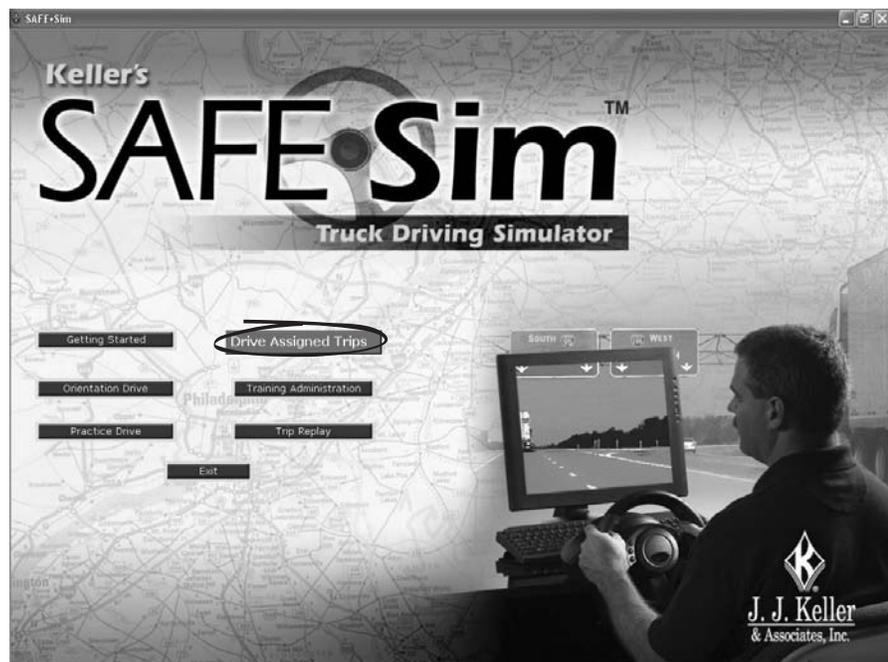
> ***Note:*** *Drivers should be informed ahead of time of their Username and Password.*

Trainer's Guide

5. After the drivers have logged in, explain to them what they will see:

    • Assigned trips

    • Trip detail

    • Trip list

    • Trip history

    • Assigned vehicle

    • Options

        o   Drive Selected Trip

        o   Practice Drive

6. Offer tips or specific practices they should note and observe during their drive, such as:

    • Take it slow until they get the feel of the simulator.

    • Keep hands at 9 and 3 o'clock on the steering wheel.

    • Practice looking left and right using the paddles behind the steering wheel.

    • Practice looking in the mirrors using the buttons on the steering wheel.

Keller's SAFE·Sim™ Truck Driving Simulator

Notes:

- Practice turning the signals, lights and windshield wipers on and off using the buttons on the steering wheel.

- When driving, they should scan ahead about $^1/_4$ mile on the highway segments and about one block ahead in the city segments.

7. Tell drivers what to do following the drive and when/how they can view their results.

> ***Note:*** *After the drive, drivers will see a report showing their performance for that drive, including the infractions made.*

Now that you have set up Keller's SAFE·Sim™, you can look forward to enhancing the skills and abilities of every level or driver in your company. It can be as easy as entering the driver information and assigning them to vehicles and default trips. However, as you and your drivers become familiar and experienced using Keller's SAFE·Sim™, you can look forward to customizing trips specific to your drivers' needs. You will discover new ways to use the simulator and see how performance on the simulator relates to performance on the road.

Unlike other training tools, Keller's SAFE·Sim™ truck driving simulator provides "hands on" experience for drivers before they go on the road. In conjunction with other means of training, such as classroom discussion, video-based training, driving on a range and on-the-road-training, you will find Keller's SAFE·Sim™ invaluable in providing the environment necessary to assess and sharpen drivers' skills. You will find that Keller's SAFE·Sim™ fits into, and enhances, existing programs rather than replacing them.

