

Priority

Dynamic Signal Control for Critical Fleets

Centrac's® Priority provides dynamic signal control for transit and emergency vehicles and does not require any in-cabinet hardware. Centrac's Priority features intelligent ETA-based signal priority without the need for complex, integration-heavy CAD implementations, dramatically reducing hardware and maintenance costs when compared to traditional systems.

In addition to existing support for most major CAD AVL systems, Centrac's Priority offers a lightweight option that only requires vehicle location as well as destination for emergency vehicles and stops and schedule for transit. This service features a dynamic routing engine that uses vehicle position and artificial intelligence to continually re-evaluate the route and controller calls to ensure optimal response times and minimal road network disruption. This results in significantly improved efficiency, emergency response times, and transit on-time performance. In addition, regular vehicular traffic is far less impacted through the ability to use ETAs that are three steps ahead, planning signal timing for vehicle arrivals well in advance of each intersection.

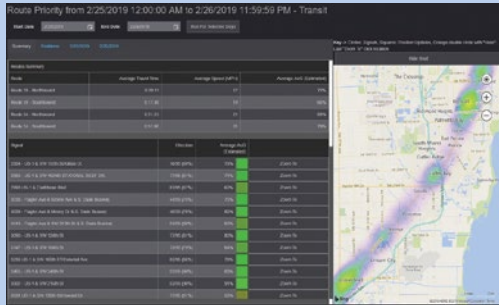
Key Features

- Real-time visualization of vehicle and signal status, including active priority requests, routes, and ETAs
- Priority Service Dashboard with support for advanced performance metrics and events
- Ability to configure custom triggers and alerts based on various events
- Tailored service for 10 different vehicle classes
- Deployment flexibility
 - No cabinet hardware required
 - Options for fully CAD-integrated or CAD-less vehicle integration

Centracs Priority: Key features and capabilities

Key Features

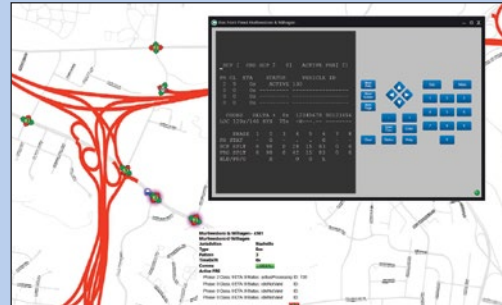
- Integration with GTFS including GTFS Schedule, GTFS Real-time, and any implemented GTFS Extensions
- Synchronization of schedules and position feeds with live feedback on schedule and headway adherence
- Near-side stop request cancellation support
- AI-enabled dwell time prediction for more accurate ETAs (Coming later this year)



Priority Route Performance Report

Key Capabilities

- Dynamic routing engine leveraging (AI) to re-calculate routes and ETAs on-the-fly
- Split adjustments without breaking coordination
- Support for multiple emergency vehicles assigned to the same incident to prevent conflicts
- Pre-flushes standing queues in advance of vehicle arrival



Status Map with Remote Front Panel

Transit Signal Priority

Our Transit Signal Priority (TSP) system is the solution for transit agencies seeking to elevate their operations. Our solution offers robust integrations with GTFS as well as in-vehicle hardware, ensuring that real-time data informs every decision for precise schedule management. With our software, transit vehicles communicate seamlessly with traffic infrastructure to maintain consistent headways and on-time performance. The result is a smarter system that renders obsolete the need for legacy TSP check-ins, as it dynamically manages vehicle ETAs and harmonizes with traffic controllers for efficient transit flow.

Our solution gives agencies the ability to meet various transit objectives, from maintaining tight schedules to expediting bus rapid transit, all while enhancing the commuting experience without impeding urban traffic.

Emergency Vehicle Preemption

Ensure swift emergency response with our Emergency Vehicle Preemption (EVP) system, engineered to streamline traffic flow, improve response times for emergency services, and to enhance safety for responders and the public. This innovative solution boasts a dynamic routing engine, using artificial intelligence to recalibrate routes and ETAs instantly, guaranteeing that emergency vehicles navigate through traffic with maximum efficiency and safety. It manages the coordination of multiple emergency units assigned to a single incident, eliminating the risk of route conflicts.

Additionally, it skillfully clears traffic build-up ahead of an emergency vehicle's arrival. By utilizing intelligent, ETA-informed preemptions selectively, our EVP system ensures that interventions are as non-disruptive as possible, facilitating rapid emergency response without unnecessary traffic disturbances. Adopt our system to enhance the operational speed and safety of your emergency services.