

# NaviGate™ AVL (Automatic Vehicle Location)

## Software Product Description

### Product Summary

The *NaviGate* AVL (Automatic Vehicle Location) Module provides for the display and management of wireless-connected GPS units in vehicles such as utility maintenance trucks, customer service vehicles, and emergency vehicles. *NaviGate* AVL displays the current and historical location of vehicles in the *NaviGate* software environment, and allow allows you to communicate with the vehicle wirelessly when two-way communication is supported by the AVL field unit.

### Description

*NaviGate* AVL will collect data about the location of vehicles by communicating directly with AVL hardware via wireless connections over the Internet. *NaviGate* AVL will collect, store, and display information such as:

- Vehicle location
- Stop time and stop location (intersection or street)
- Current speed and heading
- Data from devices connected to the AVL hardware

The specific data collected depends on your choice of AVL hardware.

The *NaviGate* AVL module provides complete facilities for displaying AVL data in your existing *NaviGate* environment:

- Current location and thematic views of vehicle status (stopped, moving, on-station, etc.)
- Vehicle paths over a specified period of time for one or more vehicles
- Tooltips with more complete information about a vehicle, such as the currently-assigned work order number or driver name, including data that may be accessed from other databases in your network
- Filter your display to show just one vehicle, all vehicles of a particular type, or your entire fleet.
- Reports on vehicles, vehicle locations, and activity
- Access to maps showing historical vehicle positions. Choose any date in the past and *NaviGate* AVL will display a map showing all vehicle locations recorded on that date. You may choose to display just a single vehicle, several, or your entire fleet.
- Where supported by the AVL hardware, *NaviGate* AVL can also send text messages from a *NaviGate* user to the AVL device for display in the vehicle cab. Alternately, *NaviGate* AVL will send a message to a pager or cell phone associated with the driver of that vehicle.

### Data Requirements

The *NaviGate* AVL Module displays all of your existing *NaviGate* application data together with dynamic information about the location of vehicles obtained from AVL hardware installed in your vehicles. *NaviGate* AVL can interface with information from a variety of AVL hardware products. Contact Gatekeeper Systems for information on support for the specific AVL hardware you are using.

### Installation and Configuration

The purchase price of the *NaviGate* AVL Module includes professional installation of the software by a Gatekeeper Systems technician, integration of the module into your existing *NaviGate*. Contact Gatekeeper Systems for more information.

### Software Prerequisites

The *NaviGate* AVL Module uses the functions and features of the standard *NaviGate* application framework. You may add this module to any current version of *NaviGate*.

### Support Options

Standard Support is available for this module. Standard Support provides support via email, the Internet and telephone during normal Gatekeeper Systems business hours. Standard Support also provides product updates as new versions of this module are released.

### Pricing

Refer to the *NaviGate* Price List for current pricing. Volume and package discounts are also available. Contact a Gatekeeper Systems representative for more information.

### Licensing

This module is licensed under the standard Gatekeeper Systems license agreement. This license agreement grants access to the software source code for the licensed module. A copy of the standard agreement is available upon request.

### Ordering

The *NaviGate* AVL Module may be ordered by contacting Gatekeeper Systems. Please specify the *NaviGate* version with which you will be using this module.

### Delivery

In most cases, the *NaviGate* AVL Module can be installed immediately. Configuration and installation takes approximately one day on site. Contact Gatekeeper Systems for currently available delivery times.