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Keller's SAFE·Sim™ Truck Driving Simulator

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Driver Information	**Notes:**

Welcome to Keller's SAFE·Sim™ Truck Driving Simulator. Keller's SAFE·Sim™ is a truck driving simulator where you operate a semi or straight truck in a variety of conditions, such as busy interstates, two-lane highways, congested city streets, mountain roads and high-risk environments.

In conjunction with different ways of learning—whether it be a classroom discussion, a video, a truck driving range, or on-the-road experience—Keller's SAFE·Sim™ Truck Driving Simulator is different from other training tools in that the simulator itself is the environment for learning. Utilized in different ways, the simulator is able to assess or improve skills, or to provide experiential experience for situations that are difficult to replicate. By driving Keller's SAFE·Sim™ Truck Driving Simulator, you will learn by *experiencing*—driving the simulator itself.

Setup

■ Make sure the screen is within 5 inches of the steering wheel.

■ Position the foot pedals so the brake (left) pedal is directly under the steering wheel and both pedals can be maneuvered comfortably.

Keller's SAFE·Sim™ Truck Driving Simulator

Note: *To keep the foot pedals stationary on the floor, setup the unit for the appropriate type of floor surface. For use on a carpeted surface, flip the unit over and press the button to extend the carpet grabbing teeth. For use on a smooth floor surface, press the button on the bottom of the unit and push the carpet grabbing teeth inside the unit.*

■   Position the chair to the appropriate height to the desktop for comfortable reach to the wheel, pedals and computer.

■   Position hands at 9 and 3 o'clock so that the buttons on the steering wheel can be reached with the thumbs (the buttons on the front of steering wheel) and fore or middle fingers (the paddles on the back of steering wheel).

Getting Started

To start Keller's SAFE·Sim™ Truck Driving Simulator, double-click the Truck Driving Simulator icon on your computer screen.

The main screen has seven options:

■   **Getting Started:** Click here to access an electronic version of the "Driver Information" section from the SAFE·Sim™ Trainer's Guide.

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- **Orientation Drive:** The Orientation Drive is helpful if you have never used the simulator before. Like having a driver instructor at your side, prompts appear on screen during the trip to help the you learn the controls and environment of Keller's SAFE·Sim™.

- **Practice Drive:** Click here to practice using the simulator. Here you will find a limited list of trips and vehicles to choose from that vary in degree of difficulty and number of hazards. This drive allows you to see what the simulator is like, including the steering, acceleration and braking, before driving on an assigned trip.

- **Drive Assigned Trips:** You may begin using the simulator by clicking here.

- **Training Administration:** For trainers and training administrators only.

- **Trip Replay:** Click here to replay your recorded trips.

- **Exit:** Click here to leave the Home Screen and close out of the software application.

Drive Assigned Trips
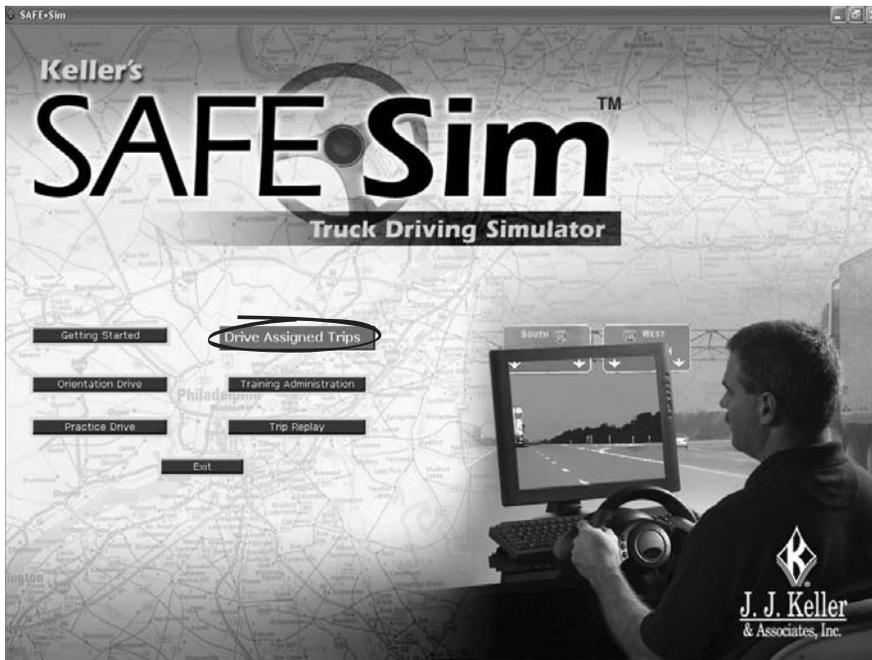
To use Keller's SAFE·Sim™ Truck Driving Simulator, click the **Drive Assigned Trips** button on the main screen.

