

The logo for INRIX Signal Analytics. 'INRIX' is in a large, white, serif font with a horizontal line above it. Below it, 'Signal Analytics' is in a white, sans-serif font with a trademark symbol (TM) to the right. The background is a blurred image of green foliage.

INRIX

Signal Analytics™



Access Systemwide Traffic Signal Insights by Adding Virtual Infrastructure

Signal Analytics helps highways authorities 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 to safety. Conventional approaches are either cost prohibitive or don't provide fresh, fast, or reliable insights systemwide. Traditional attempts to qualify and reduce unnecessary delays at junctions typically require the installation of expensive hardware and conducting extensive fieldwork. These efforts usually only cover a fraction of junctions and even worse, they don't paint a complete picture of current issues and trends.

INRIX® Signal Analytics helps highways professionals better manage systemwide traffic signal performance by working smarter, not harder. The powerful cloud-based application uses anonymous connected vehicle data to assess and help improve signalised junctions and corridor performance. Because the data originates from high frequency GPS way-points transmitted to the cloud, Signal Analytics is readily available, scalable, and cost-effective.

Authorities can now easily identify, rank, and prioritise junction signal projects to achieve maximum impact on traffic flow, all without leaving their desks and at a fraction of the cost of conventional approaches.

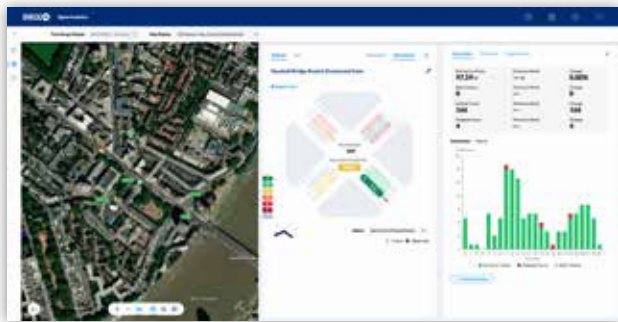
Key Benefits at a Glance

- Continuously monitor every movement in your network with virtual Infrastructure
- Identify performance issues without ever leaving your desk
- Take proactive actions based on deep analysis and reliable performance trends
- Make streets more livable with better traffic flow, improved air quality, and safer junctions

Use Cases

- Identify where signal re-timing needs are most urgent
- Rank junctions by their chosen performance metric to prioritise traffic signal projects most effectively
- Quantify the impact of traffic signal management strategies
- A quick and accurate way to test new signal strategies
- Understand the reliability and performance of a corridor at various times

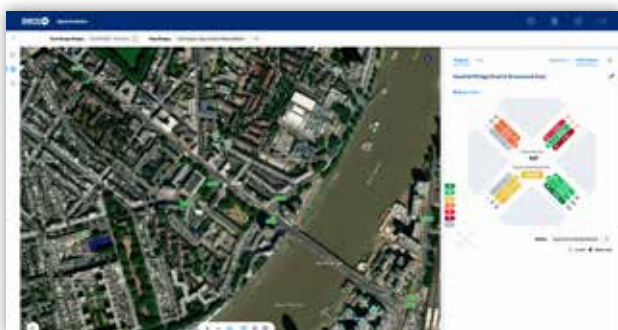
Make Your Highways Network as Efficient as Possible with INRIX Signal Analytics



Signal Analytics display of a junction in London, where important statistics can be visualised.

Continuously monitor every movement in your network without investing in equipment

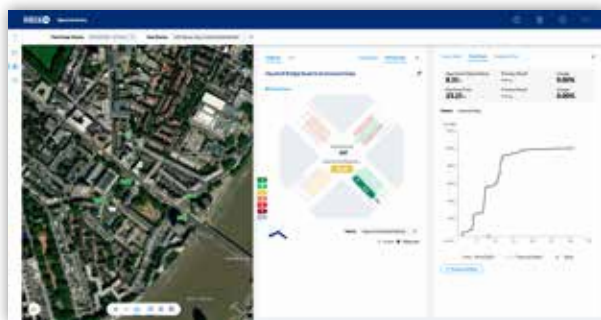
Signal Analytics creates a virtual infrastructure by continuously collecting connected car data across the entire network and provides accurate metrics for every movement and every junction at a fraction of the cost of hardware-based solutions.