GKS Part Number: 5318-AV1-1

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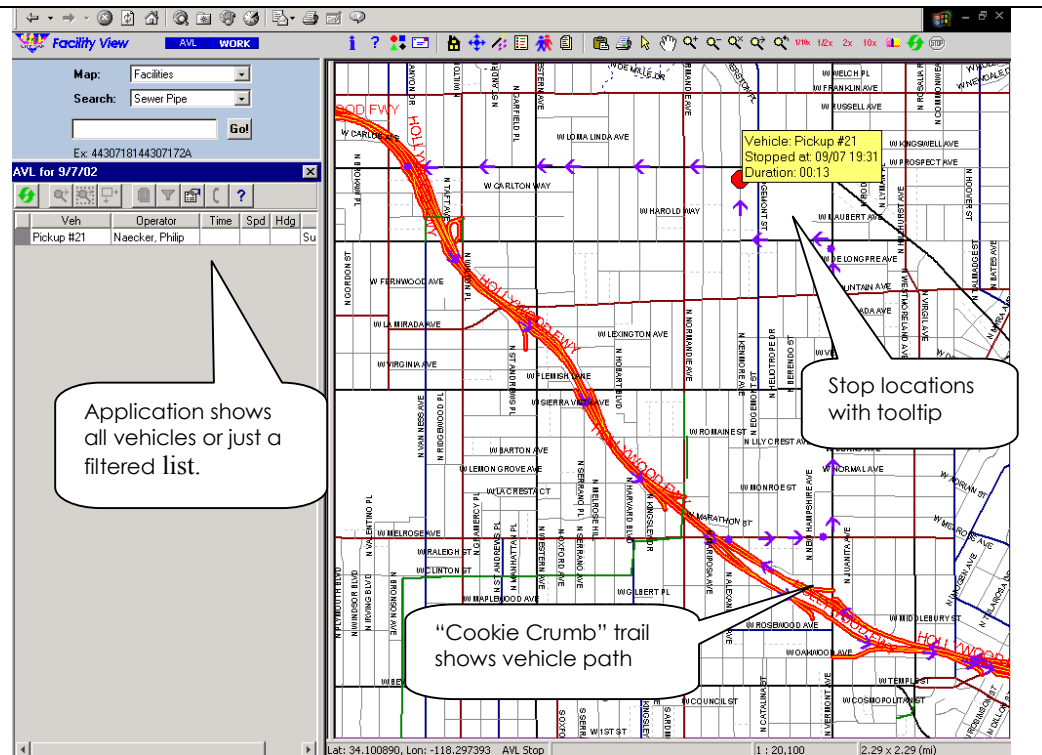
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## Display Vehicles on a Map

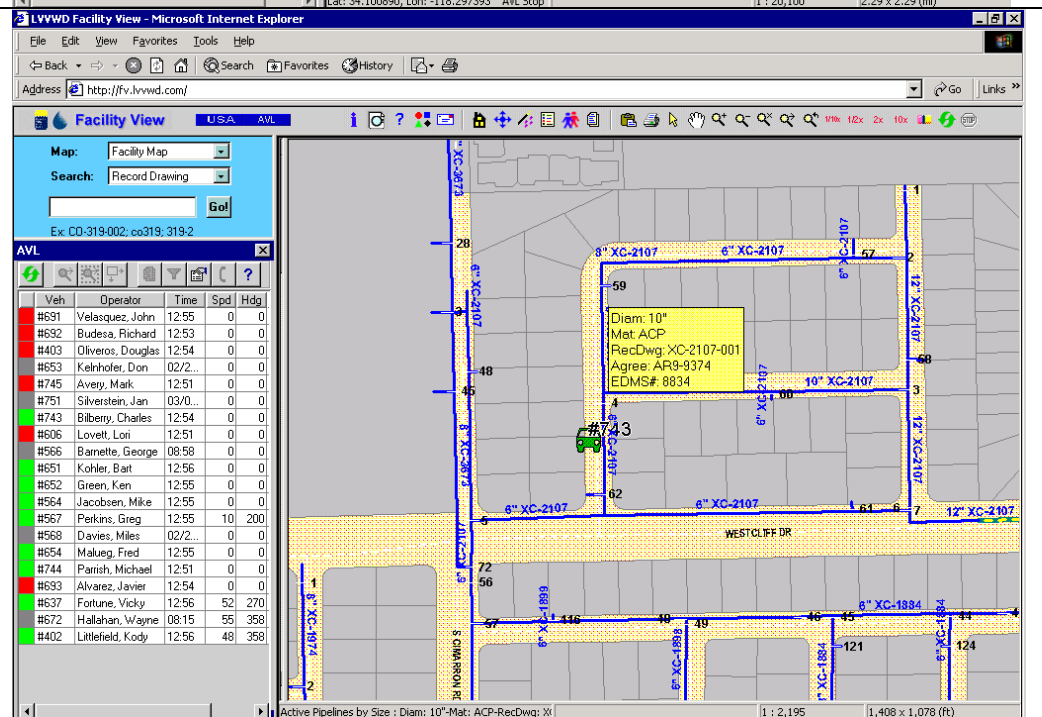
The map display includes the current position of all vehicles in the fleet. You can also display a "cookie crumb" trail of past positions and the duration and location of all vehicle stops.

You can configure NaviGate AVL to refresh the display automatically, or to "follow" a particular vehicle.



## Simultaneous Display of Vehicles and Facilities

Show the position of vehicles together with your own facilities data. Your map can also include parcel data or other landbase information. You can customize the kinds of map data displayed.



