

# Give smarter roads the green light.

What if your traffic signals could improve traffic flow?



As of 2015, the annual cost of congestion is approximately \$160B<sup>1</sup> from time lost, vehicle emissions and wasted fuel. This is a result of aging infrastructure, insufficient data and lack of communications to signals to understand the flow of traffic.

Communities are concerned about sustainability, air quality and uncongested roads as factors in attracting top businesses and improving livability for constituents. Retailers want to encourage easy accessibility to shopping centers. Entertainment venues, campuses and stadiums all want to make it easier to get to and from events for a positive visitor experience.

Verizon Intelligent Traffic Management provides tools and analytics to help you see into your road and traffic infrastructure in near real time to aid in optimizing signal timing and improving traffic flows. With this turnkey, end-to-end solution, small sensors are embedded and installed at various points along roadways. These sensors communicate wirelessly to software residing in a secure cloud environment. Customers will access aggregated performance metrics such as speed, travel times, vehicle/bicycle

counts, volume/capacity, turns and red light violations, among other valuable traffic statistics. This information will help municipalities and other transportation planning organizations effectively manage the flow of traffic.

## Near real-time awareness

Often, traffic data is collected manually or studies are performed during a limited window of time. The problem with this methodology is, as anomalies develop or trends change, they are not captured, making the information less accurate over time.

Our turnkey service includes all the necessary equipment, design, installation, operation and maintenance. In addition to increased road safety and reduction in delays, this service provides performance measurements for major corridors on a 24/7 basis, including travel times, system counts, turn movements and more.

Agencies use this cloud-based data for traveler information, planning, before/after measures and MAP-21 reporting, among other uses. Agencies can also export data for their own models, or for sharing data with other platforms, other agencies or the public.

Depending on your needs, we can design and scale the solution to provide information from basic to complex, including:

- Travel time and intersection delays
- Volume and occupancy
- Suite of safety and arterial performance measures



## Intelligent Traffic Management drives results:<sup>2</sup>

- 20% less travel time
- 25% faster speeds
- 15% fuel savings
- 41% reduction in signal delay
- 44% fewer stops

### Challenge

A city needs to improve traffic flow along a corridor adjacent to a major interstate highway.

### Customer strategy

Integrated Corridor Management employs high-resolution traffic analytics to help alleviate congestion on both the interstate and the signalized arterial. This can improve travel times and the number of stops on both roadways.

### Our IoT solution

We're providing the solution for a 2016 pilot:

- Verizon-equipped intersections collect high-resolution traffic data.
- Traffic analytics measure against known performance metrics.
- Continuous, near real-time data analytics can help optimize signal timing.
- Our goal is to help reduce congestion and improve travel times.

**Greater efficiencies**

Unlike most traffic solutions that are premises based and costly to maintain, Verizon offers a cloud-based, software-as-a-service alternative that reduces the barriers to change. By removing the headaches of supporting expensive servers, Verizon enables you to focus on your core competencies.

Wireless connectivity is also a convenient way to address the challenges of the aging copper infrastructure associated with many traffic networks. At a fraction of the cost of fiber, cellular communications provides reliable visibility into your operations. So you can know how your system is performing in continuous, near real time.

Our end-to-end solution is fully monitored, to identify problems immediately, helping you save valuable time, improving system performance and uptime.

**Solution advantages:**

- Fewer truck rolls
- Maintenance and support included
- Reliable wireless connectivity
- Flexible pricing

**Solution benefits:**

- Shorter commutes
- Fewer stops and starts
- Increased driving speeds

**The road to smart cities**

Intelligent Traffic Management is part of the Verizon Smart Cities Internet of Things (IoT) portfolio. Our innovative approach is changing the way traffic solutions are delivered. The Verizon solution provides near real-time performance data to help keep traffic flowing smoothly. We give customers a hassle-free, state-of-the-art solution that helps control costs.

**At a fraction of the cost of fiber, cellular communications provide reliable visibility into your operations. So you can know how your system is performing in continuous, near real time.**

**Sustainability**

Intelligent Traffic Management is a tool to aid in signal optimization, which can have a tremendous impact on:

- Congestion mitigation
- Air quality
- Idle times and fuel economy
- Stops and delays

**Why Verizon**

When it comes to traffic infrastructure, the network matters. We offer America's largest, most reliable 4G LTE network. Our testers drive a million miles a year to make sure your service is working as well as possible. Nearly all of our towers have backup generators to keep them working during blackouts. Because reliability means you can depend on us whenever you need us.

And we don't stop there. We work with industry experts to provide revolutionary devices, applications and enterprise-grade cloud technologies. Our expertise in connected technologies has helped form the Internet of Things.

Ninety-eight percent of the Fortune 500 rely on our services and technologies. And we're the number one communications and wireless service provider to the public sector. More coverage, fast speeds and strong connections. So you can protect what's important, with help from a trusted partner: Verizon.



**Contact Verizon.**

To learn more about Verizon Intelligent Traffic, please contact your Verizon account team. Or visit [VerizonEnterprise.com/itm](http://VerizonEnterprise.com/itm)

1 David Schrank, et al, 2015 Urban Mobility Scorecard, Texas A&M Transportation Institute and INRIX, Aug. 2015.  
 2 Sensys Networks Case Study, Associated Press. Feb. 2013. [http://ibttta.org/sites/default/files/documents/MAF/CSG%20Sean%20Stone%20CR\\_Tolling.pdf](http://ibttta.org/sites/default/files/documents/MAF/CSG%20Sean%20Stone%20CR_Tolling.pdf)  
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