

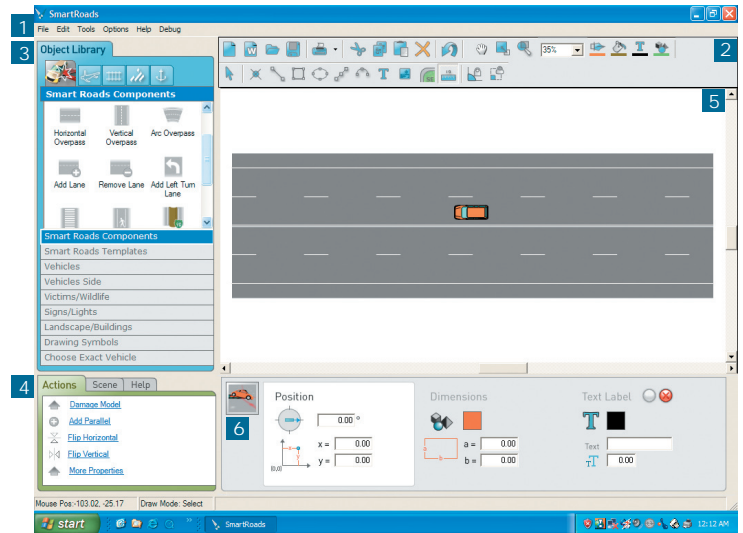
SmartRoads

User QuickGuide

SmartRoads now features a new interface that makes diagramming a breeze. New and existing users will find that SmartRoads will improve efficiency with features including the Properties dialog box, Actions tab (eliminates right clicking objects), Scene tab and especially the Help tab (displays actions and options of a selected tool or object).

Create diagrams quickly and easily by dragging and dropping roadways and objects onto the scene. SmartRoads allows the user to create and control diagrams.

You'll be amazed by the ease of use and the speed to create diagrams. Creating professional diagrams will take minutes, not hours or days.



- | | |
|-------------------|---------------------------------|
| 1. Menu Bar | 4. Actions, Scene & Help Dialog |
| 2. Tool Bar | 5. Canvas |
| 3. Object Library | 6. Properties Dialog |

Getting Started

Populating the Scene

The fastest way to get started on a diagram is to open a template:

[File > Open Template Library](#)

SmartRoads includes over 60 templates to choose from, or the user can create their own saved templates.

To save diagrams as templates:

[File > Save As Template](#)

The user has instant access to pre-drawn intersections and roadways - simply insert the objects that the diagram requires.

Object Library



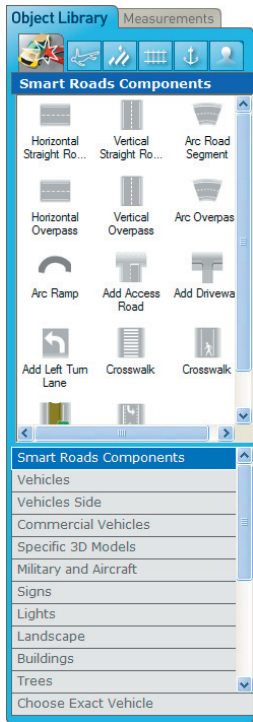
To add objects, drag and drop them from the library (positioned on the left of the canvas).

Choose from over 600 categorized objects (commercial vehicles, signs, lights, buildings, wildlife...) and from over 3500 exact vehicles (1971-2006) using the "Choose Exact Vehicle" button positioned on the bottom of the Object Library.

The Object Library contains thousands of models divided into 5 categories to make them easy to find.



SmartRoads Components



The most powerful feature in SmartRoads is the SmartRoad Components. Simply drag the components onto the canvas and intersect roads to create intersections, add lanes, crosswalks, turning lanes, medians...

The finished intersection or roadway is placed as a fully editable object.

Actual drawing tools will not be required most of the time. The scene can be constructed using models from the object library. Simply drag & drop the required elements from the object library to the canvas - then adjust the properties as required.