## Manage Your Fleet

The AVL application allows dispatchers and others to use a simple web browser to manage large fleets and display their position on a map.

The screenshot shows the AVL application interface. At the top is a toolbar with icons for refresh, search, zoom, print, and help. Below the toolbar is a table with the following columns: Veh, Time, Spd, Hdg, and Type. The table contains 20 rows of vehicle data, with the 10th row (Veh 027) highlighted in blue.

Veh	Time	Spd	Hdg	Type
001	09/0...	8		Digger
003	14:06	2	25	Unknown
005	13:47	2	157	Crane
010	14:09	5	145	Digger
012	14:13	13	217	Crane
016	09/1...	0		Pickup
017	16:52	0		Crane
018	09/0...	0		High Ranger
019	16:52	0		Bucket
021	14:10	17	260	Crane
023	16:54	0		Unknown
024	16:53	5	43	Unknown
025	14:12	1	108	Digger
026	09/1...	0		Digger
027	16:53	16	10	Digger
030	16:53	0		Pickup
031	14:12	48	203	High Ranger
032	13:11	1	291	Bucket
033	13:19	0		Bucket
035	14:58	2	246	Unknown
037	14:50	29	162	Pickup
038	16:54	0		Crane
039	16:16	6	56	Digger
042	16:50	0		High Ranger
045	16:53	2	347	Digger

The AVL Application Toolbar lets users easily manage the display of hundreds of vehicles.

Click on a column heading to sort vehicles by type, status, vehicle ID, etc.

Select one or more vehicles in the list to view them on the map.

## Historical Display

Configure the application to show current data, or to display the locations of vehicles for a previous date.

The screenshot shows the AVL Options dialog box. It has two tabs: "Path" and "Date". The "Path" tab is selected, showing three radio buttons: "Do not show past positions", "Show only position points for the last hour", and "Show all position points for today". The "Date" tab is also visible, showing "Today" and "Historical" radio buttons, with a date dropdown set to "Sep 7, 2002". A calendar widget is open, showing the month of September 2002. There are "OK" and "Cancel" buttons at the bottom.

This screenshot shows the AVL Options dialog box with the "Date" tab selected. The "Historical" radio button is selected, and the date dropdown is set to "Sep 7, 2002". The "Refresh rate" dropdown is set to "None". There is a checkbox for "Show vehicle stops on the map" which is checked. "OK" and "Cancel" buttons are at the bottom.

## Send Messages

Select one or more vehicles from the map and send a text message to their cell phone or pager.

The screenshot shows the "Send a Message" dialog box in a Microsoft Internet Explorer browser window. The "Type" dropdown is set to "Meet Customer at Job Site". The "Message" text area contains the text "Contact customer John Smith at 626/555-1212". There are "OK" and "Cancel" buttons at the bottom.

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## Reports Summarize Vehicle Activity

Reports are available as HTML pages or as Excel spreadsheets.

Reports provide a quick summary of vehicle activity as a snapshot across the entire fleet or for a single vehicle for an entire day. The reports summarize current status or the history of vehicle stops for the day, including the stop duration and a reverse-geocoded vehicle location showing the nearest intersection or street address.

The screenshot shows a web browser window titled 'Vehicle Stop Detail - Microsoft Internet Explorer' displaying a table of vehicle stop data. Below the browser, a Microsoft Excel spreadsheet titled 'xlsreport[2].xls' is open, showing the same data in a spreadsheet format.