Each junction in Signal Analytics can be selected to reveal detailed metrics at the movement level.

Identify performance issues without ever leaving your desk

By transforming trillions of data points into detailed and transparent metrics and trends, Signal Analytics helps to quickly answer almost any junction and corridor related question to prioritise traffic signal projects and make meaningful improvements.



Delay and Level of Service can be visualised for each directional movement.

Take proactive actions based on deep analysis and reliable performance trends

Whether you need to reduce delays for just a few signals or improve performance throughout your entire network, Signal Analytics provides functional summaries, detailed scheduled reports, and data visualisations at the click of a button so you can immediately take action rather than waiting for complaints.



The dashboard view helps understand if the network is improving and where there are potential opportunities to make performance improvements.

Make streets more livable

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 authorities to assess and improve traffic signal performance systemwide so they can significantly improve traffic flow, reduce carbon emissions, and create safer junctions.

Key Metrics and Features

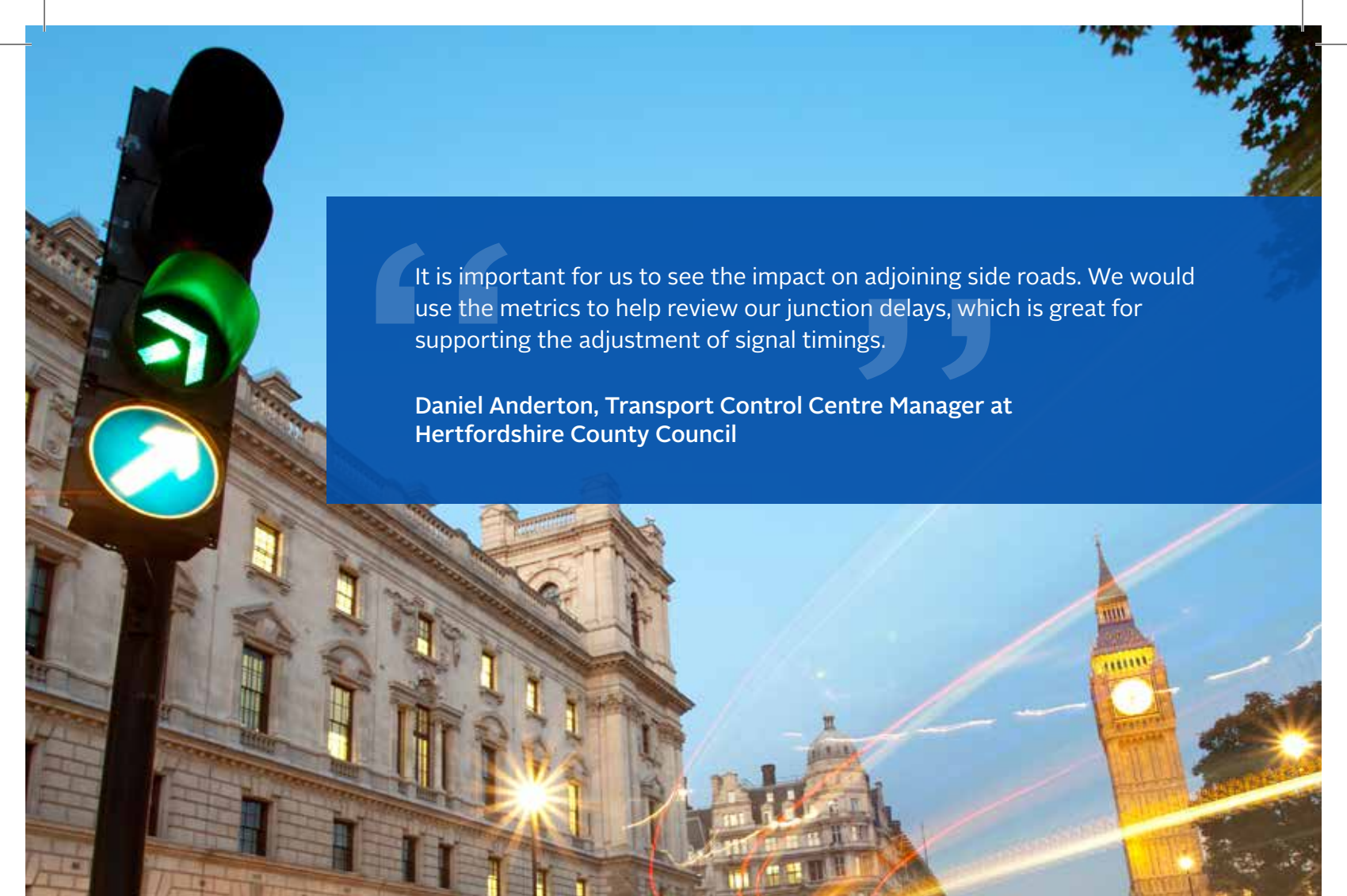
Signal Analytics provides authorities with the powerful insights they need to identify and solve performance issues at scale in a cost-effective way.