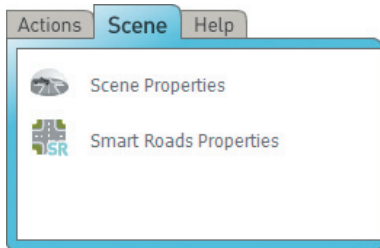
Create a diagram in minutes !

Setting up SmartRoads

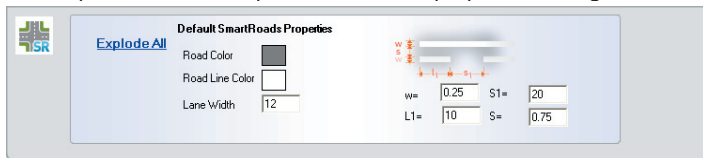
Before getting started, it is advisable to set up the SmartRoads properties (see below) so every component dropped onto the scene will have the properties needed. A great time saver!

These settings will be saved as default for the future.

1. Select the **Scene Tab > SmartRoads Properties**



2. Set up the SmartRoads preferences in the properties dialog

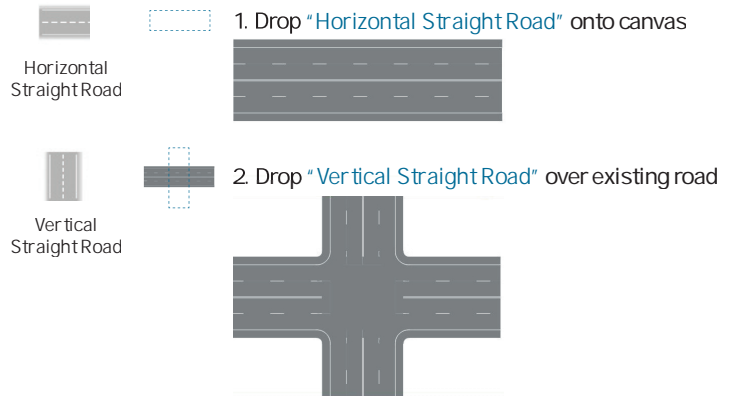


Set up: road color, road line color, lane width and road line properties

Drawing a Diagram from Scratch

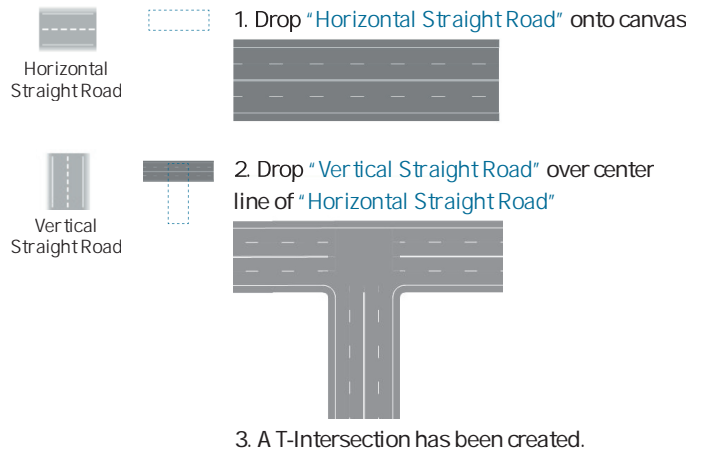
4-way Intersection

Creating an intersection is as easy as dropping 2 SmartRoad components from the object library on top of each other.



T-Intersection

A T-intersection is built as quickly as a 4-way intersection, the only difference is the positioning of the second road segment.



Curved Road

SmartRoads 2 enables the creation of curved roads and curved intersections. The curved road component behaves the same way as a straight road component except it has additional grips to edit the radius of the road segment.



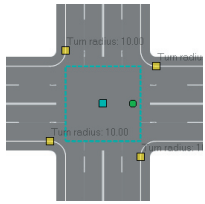
A curved road can be created by placing a straight road first then convert using the actions tab.