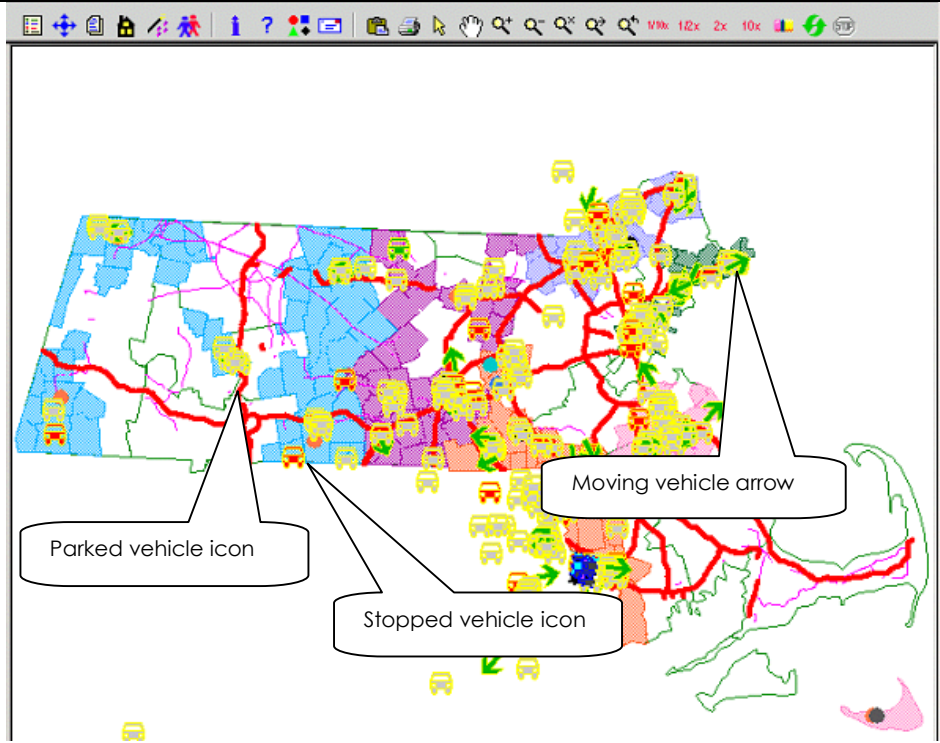
Vehicle	Operator	Time	Duration	Location	Asset Type
Pickup #21	Naecker, Philip	2002-09-06 20:50:56	06:31		Supervisor
Pickup #21	Naecker, Philip	2002-09-07 03:44:56	00:45		Supervisor

Vehicle	Operator	Time	Duration	Location	Asset Type
Pickup #21	Naecker, Philip	9/6/02 20:50	06:31	1100 Woodbury	Supervisor
Pickup #21	Naecker, Philip	9/7/02 03:44	00:45	Union at Catalina	Supervisor
Pickup #21	Naecker, Philip	9/7/02 04:36	00:50	4th at Spring	Supervisor
Pickup #21	Naecker, Philip	9/7/02 05:37	03:02	Union at Catalina	Supervisor
Pickup #21	Naecker, Philip	9/7/02 09:15	00:20		Supervisor
Pickup #21	Naecker, Philip	9/7/02 10:34	00:18	Lake at California	Supervisor
Pickup #21	Naecker, Philip	9/7/02 11:04	00:16		Supervisor

## Application Scales to Regional or Statewide View

Manage hundreds or even thousands of vehicles over an entire state or region. Icons differentiate between moving, stopped, and parked vehicles.

