

# RoadSoft

Sept, 2010 Vol. 10, No. 2

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# RoundUp

RoadSoft is useful for examining hard data and figures. It helps us justify our expenses to stakeholders.

- Mark Zenner  
Public Works Director, City of Houghton

## Google Integration in RoadSoft 7

Information is an essential commodity. Having access to up-to-date information and sharing data with others makes it easy for your agency to make decisions about roadway assets quickly and efficiently. RoadSoft gives users tools to analyze data and make economical decisions about construction and repairs. However, collecting data on assets still requires physical inspections. While inspections are a necessary part of road maintenance, they can also be costly due to limitations such as travel time between assets or the need to verify information. The Google Integration feature in RoadSoft 7 gives you tools that can make verifying data elements and sharing information easier.

The new tools allow you to access detailed maps and street views provided by Google. Right-clicking on the map in RoadSoft now gives access to the Google Integration menu. The menu is used to view roads and assets in Google Maps and Google Earth. "These tools were developed to allow agencies to share asset information with anyone, not just RoadSoft users," says Chris Pinnow, a software engineer for the Center for Technology and Training (CTT) at Michigan Technological University, "there is a lot of information in Google Maps and Google Earth that is available to the public. This data can be used to enhance the RoadSoft experience."

### Google Maps

Selecting "Open Location in Google Maps" from the Google Integration menu opens and displays a location selected in RoadSoft in Google Maps. Google Maps is a free web-based application that displays detailed maps from around the globe. Using Google Maps you can view detailed maps and satellite imagery to assist in making maintenance and construction decisions. You can also E-mail and print map views to explain projects to groups outside of your agency that don't have access to RoadSoft.

In addition, you can open locations in Google Map's street view using the Google Integration menu. Google provides detailed photos of most roadways from the perspective of motorists. These images are updated periodically and are useful for making preliminary assessments of roadway assets or verifying data collected in the field. For example, you could open a road in street view to see what signs are posted or what kind of terminal a guardrail has. This sort of preliminary digital inspection can save your agency time and money that can be spent on improving the quality of your roads. "Looking at street view can give you an idea of what's out there before visiting a site" says Pinnow.

### Google Earth

Any selection or polygon (such as pavement condition) in RoadSoft can be opened in Google Earth using the Google Integration menu. Google Earth is a free program that allows you to view 3D satellite imagery and create custom overlays and icons from coordinates and map data from programs such as RoadSoft. Once asset information is opened in Google Earth you can apply a custom legend, similar to ones that can be created in RoadSoft, to color-code and label information. You can also choose to include inventory data with imported assets to share with other Google Earth users.

Maps created in Google Earth serve as valuable presentation tools because they can be viewed on any computer that has the program installed. RoadSoft supports saving selections as Keyhole Markup Language (KML) files that can be opened by a variety of mapping software, including Google Earth. "KML files make information collected in RoadSoft significantly more portable and accessible," says Pinnow.

Advanced users can share information from Google Earth on the web. For example, you could create a KML file that shows road and lane closures due to construction or restrictions. Then, you could upload the KML file to a publicly accessible website such as Google Docs, and post a link to the file on the web or through E-mail. Your agency could update the maps daily so that motorists are informed when roads will be open without having to contact your office directly. "People are used to seeing data on digital maps," says Tim Colling, a civil engineer at the CTT, "Paper maps may be out of date as soon as they are printed. Web-based maps make it easy to update information and keep people informed."

### Constant Improvements

In the future, the CTT plans to integrate other web-based map services into RoadSoft. "We want to expand the integration to include other maps like the ones provided by Bing and we want to take advantage of the information provided by these maps," says Pinnow. "For example, one idea is to collect assets from web-based maps and transfer it into RoadSoft."

Web-based map integration gives you access to a large amount of new information and makes it easy to distribute information across a variety of channels. Watch for future RoundUp articles on updates to the Google Integration menu and developments on other web-based map integration.

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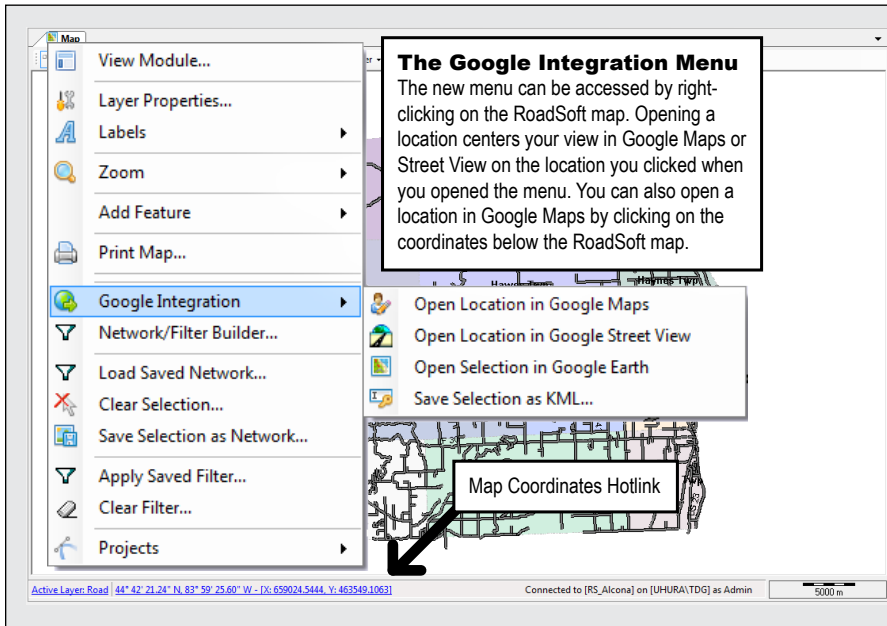
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RoadSoft RoundUp Volume 10, Number 2  
3,109 copies mailed this edition

# RoadSoft RoundUp



## Upcoming RoadSoft Events:

### RoadSoft Introductory Training

Online - Introduction to RoadSoft Training Series  
 DATES: Five Morning Sessions: Monday, October 11, 2010 – Friday, October 15, 2010.  
 TIME: 9:30 AM - 11:30 AM (EST)

#### DESCRIPTION:

This online training series will consist of five, 2-hour sessions that will introduce users to RoadSoft. Users will be introduced to topics to help them get started with RoadSoft, use the Laptop Data Collector (LDC), and manage their RoadSoft database. This training will be presented using the latest version of RoadSoft 7.

All Sessions will take place from 9:30 AM - 11:30 AM (EST) on the following dates:

- October 11, 2010 — Session 1: The Map Interface, Legends, Filters, and Reports
- October 12, 2010 — Session 2: Using the Road Module
- October 13, 2010 — Session 3: Data Collection in RoadSoft / Using the LDC
- October 14, 2010 — Session 4: Managing Your RoadSoft Data
- October 15, 2010 — Session 5: Intro to Safety Analysis / Using Crash Data

The cost to attend this series is \$45 per connection. To register, call the Center for Technology & Training at 906-487-2102 or email your contact information (name, title, organization, phone number) to [ctt@mtu.edu](mailto:ctt@mtu.edu).

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