The actions tab allows the user to toggle whether the road is straight or curved.

Editing your Intersection/Roadway

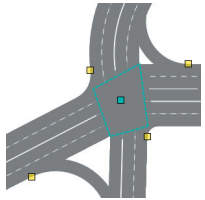
Click on different parts of the intersection to locate the grips to modify it. Grips and the properties dialog can be used to modify an intersection to fit your needs.

Editing your Intersection



Click in the center of your intersection to get the following grips.

- Move
- Rotate



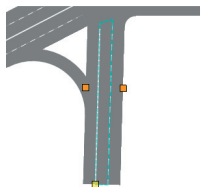
Radius grips for right-turn lane change: radius of right-turn lane from corner to right-turn lane

To add a crosswalk to an intersection, select "add crosswalks" in the actions tab.

Editing Roads/Legs and Lanes

Select a roadway or leg of an intersection and use grips to adjust the object to suit your needs.

Straight Road/Segment

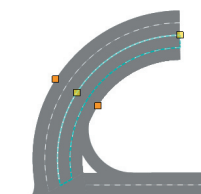


Road-grips change:
- lanes (+,-)
- road (angle, length)

■ Use the yellow grip to change length and position of the selected road

■ Use the orange grip to edit the amount of lanes.

Curved Road/Segment



Road-grips change:
- angle, length
- radius
- lanes (+,-)

■ Use the yellow grip in the center of a segment to change the radius of a segment.

Other grips behave like those of the straight road/segment (see above)

Editing Lanes

Normal lanes can be converted to suit the diagramming needs.

1. Select lane



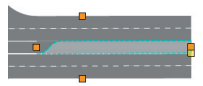
2. Select the type of lane to be converted in the actions tab.



To edit lane width, select lane and edit lane width in the properties dialog below the canvas.

Left Turn Lanes

A left turn lane can be edited by using grips or the properties dialog.



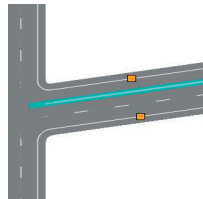
Grips for left-turn lanes change:
- length, position of right-turn lanes
- lanes (+,-)

■ Use orange grips in the center of the left-turn lane to adjust lane

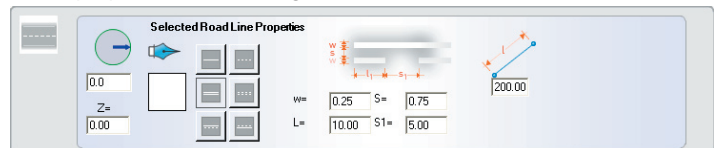
Editing Road Lines

Change road lines from the selected defaults in the SmartRoads properties to any road line such as a solid, dashed, double solid, solid-dashed line....

1. Select a road line



2. Edit properties in the dialog window below



Adding other Components to an Intersection/Roadway

To add access roads, driveways or crosswalks, simply drag symbols from the object library and drop on the roadway.

Sidewalks, grass/dirt/paved shoulders can also be added by selecting an outside lane or the center of an intersection and then using the actions tab to add the desired edge.

When a lane is selected, the curb will be applied to the closest edge. Selecting an intersection applies the object to all edges of the intersection.

Adding Objects

The Object Library allows the user to choose symbols appropriate for:

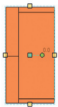


Collision CSI Fire Rail Marine

Choose from sub-libraries within the categories to find a symbol. When the correct symbol is located, simply drag it onto the scene to the desired location. Notice the grips that appear which allowed editing of position, rotation or size. The symbols properties appear in the Properties Editor at the bottom of the screen. Properties edits revise in real time. Cut, copy, paste are found on the right click menu after selecting the symbol.



