

Access Systemwide Traffic Signal Insights Without Investing in Equipment

Signal Analytics helps transportation agencies assess and improve traffic signal performance throughout the entire network without the need for costly physical equipment or manual data collection.

Poorly timed signals impact everything from urban congestion to air pollution and even safety. Traditional approaches are either cost prohibitive or don't provide fresh, fast, or reliable insights systemwide. Traditional attempts to qualify and reduce unnecessary delays at intersections typically require the installation of costly hardware and conducting extensive fieldwork. These efforts only cover a fraction of a city's intersections and even worse, they don't paint a complete picture of all issues and trends that actually exist.

INRIX® Signal Analytics helps transportation professionals better manage systemwide traffic signal performance by working smarter, not harder. This powerful cloud-based analytics application uses crowd sourced connected vehicle waypoint data to help transportation professionals assess and improve their signalized intersection and corridor performance. Because the data originates from the highest frequency GPS waypoints transmitted to the cloud, Signal Analytics is readily available, scalable, easy-to-use, and extremely cost-effective.

Never before have agency staff been so easily able to identify, rank, and prioritize intersection signal projects to achieve maximum impact on traffic flow, all without leaving their desks and at a fraction of the of the cost of traditional hardware equipment.

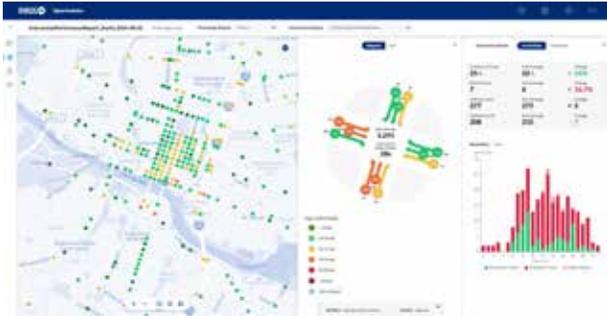
Key Benefits at a Glance

- Continuously monitor every movement in your network without investing in equipment
- Identify performance issues without ever leaving your desk
- Take proactive actions based on deep analysis and reliable performance trends
- Make a positive impact on people's lives with better traffic flow, improved air quality, and safer intersections

Use Cases

- Identify where signal retiming needs are most urgent
- Rank intersections by their chosen performance metric to prioritize traffic signal projects most effectively
- Get insights to guide prioritization of signal investments
- Quantify the impact of traffic signal management strategies
- A quick and accurate way to test new signal strategies
- Adopting TSMO strategies for traffic signals
- Understand the reliability and performance of a corridor at various times

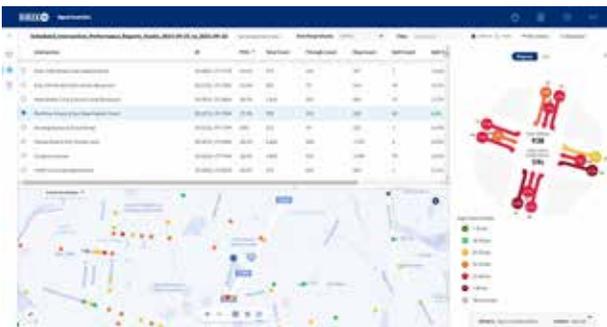
Make your transportation network as efficient as possible with INRIX Signal Analytics



Reveal detailed metrics at the movement level for each intersection.

Continuously monitor every movement in your network without investing in equipment

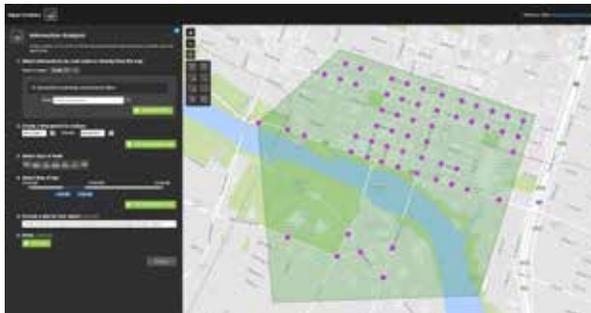
Signal Analytics creates a virtual infrastructure by continuously collecting connected car data throughout the entire network and making it available in an easy-to-use application which everyone from traffic engineers to maintenance technicians can use to make data driven decisions.



Rank intersection by performance level and visualize significant delays.

Identify performance issues without ever leaving your desk

By transforming trillions of data points into detailed and transparent metrics and trends, Signal Analytics helps agencies quickly answer almost any intersection and corridor related question so they can effectively prioritize traffic signal projects throughout their entire network and make meaningful improvements.