Keller's SAFE·Sim™ Truck Driving Simulator

To begin using the simulator, enter the username and password you have been assigned.
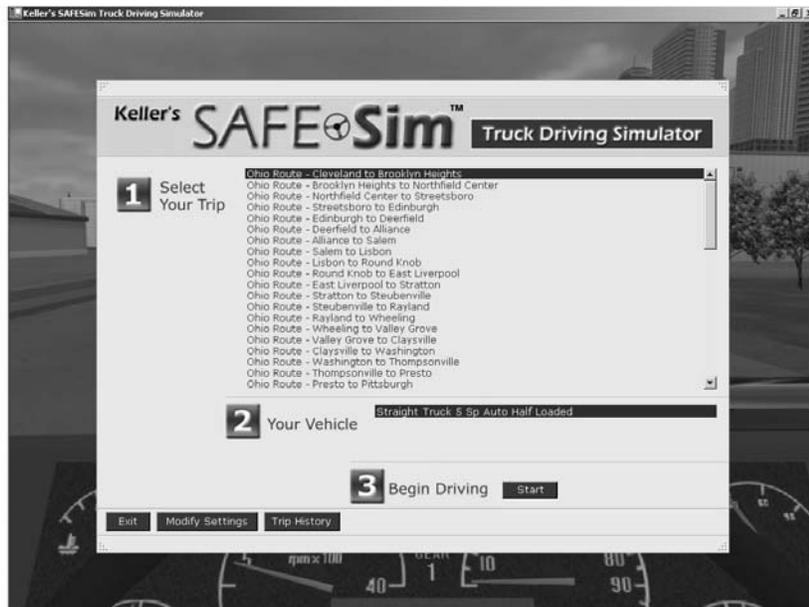
The Trip Selection screen appears displaying your assigned trips and your assigned vehicle. To view your driving history, click the **Trip History** button. To view trip details, select a trip and click the **Trip Details** button. The following information will be displayed:

> Trip Name
>
> Description
>
> Distance
>
> Time of Day settings
>
> Weather settings
>
> Season Setting

To begin the selected trip, highlight the trip you want to drive, then click the **Start** button.

To exit this screen, click the **Exit** button.

Drive Selected Trip

Once you have clicked the **Start** button, the simulation will begin. When the trip is completed, you will see a report display-

Trainer's Guide

ing your performance for that drive, including the infractions made.

Practice Drive

To practice driving on the simulator, you may click the **Practice Drive** button on the Main screen.

Driver Controls

■ Steering wheel controls
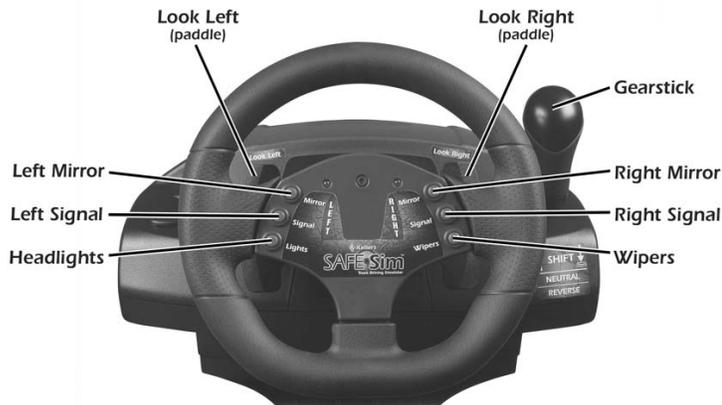
- Front buttons:
  - o Left mirror
  - o Right mirror
  - o Left turn signal
  - o Right turn signal
  - o Headlights
  - o Windshield wipers
- Paddles on back of steering wheel:
  - o Look left
  - o Look right