Object - grips¹:
move object
rotate



Object - grips²:
move object
rotate
resize

¹ cars - resizable in properties
² resizable objects

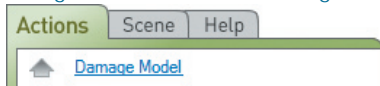
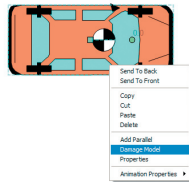
SmartRoads includes over 3500 exact vehicles (1971-2006). To insert a vehicle, use the "Choose Exact Vehicle" button positioned on the bottom of the Object Library.

Vehicle Damager

- > Select Object
- > Actions Tab choose:
 - > Damage Model

OR:

- > Right-click car - select Damage Model

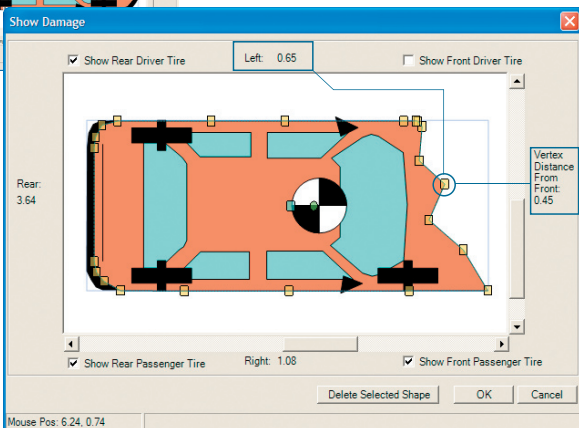


A dialog window allows the model to be damaged precisely according to Total Station or hand measurements.

To damage model :



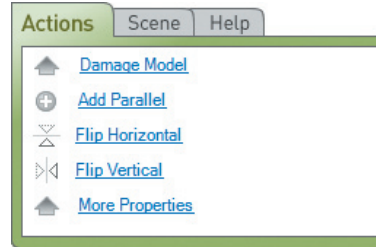
Select area, position points or delete area



Right-click to add points

Action, Scene & Help

Actions



The actions tab is designed to show options available like converting lines, Open Vehicle Damager and many more. The actions differ depending on the object or tool selected.

It is designed to make SmartRoads more intuitive.

No more hidden functions! No need for right-clicking!

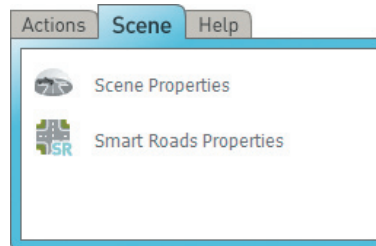
Scene

Edit Scene Properties in the scene tab which is divided into:

[Scene Properties](#)

[SmartRoads Properties](#)

Choose and edit properties in the Properties box.



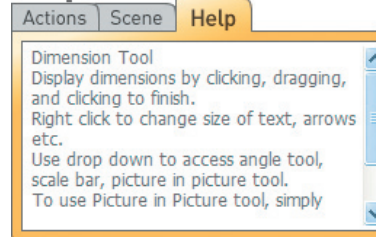
Scene Properties

Edit the ground color and the Grid (size, turn on-off) in the scene properties.

SmartRoads Properties

See page 2.

Help



The Help Dialog provides a quick overview making the initial run in SmartRoads a breeze. It also provides additional information on how to use tool, objects and anything else selectable.

Simply select a tool or object to view the information that can be used to make the creation of a diagram fast and efficient.

In-depth Help can be used with search and full descriptions of SmartRoads and its components.

