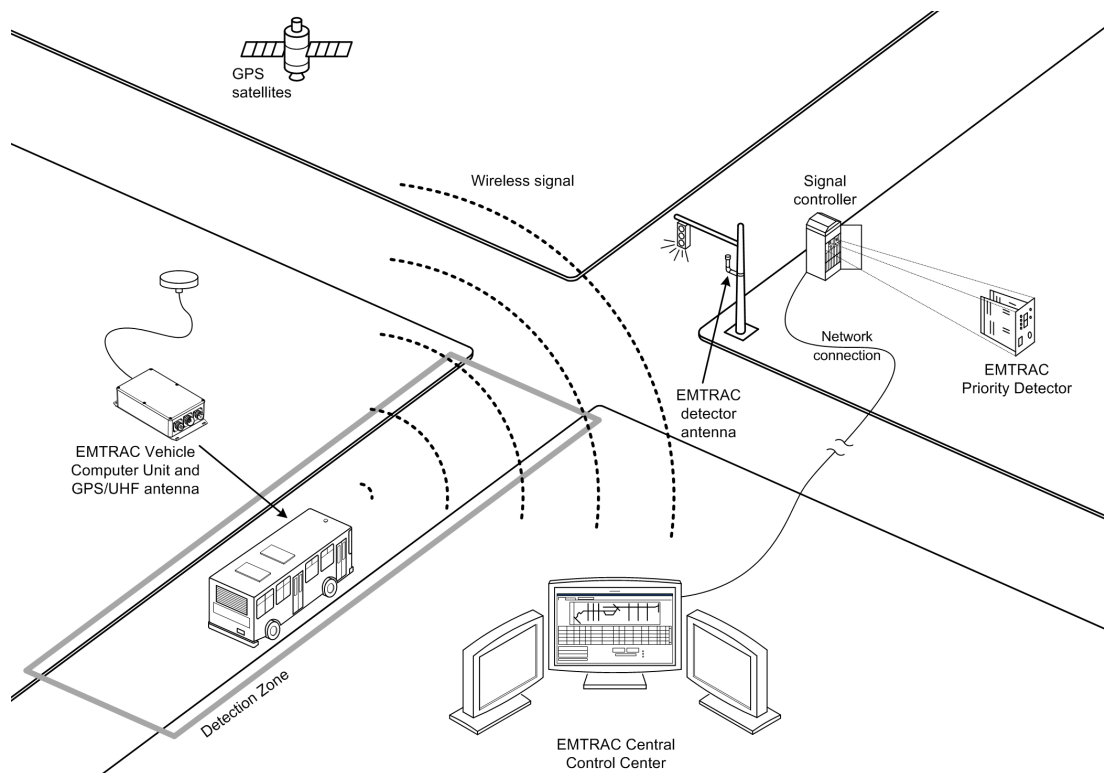


EMTRAC Central Monitoring System



The EMTRAC Central Monitoring system enables transit, first-response, and personnel to remotely monitor vehicle activity and progress in real time, while also enabling vehicles to request signal priority for quick passage through intersections.



EMTRAC Central Monitoring System

The EMTRAC system utilizes reliable GPS technology and secure frequency-hopping spread spectrum radio to enable transit and emergency vehicles to report location, schedule, and safety information to central locations—while also decreasing travel delays.

As EMTRAC-equipped vehicles travel throughout cities and regions, they transmit data to Priority Detectors in signal-control cabinets. This data is sent through the network to report the vehicle's location, schedule and route information, and safety alerts. Equipped vehicles are also able to perform a number of controls, such as requesting signal priority for upcoming intersections.

The EMTRAC detection zones require no buried loops or costly switches to install or maintain. The EMTRAC system is also completely automatic and requires no driver interaction.

Central Control Center Features

In addition to running the basic EMTRAC system, EMTRAC Central Control Center offers the ability for a single workstation to do the following things:

- Map display of city streets, showing location and activity for multiple equipped vehicles.
- Ability to monitor vehicle "events" by user-definable types. For example, when used to monitor light rail activity, the system can be set up to log stop-bar overruns.
- Audible and pop-up alarms to notify control center personnel of critical events (such as a light rail vehicle on the wrong tracks).
- Automatically generate user-definable reports, which can be automatically archived and/or emailed daily, weekly, or monthly.
- Verify proper system functionality by monitoring signal controller responses to priority requests.
- Remotely check EMTRAC system diagnostics to verify proper functionality.
- Detect and confirm proper rail crossing-gate closure. If a gate fails to close, an alarm is sent to the control center and vehicle driver, and automatic braking can occur if desired.



Benefits of EMTRAC

- **Ease of Monitoring:** Know where equipped vehicles are in real time.
- **Low-Maintenance:** GPS-based system requires no in-ground loops or costly switches.
- **Reporting:** Generate detailed status and activity reports, as well as connectivity reports.
- **Safety:** Alert monitoring personnel about potentially unsafe vehicle activity in real time.
- **Flexibility:** Customize detection zones and necessary parameters to transmit desired vehicle activity data.
- **Timeliness:** Improve schedule adherence and emergency response times by requesting signal priority when agency-specified conditions are met.
- **Security:** Frequency-Hopping Spread Spectrum radio signal has superior range and utilizes AES encryption.
- **Accuracy:** Monitor vehicle activity with precise location data.