■ Gear stick

- Forward = shift up
- Back = shift down
- Neutral = between forward and reverse

Driver Information-5

Notes:

- Reverse = down from neutral

■ Foot pedals

Brake   Accelerator

- Brake

- Accelerator

Driver Tips

When driving Keller's SAFE·Sim™ Truck Driving Simulator, consider the following:

■ Take it slow until you get the feel of using the simulator.

■ Keep your hands at 9 and 3 o'clock on the steering wheel.

■ Practice looking left and right using the paddles behind the steering wheel.

■ Practice looking in the mirrors using the buttons on the steering wheel.

■ Practice turning the signals, lights and windshield wipers on and off using the buttons on the steering wheel.

■ When driving, scan ahead about $^1/_4$ mile on the highway segments and about one block ahead in the city segments.

As a learning and assessment tool, you will find that Keller's SAFE·Sim™ Truck Driving Simulator is different from other training tools—you have the chance to learn, experience and sharpen your skills in a "virtual" environment. In conjunction with other ways of learning, such as classroom discussion, video-based training, driving on a range and on-the-road-training, you will find Keller's SAFE·Sim™ Truck Driving Simulator invaluable in providing the environment necessary to assess and sharpen your driving skills.

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Trip Directional Signs

Trips begin at freight terminals. Each trip will be marked throughout with blue directional arrow signs. Simply turn where the arrows indicate in order to stay on course to your destination. If you miss a turn or go the wrong direction, a pop-up dialog box will alert you that you are off course. Keller's SAFE-Sim™ will then return your truck to the proper course, so that you can continue your trip.

Terminating a Trip

A trip is completed when you arrive at your destination (freight terminal) and park your vehicle in the location indicated by the blue "Park Here" sign. You should back into docks when those are marked as the parking area. Your vehicle must be within the parking or dock lane lines marked on the pavement in order to register in the system as parked.

When your vehicle is properly parked, Keller's SAFE-Sim™ will notify you. You can then access a list of the infractions that occurred during your trip. From this screen you may choose to view a replay of the infractions or select to drive another assigned trip.

Keller's SAFE·Sim™ Truck Driving Simulator

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Keller's SAFE·Sim™ Truck Driving Simulator Trainer's Guide

Reference	**Notes:**

Environmental Conditions and Hazards

Time-of-day and weather conditions:

- Night driving

  - Low light

  - Need headlights on

  - Other vehicles and ambient light

- Dusk/dawn driving

  - Everything will be dimmer than normal daylight driving

  - Street lights will be on

- Rain

  - Lands on windshield. Windshield wipers can be turned on/off by pressing the **Wipers** button on the steering wheel.

  - Road will be slick, but will have some traction

  - Distinguishable from normal road surface

- Snow

  - Appears as a white texture that is slick, but will have some traction

  - Distinguishable from normal road surface

  - Lands on windshield. Windshield wipers can be turned on/off by pressing the **Wipers** button on the steering wheel.

  - Loss of control will be determined by vehicle dynamics, and driver input

- Ice

  - Road will be very slick—basically no traction

  - Distinguishable from normal road surface (brighter)

  - Loss of control will be determined by vehicle dynamics, and driver input

Keller's SAFE·Sim™ Truck Driving Simulator

Notes:	■ Black ice

■ Black ice

- Road will be very slick—basically no traction

- Distinguishable from the normal road surface (slightly darker)

- Loss of control will be determined by vehicle dynamics, and driver input

■ Fog

- Environment will be lighter with less visibility

- Does not affect traction

Hazards:

■ Object in roadway

■ Car blocking roadway

■ Construction: Lane change sites

■ Construction: Lane closure

■ Construction: Shoulder work

■ Animal in roadway

■ Car runs a stop sign at a two-way non-electronic intersection

■ Car runs a stop light at a four-way electronic intersection

■ Pedestrians

■ Parked cars/placeable objects, such as barrels and cones

■ Parked car about to pull out into traffic from parking space

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Importing Employees/Drivers

The import function will allow you to easily bring in an existing employee list, provided the file is set up in a specific manner.