Perform custom reports with the Intersection Analysis Module, powered by CATT Lab.

Take proactive actions based on deep analysis and reliable performance trends

Whether you need to reduce excessive delays for just a few signals or improve performance throughout your entire network, Signal Analytics provides functional summaries, detailed reports, and data visualizations at the flip of a switch so you can immediately take action and not wait for residents to complain.



Identify opportunities to improve traffic flow at a glance and easily measure results.

Make a positive impact on people's lives

Poorly timed traffic signals often lead to longer commutes, increased energy use and air pollution, and more crashes. Signal Analytics provides a cost-effective way for agencies to assess and improve traffic signal performance systemwide so they can significantly improve traffic flow, reduce greenhouse gas emissions, and create safer intersections.

Key Features and Metrics

Signal Analytics provides agencies with the powerful insights they need to identify and solve performance issues at scale in a cost-effective way.

Key Metrics

Delay: Location Analytics comes pre-loaded with highly precise and relevant POIs that can be searched and filtered by type, location, etc. and you can even import your own locations.

Level of service: Unlike other offerings that are limited to only giving you data linked to proprietary POIs, we let you specify the exact geographic boundaries you want data from with an easy-to-use drawing tool to cover a wide variety of uses cases.

Split Failures: Visitors are matched to the area they came from (Census Block Group). This makes it easy to understand where visitors come from for each location, as well as to match visits to demographics data such as income level, age, ethnicities, etc.

Arrival on Green: The percent of vehicles without a stop recorded at the intersection.

Turning Movements: Get details on how many vehicles stopped and started inside the location boundary, how many went through, where they came from, and where they went. See the typical hour-by-hour speeds for road segments at and around a location, even down to minor roads.

Travel Time: Drive time polygons predict distance in minutes rather than miles, helping retailers determine the accessibility of store locations. Analyze drive times by day of week, time of day, and length of journey.

Approach Speed: Access anonymized mobile location intelligence data to better understand who your customers are, where they come from, and when they are visiting the most.

Intersection Analysis Module: Powered by CATT Lab, this module allows you to dig deeper with a custom inspection of an intersection.

Key Features

Corridor Metrics: Understand and analyze the reliability and performance of defined corridors at various times of the day. Signal Analytics makes it easy to define the beginning and end of corridors you are interested in.

Self-Serve: Easily identify and select the intersections and corridors you would like to display within Signal Analytics using an interactive map.

Daily Reports: Customizable daily generated reports provide details on the subscribed intersections & corridors, highlighting key metrics, problems, and trends along with visual infographics.

Interactive Dashboard: Easy-to-use dashboard includes every metric needed to understand intersection performance, including control delay, split failures, turn ratio, volume, and more.

Virtual Infrastructure: Massive amounts of anonymous connected vehicles enables granular insights without relying on expensive hardware or fieldwork.

Easy -To-Use: Signal Analytics is an intuitive and easy to use cloud-based application. No additional IT resources and no data scientists are needed to gain insights.



We are using Signal Analytics to quantitatively verify the extent of existing issues and the degree of improvement/benefit once we make changes and adjustments.

Lance Ballard, Traffic Engineer, Kimley-Horn

Data You Can Trust: Signal Analytics uses over 130 million vehicle intersection crossings per week covering approximately 240,000 intersections (and growing) currently in the database to provide granular insights and leverages detector-based signal analytics platforms to validate and improve the parameters.

- GPS point data used in Signal Analytics is updated every 5 seconds or less
- Results are generated at 15-minute granularity at intersection, approach, movement, and corridor level
- Complete detail and transparency of metrics and trends are provided within Signal Analytics

INRIX enables smarter mobility by empowering cities, people, and businesses with the best data, tools, and insights to make movement smarter, safer, and faster. As a leader in mobility data and location intelligence for more than 15 years and trusted by the site selection industry, INRIX helps world class organizations make calculated decisions every day based on a deep understanding of the world around them. INRIX collects 36B+ mobility data points and makes them available to some of the most innovative public sector agencies, automakers, and businesses so they can deliver better products and services to their customers and constituents.

INRIX is the Largest Mobility & Location Based Platform Globally

- INRIX captures 120M trips per day in the US (1 out of every 7 miles driven in US)
- 145+ global countries that data is sourced from
- 36B+ real-time data points collected each day, 25M+ every minute
- 2T+ KM of vehicle trip data representing 35B+ driving hours
- 15+ years of historical data in proprietary database

[Learn more about INRIX Signal Analytics @ INRIX.com/products/signal-analytics/](https://www.inrix.com/products/signal-analytics/)