[Menu > Help > Contents or \[F1\]](#)

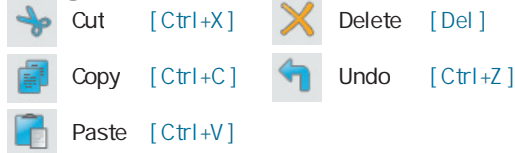
Tool Bar

Select



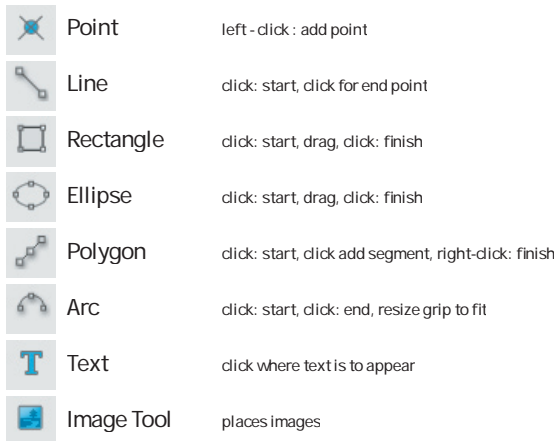
Use the select tool to edit any object. The Property dialog will appear at the bottom of the canvas. Change all properties in that form. Standard Windows functions are available on the right click menu for all objects.

Copy



These functions are also available by right-clicking an object.

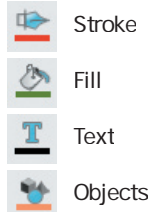
Drawing Tools



Editing Drawing Shapes

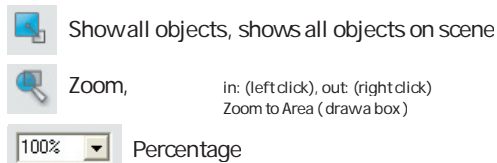
Once a drawing tool is selected, choose line type (dotted, dashed...). It is also possible to change the line in the actions window, for example, from a line to skidmark.

Color Tools



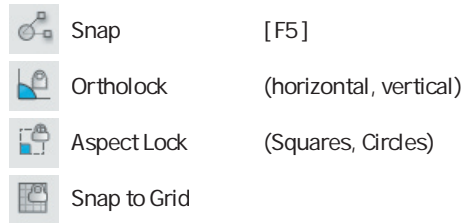
Select an object and click one of the buttons to edit the color.

Zoom

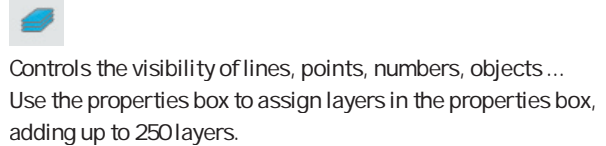


Snap

Click to turn features on & off for precise, fast and easy diagramming.

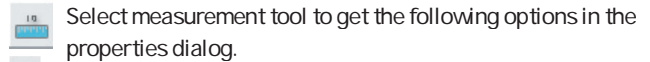


Layers

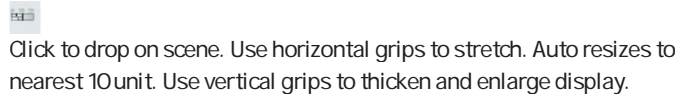
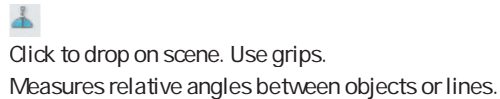


Measurement

Measure distances and angles or place a scale bar.



Click and drag over the area to be measured and click to finish. Adjust properties for display options.



Print



Print

Click print to send the diagram to the print preview form where the program automatically scales the diagram for the printer's paper size. Once the diagram is in Print Preview, the scale can be adjusted using the drop down or by typing in a new scale and clicking on "Update Scale". Using the menu, choose landscape or portrait to better fit the format of the diagram. Use the Vista *fx* title blocks by clicking on "Edit Title Block" and use the drop down and entry fields. Once printed, those settings become the default and will be saved with the diagram file.

Print Selected Area

Allows choice of a certain scale and/or a specific area needed to print at the same time. Use the drop down list beside the printer icon on the tool bar and click on Print Selected Area, or [File > Print Selection](#) under the File menu. A blue rectangle appears on the diagram, representing paper size at the scale shown in the form. The scale can be changed with the blue rectangle changing in real time to display the desired print area. The blue rectangle can be moved to print only the area required.