You must be an administrator to import employees.

To import employees/drivers:

1. Prepare the Import file as described below.

    Import file specifications:

    File must include commas or tabs as field separators. Maximum sizes for the various fields are listed below. Import file must be a text file (*.txt or *.csv). Fields in *.txt files can be separated by either tabs or commas. Fields in *.csv files must be separated by commas.

Field	Maximum Field Length
* Locationkey **Important:** Location is the numerical identifier for a location's position found when you open your drop-down list of locations (e.g., first on list is #1, etc.). Do not leave this field blank; the values must be greater than "0" and correspond to a valid location. For instance, if you do not have multiple locations, the value would need to be "1." If you have multiple locations, a value of "1" corresponds to the first location in your list, a value of "2" corresponds to the second location in your list, etc	4
* Employee ID (Note: Must be unique or import will fail.)	11
* Firstname	15
MiddleInitial	1
* Lastname	20
Phone (Home phone number)	20
Phone2 (Work phone number)	20
Email	28
Address1	30
Address2	30
City	20
State	2
Zip	10

Keller's SAFE·Sim™ Truck Driving Simulator

* Indicates a required field. A value must exist in these fields for each record being imported. Other fields can be blank.

Important: For each record added through the "import" process, the employee's ID number is automatically assigned as their user name and password.

2. From the Home window, click the Training Administration button.

3. Enter the Administrator username and password as instructed.

    The SAFE•Sim Setup Areas window displays.

4. To the right of Step 1. Enter Drivers, click the Next button.

    The Driver Entry window displays.

5. Click the Import Drivers button.

    The Import Drivers dialog box displays.

    Keller's SAFE·Sim™ will open the 'Select file to import' dialog box.

6. Click the OK button.

    The Open dialog box displays.

7. Navigate to the directory and sub folder where your source file exists. Remember, it must be a .txt or .csv file. Select the file, then click the OK button to begin the import.

    Note: The employee ID for each record you are importing must be unique.

    When the import is complete, the employees will be included in the Driver Entry list.

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Trainer's Guide**

Other Training Resources

Keller's SAFE-Sim™ Truck Driving Simulator is a comprehensive training tool. However, when you need to go into greater detail or have specific requirements due to the nature of your operation, the following list of training resources can help you. Unless noted otherwise, the products listed are all video-based driver training kits. *(All products listed are available from J. J. Keller & Associates, Inc.)*

SEEING HAZARDS
- **Hazard Perception Challenge** (118-K)
- **Hazard Perception Challenge II** (218-K)
- **Seeing Hazards** (315-VT)

DEFENSIVE DRIVING
- **Defensive Driving** (363-VT)
- **City Driving** (99-K)
- **Using Your Mirrors** (332-VT)
- **Traffic!** (385-VT)
- **Straight Trucks** (and Vans) (112-K)
- **Defensive Driving** (straight trucks) (343-VT)

SPEED & SPACE MANAGEMENT
- **Speed & Space Management** (319-VT, 171-K, 400-K or 400-DVD)
- **Using Your Mirrors** (332-VT)
- **Traffic!** (385-VT)
- **Distracted!** (151-K)
- **Speed & Space Management** (straight trucks) (355-VT)

EXTREME DRIVING CONDITIONS
- **Rain!** (340-VT)
- **Wind!** (339-VT)
- **Rollover!** (341-VT)
- **Extreme Weather Driving** (316-VT)
- **Adverse Weather** (straight trucks) (345-VT)

DRIVING GRADES
- **Mountains!** (366-VT)