Key Metrics

- **Delay:** The extra time required at a junction due to slowing traffic attributed to the signal compared to measured free-flow speeds.
- **Level of service:** A qualitative measure describing operational conditions within a traffic stream, based on average control delay.
- **Turning Movements:** The number of observed vehicles making left or right turns and through movements at the junction for a chosen time period.
- **Travel Time:** The distribution of travel time for each movement at each junction approach.
- **Approach Speed:** The speed distribution of vehicles directly before the junction.

Key Features

- **Junctions Metrics:** Metrics are provided at any junction and measured without the need for physical sensors or complex hardware infrastructure. Run reports to determine when junctions are under performing or before and after reports to determine if a problem was solved.
- **Corridor Metrics:** Understand and analyse the reliability and performance of 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 junctions and corridors using an interactive map.
- **Scheduled Reports:** Weekly and monthly scheduled reports provide details on the subscribed junctions & corridors, highlighting key metrics, problems, and trends along with visual infographics.
- **Interactive Dashboard:** Easy-to-use dashboard includes every metric needed to understand junction performance, including control delay, turn ratio, volume, and more.
- **Virtual Infrastructure:** Massive amounts of anonymous vehicles data enables granular insights without relying on expensive hardware or fieldwork.
- **Easy -To-Use:** An intuitive and easy-to-use cloud-based application that doesn't require IT resources or data scientists to gain insights.



“It is important for us to see the impact on adjoining side roads. We would use the metrics to help review our junction delays, which is great for supporting the adjustment of signal timings.”

Daniel Anderton, Transport Control Centre Manager at Hertfordshire County Council

Data You Can Trust: Signal Analytics uses over 70 million vehicle junction crossings per week covering approximately 240,000 junctions (and growing) to provide granular insights and leverages detector-based signal analytics platforms to validate and improve the parameters.

- High frequency GPS point data is used in Signal Analytics
- Results are generated at 15-minutes granularity at junction, approach, movement, and corridor level
- Complete detail and transparency of metrics and trends are provided

INRIX enables smarter mobility by empowering streets, 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, INRIX helps world class organisations make calculated decisions about the world around them. INRIX turns 36B+ mobility data points into insights for some of the most innovative public sector authorities, automakers, and businesses so they can deliver better products and services to their customers and constituents.

INRIX is a Leading Mobility & Location Based Platform Globally

- Insights are sourced from 145+ countries
- 36B+ real-time data points collected each day, 25M+ every minute
- 2T+ KM of vehicle trip data representing 35B+ driving hours

Learn more @ [INRIX.com/signals](https://www.inrix.com/signals)

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