

Cloud-Based Signal Management



The EMTRAC system enables smart cities to take full advantage of cloud technology for trafficsignal management and vehicle-priority control. Any number of conditional factors may be evaluated before granting signal priority—the end result being *effective* and *efficient* signaling.

The EMTRAC system utilizes precise GNSS technology and secure wireless communication to provide reliable, safe, and efficient signal priority. The EMTRAC system has led the way for over 30 years—and it continues to lead the way with cloud-based centralized control.

EMTRAC Advantages



Communications Reliability

Data hosting is only part of the equation. EMTRAC interfaces with transit and traffic systems utilizing industry communications standards.



Conditional Signal Priority

Factor any number of conditional variables into whether signal priority should be granted.



Centralized Control

Base decisions on the most complete information available—while reducing communications traffic.



Data Analytics

Recognize performance trends and identify needed improvements through detailed activity displays.



Flexible Integration

From fully centralized priority control to a hybrid integration with third-party services, the EMTRAC system informs smart cities small and large.



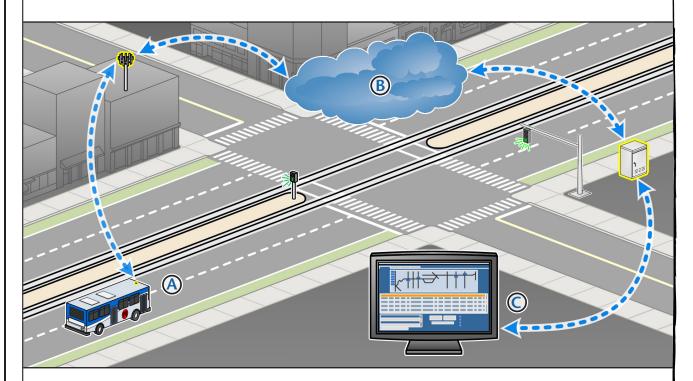
Accuracy

Vehicle units offer the most precise GNSS positioning available, as well as dead reckoning for areas without satellite availability.

emtracsystems.com

About EMTRAC

The EMTRAC system utilizes precise GNSS technology and secure cellular communications to enable smart cities to take full advantage of cloud technology for traffic-signal management and priority control. The EMTRAC system has provided reliable, safe, and efficient signal priority for over 30 years—and it continues to lead the way with cloud-based centralized control.



The EMTRAC Process

- **A)** EMTRAC-equipped vehicles transmit vehicle data and other relevant data (such as conditional states) to the cloud.
- **B)** By evaluating any number of real-time inputs, EMTRAC cloud services determine whether signal priority should be requested and sends requests to the appropriate controllers via NTCIP.
- C) Workstations at the traffic management center provide a map display of current and historic activity—and enable access to other EMTRAC service modules, such as data analytics.

All data is encrypted, both in transit and at rest, and access control is as secure as on-premise storage. Data may be stored in any number of secure data centers to ensure accessibility at all times.

Most importantly, EMTRAC system capabilities are proven every day in cities across the globe.



Arrive on time

Arrive safely



emtracsystems.com