Keller's SAFE·Sim™ Truck Driving Simulator

NIGHT DRIVING

- **Night Driving** (314-VT)

ROAD CONSTRUCTION SAFETY

- **Road Work!** (365-VT)

EMERGENCY MANEUVERS

- **Emergency Maneuvers** (323-VT)

RAILROAD CROSSINGS

- **Railroad Crossings** (331-VT)

AGGRESSIVE/DISTRACTED DRIVING

- **Road Rage** (114-K and 384-VT)
- **Distracted!** (151-K)

BACKING

- **Backing** (312-VT, 152-K, 400-K or 400-DVD)
- **Avoiding Truck Stop Accidents** (361-VT)
- **Yard Spotting** (362-VT)
- **Backing & Parking** (straight trucks) (344-VT)

ALL DRIVER TRAINING AREAS

- **Traffic Violations & CDL Disqualification** (166-K)
- **Drivers, Drugs & Drinking** (184-K)
- **Hours of Service: A Driver's Guide** (286-K)
- **Hours of Service: A Driver's Guide** computer based training (286-CMM-P)
- **Hours of Service: A Driver's Guide** internet delivered training (286-IDC)
- **Fuel Efficiency** video (462-AV)
- **Federal Motor Carrier Regulations** *Pocketbook* (7-ORS-A)
- **A Driver's Guide to the FMCSR** *Handbook* (16-ORS)
- **The Interstate Truck Driver's** *Handbook* (1-ORS)
- **Route & Delivery Driver's Safety** *Handbook* (150-ORS)
- **Transportation Safety Training** *Newsletter* (8-N)
- **Kellersoft® Safety Training Customizer™** *CD-ROM* (245-KS-R)

For more information on these and other Keller products, visit our website at www.jjkeller.com or call us toll-free at 1-800-327-6868.

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Supplement your SAFE-SIM™ Truck Driving Simulator training with other products available from J. J. Keller & Associates, Inc.

- **HAZARD PERCEPTION CHALLENGE® (118-K) and HAZARD PERCEPTION CHALLENGE® II** (218-K) – Two highly interactive driver training programs centered around a segmented 60-minute video. Each segment contains driving scenarios which employ Q&A and commentary to address hazard perception and defensive driving skills as they relate to: highway, city, night, extreme weather driving and backing. (Both programs also include a Trainer's Guide, ten driver skill cards with a removable receipt page, ten test blanks and ten certificates of completion.)

- **SEEING HAZARDS Seven-Minute Solution** (315-VT) – Zeros in on seeing skills and how they can help drivers keep hazards from becoming emergencies.

- **DEFENSIVE DRIVING Seven-Minute Solution** (363-VT) – Reviews the key elements of driving defensively: visual scanning, identifying and dealing with road hazards and road user hazards, and communicating clearly with other motorists.

- **SPEED & SPACE MANAGEMENT Driver Training Kit** (171-K) – Instructs both new and experienced drivers on the critical elements of speed and space management.

- **SPEED & SPACE MANAGEMENT Seven-Minute Solution** (319-VT) – Covers important factors about speed, stopping distances, adjusting speed for various road conditions and maintaining space.

- **DISTRACTED! Driver Training Kit** (151-K) – Outlines how drivers can avoid the hazards of distracted driving by knowing what to look for and what to do when they encounter a distracted driver as well as how to prevent becoming distracted drivers themselves.

- **TRAFFIC VIOLATIONS & CDL DISQUALIFICATION Driver Training Kit** (166-K) – Discusses how the CDL disqualification rules are applicable whether certain traffic violations are committed in a commercial motor vehicle or a professional driver's personal vehicle.

- **KELLERSOFT® SAFETY TRAINING CUSTOMIZER™ CD-ROM** (245-KS-R) – A CD-ROM based product featuring three key elements for delivering effective safety training (PowerPoint® presentations, instructor notes and attendance sheets) on important DOT topics (also includes OSHA and EPA topics).

**For more information or to order products,
contact a Keller sales representative at 1-800-327-6868
or see our website: *www.jjkeller.com***

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