# PARSONS OVERVIEW

Parsons (NYSE: PSN) is a leading technology firm driving the future of defense, intelligence, and critical infrastructure. By combining unique technologies with deep domain expertise across cybersecurity, missile defense, space, connected infrastructure, and smart cities. we're providing tomorrow's solutions today. For more about Parsons, our 16,000 employees, and our iconic projects across the globe, visit us at parsons.com and follow us on social media.

# **OUR SMART MOBILITY** CAPABILITIES

We've not only imagined the future of transportation—we've realized it. Parsons is a leader in providing advanced traffic management systems (ATMS) and other smart mobility solutions for our customers, with over 100 cutting-edge global deployments. Our systems have connected over 63,000 devices, including more than 12,000 traffic signals, that monitor, manage, and control the efficiency and safety of intersections.



Smart Mobility Projects And Deployments



**PARSONS** 

#### LEARN MORE ABOUT **PARSONS INTELLIGENT INTERSECTIONS**

parsons.com/smart-cities-challenge

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# A LOT CAN CHANGE IN FIVE YEARS ...

Population growth leads to urbanization-new offices and residential hubs, new transit and roads, and new malls and retail developments. But all this growth can strain a city's traffic network.

Congestion problems are frustrating, but what can be done without the information necessary to evaluate and prioritize problem intersections? In many cases, signals may have been retimed just a couple years ago, and there isn't a budget to do it again anytime soon.



#### **The Costs Of Congestion**



6.3 billion hours lost to congestion

each year1



# 30 million

tons of greenhouse gases due to idling each year<sup>2</sup>



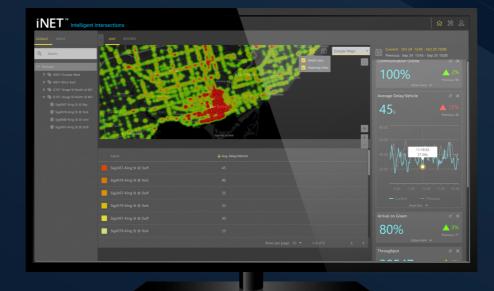
#### \$88 billion

dollars of productivity lost to congestion each year1

# VISUALIZE THE DATA

Unlock insights from data that's already being collected. Our Intelligent Intersections solution takes data from the signal controller unit and from local sensors to provide a dashboard that allows you to identify hotspot priorities and drill down to Automated Traffic Signal Performance Measures (ATSPM) to make more effective decisions.

#### **Automated Traffic Signal Performance Measures**



#### **ATSPM Metrics**

- Approach Delay
- ✓ Approach Speed
- ✓ Approach Volume
- Arrivals On Red And Green
- Pedestrian Delay
- ✓ Phase Termination

- Preemption Details
- ✓ Purdue Coordination
- Split Failure
- Split Monitor
- ✓ Turning Movement Counts
- Yellow And Red Actuations

## Signal Availability

- ✓ Alarms
- Clock Drift
- Communication Failure
- ✓ Flash And Free Mode
- ✓ Not On Local Schedule
- Offset Transition

## **How Better Intersections Help**



15-40%

DATA AND

**SENSORS** 

reduction in traffic delay from updated signal timing<sup>3</sup>



A BRILLIANTLY SIMPLE SOLUTION

staff to assess and maximize the benefits of these signal retimings.

Our Intelligent Intersections solution automates signal retiming by applying our proprietary

algorithms to existing timing plans and GPS traffic data. What used to be a labor-intensive

efficiency allows cities to retime signals with greater frequency as traffic conditions evolve

**IN-CLOUD ANALYSIS** 

-quarterly or annually-instead of every five years. Our visualizations further enable city

process is now a seamless exercise that can be completed in minutes. This kind of

#### 4.9 billion

estimated reduction of tons of greenhouse gases each year due to better signal timing



\$27 billion

**RETIMED** 

SIGNALS

estimated reduction in dollars of productivity lost to congestion each year

Source: 1 Inrix / 2 Department of Energy / 3 FHWA