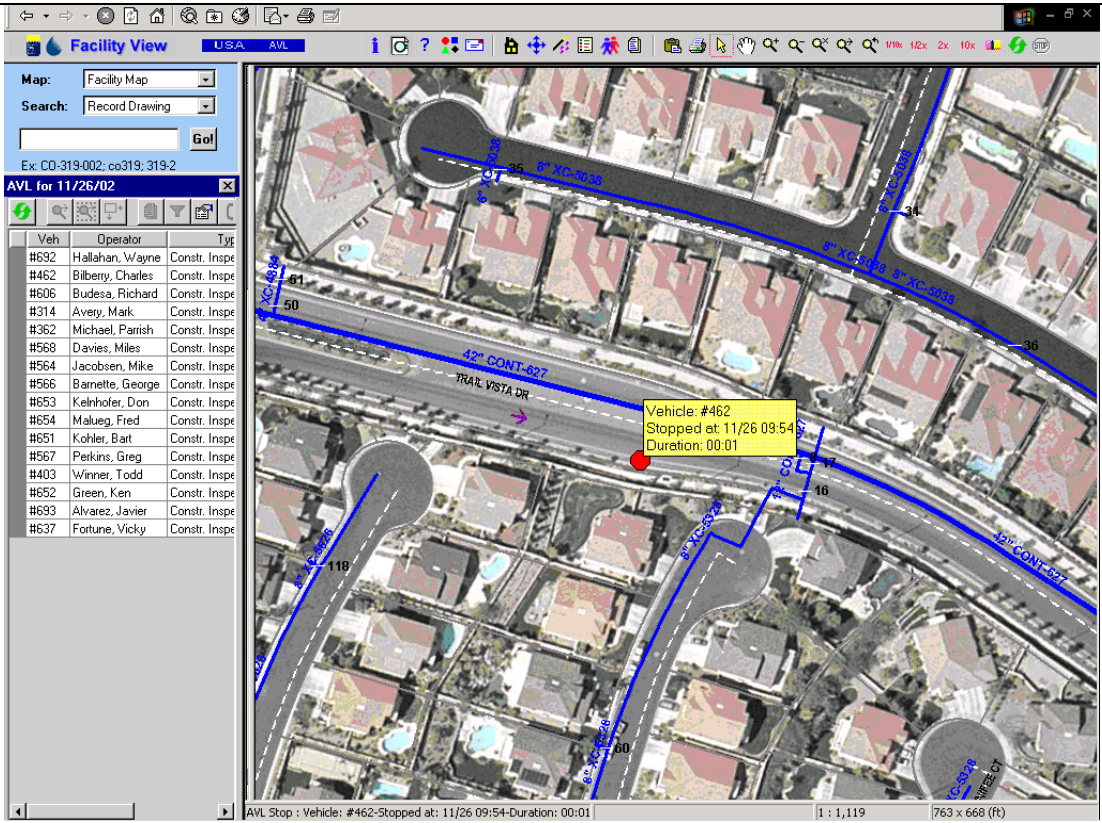


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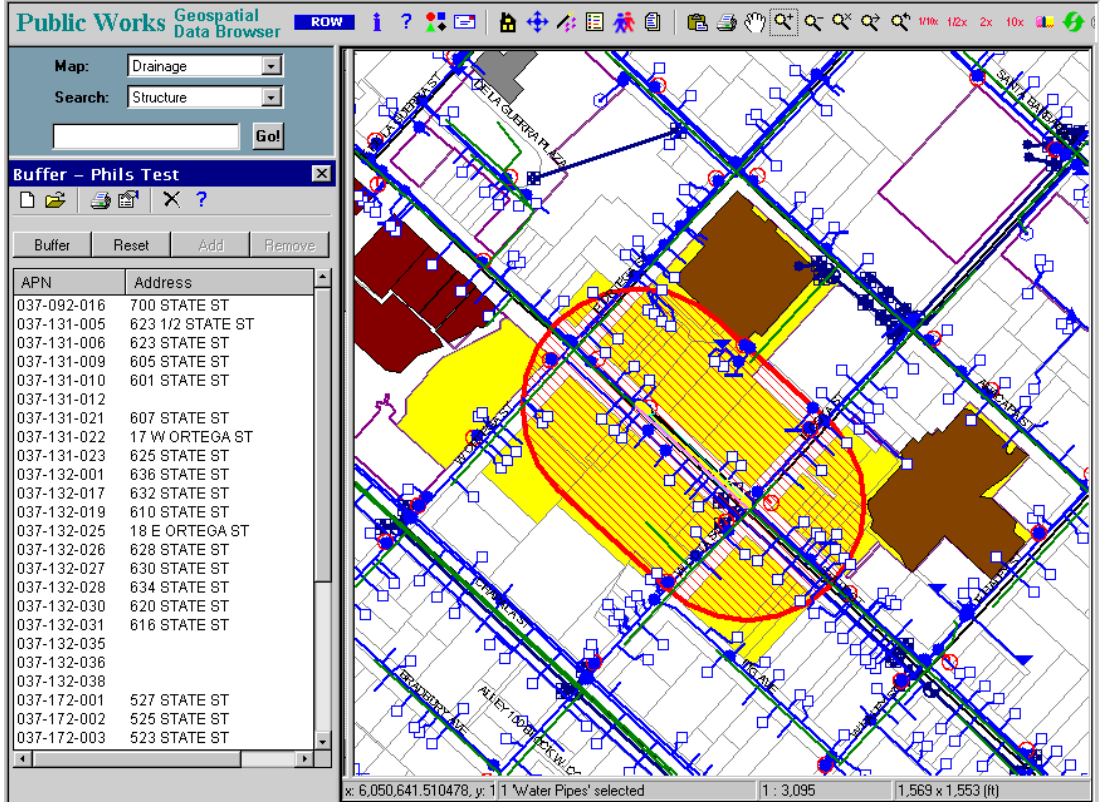
## Use Satellite and Aerial Photography

Available satellite and aerial photography can be used to as an aid when communicating with the vehicles on the ground.



## Integrate With Other NaviGate Modules

You can use NaviGate AVL together with other NaviGate modules for functions such as Buffering, Underground Locate, or Outage and Trouble Call Visualization.



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