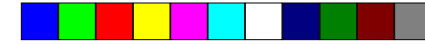


SPEEDING RESPONSE

SAVING LIVES



**Automatic
Vehicle Location
Capabilities for
Emergency
Services**



Bringing Emergency Vehicles to Incidents Quickly and Efficiently

"We know where all our emergency service units are at any given time. The system does not assume a truck is sitting in the fire station, but it actually dispatches the nearest truck based on where the trucks are at the time of the call."

—Jim Arbagey, Fire Division Chief, Deployment Services, Phoenix Fire Department

Automatic Vehicle Location (AVL) systems relay the positions of emergency vehicles to a central location, allowing dispatchers to:

- Quickly find the closest available unit to respond to a call
- View all vehicles as they travel emergency routes and evaluate the route's efficiency
- Adjust directions to accommodate traffic conditions

Automatic Vehicle Location Has Many Possible Applications To Benefit Emergency Vehicles and their Dispatchers

Combining automatic vehicle location systems with technologies for displaying information, automating routing, and communicating between dispatch and the vehicles, greatly expands the uses of the system for all users.

Depending on presently available resources, installing a working automatic vehicle location system can be as sophisticated as installing a complete computer-aided dispatch system with geographic information system software. It can also be as basic as purchasing individual transponders for each vehicle, which can then be used as components to an existing system, possibly owned by other public agencies.

With Automatic Vehicle Location, Emergency Responders Reach Precise Locations Despite Challenging Conditions

Automatic vehicle location uses global positioning systems to pinpoint the precise location of emergency vehicles. This satellite based technology provides real-time location, latitude and longitude coordinates, and direction of traveling vehicles.

"A trooper—just three days after having the AVL system installed in his vehicle—used it to give coordinates to an Airlife helicopter. The coordinates helped reduce the time of arrival at the scene of a major accident by about six minutes."

—Jim Stewart, Sergeant, Texas Highway Patrol



An automatic vehicle location system also helped the Red Cross reach victims after a tornado devastated Jarrell, Texas, in June 1998.

"We knew where the community was, but all the street signs had been blown down. Without our AVL tracking system, we might never have found them."

—George Snell, Director of Disaster Services for the San Antonio Area Red Cross

Automatic Vehicle Location Maximizes Emergency Resources and Response

With the increased coordination automatic vehicle location provides, emergency agencies are:

- Expanding their service area and setting up links with other agencies
- Increasing operating efficiency of existing vehicles and staff
- Quickly addressing and resolving emergency situations

"AVL in our Highway Helper trucks is an invaluable enhancement to the two-way radio we use. From the dispatcher perspective it makes our job much easier. When we are alerted to a problem, we can see where the trucks are and send the closest one to help."

—Melanie Braun, Traveler Information Supervisor, Minnesota Department of Transportation

Because automatic vehicle location enables dispatchers to track the location of vehicles with greater accuracy, they can more effectively coordinate emergency efforts with other agencies.

"With the old system, you could park a fire truck across the street from an incident and a truck from a fire station two miles away would be sent to respond. We didn't have the technology to know there was a truck across the street."

—Jim Arbagey, Fire Division Chief, Deployment Services, Phoenix Fire Department

Delivering Faster Response and Optimizing Resources

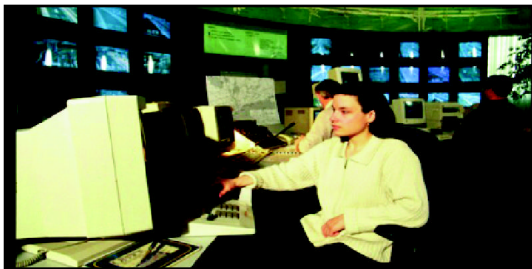


Automatic Vehicle Location Accommodates a Range of Emergency Situations

With automatic vehicle location, sending assistance to resolve a variety of crises, from medical emergencies and man-made disasters to hazardous weather conditions, is occurring with increased accuracy and speed.

"When a state trooper reports an icy area, dispatch can locate the maintenance trucks working the area via AVL and directly contact the truck that is best positioned to provide service. At the same time they are arranging this service, they are communicating those arrangements to the trooper. This has improved response time to incidents, and in many cases, maintenance forces are able to be proactive rather than reactive, servicing the areas before accidents happen. Being proactive has reduced accidents, improving both safety and efficiency overall."

—Richard Maddern, ITS Coordinator,
Minnesota Department of Transportation



"When looking at the benefits of AVL technology, cost is certainly a factor, and we are certainly concerned about it, but our real measure of benefits is what it means to the citizens of Dallas."

—Ron Kirk, Mayor of Dallas

"The highest rate of return for an investment is when lives are saved. We know our AVL and vehicle preemption systems have saved lives."

—John Nelson, Phoenix City Councilman

Automatic Vehicle Location Collects Data for Policy Decision Making

Information from automatic vehicle location systems, when combined with computer-aided dispatch software, can provide a rich source of data for analyzing emergency vehicle operations and evaluating agency performance.

"The capabilities of AVL are extensive. We have a wonderful visual reference for our dispatch, and hopefully, in the future, we can use it for more things. Our city council is progressive and has consistently supported upgrades in our communications systems."
—Captain Cliff Johnson, Technical Services Division Commander, Schaumburg, IL Police Department

Officials need to see that equipping emergency vehicles with cutting edge communications systems is critical for saving lives.

"Demonstrating AVL systems in emergency vehicles shows city officials how the benefits of the system's adaptability and its ability to save lives far outweigh the initial costs."
—Jim Arbagey, Fire Division Chief, Deployment Services, Phoenix Fire Department

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