

Products of Vendors

Vendors

- NoTraffic
- Miovision
- Rhythm Engineering
- Flir
- Wavetronix
- Iteris
- ARGOS Vision
- Econolite
- Gridsmart
- Rapid Flow - Surtrac
- Kimley Horn – Kadence
- TransCore – ACDSS

NoTraffic

- NoTraffic is a traffic management platform that optimizes traffic lights' timing based on smart sensors in real time.
- NoTraffic prepares the road infrastructure for the connected and autonomous era.
- NoTraffic is on a mission to digitize the backbone of transportation.
-

About NoTraffic

- The NoTraffic platform is an end-to-end hardware and software solution installed at intersections, transforming roadways to support modern demands.
- The platform can retrofit any intersection around the world and transform it to be a cloud-connected and fully autonomous in less than 2 hours.
- The platform is delivered as a managed service with 24/7/365 monitoring and support.

NoTraffic

The screenshot shows the NoTraffic platform's user interface. On the left is a dark sidebar with navigation links: Dashboard, Intersections, Units, Corridor Analytics, Policies (selected), Intersection, Corridor, and Intersection logs. The main area has a map of a city grid with various street names like Henry St, Madison St, Grand St, and Water St. Overlaid on the map is a light blue rectangular area representing a selected region. The central part of the screen displays an "Intersection Policy Name" section with a "TURN POLICY ON/OFF" toggle switch. Below it are eight policy cards: PEDESTRIAN, PASSENGER VEHICLE (with a toggle switch), BUS, HEAVY TRUCK, MOTORCYCLE, BICYCLE, GARBAGE TRUCK, and CUSTOMIZE ROAD USER. Each card includes a small icon and a horizontal slider bar.

Virtual management center (VMC)

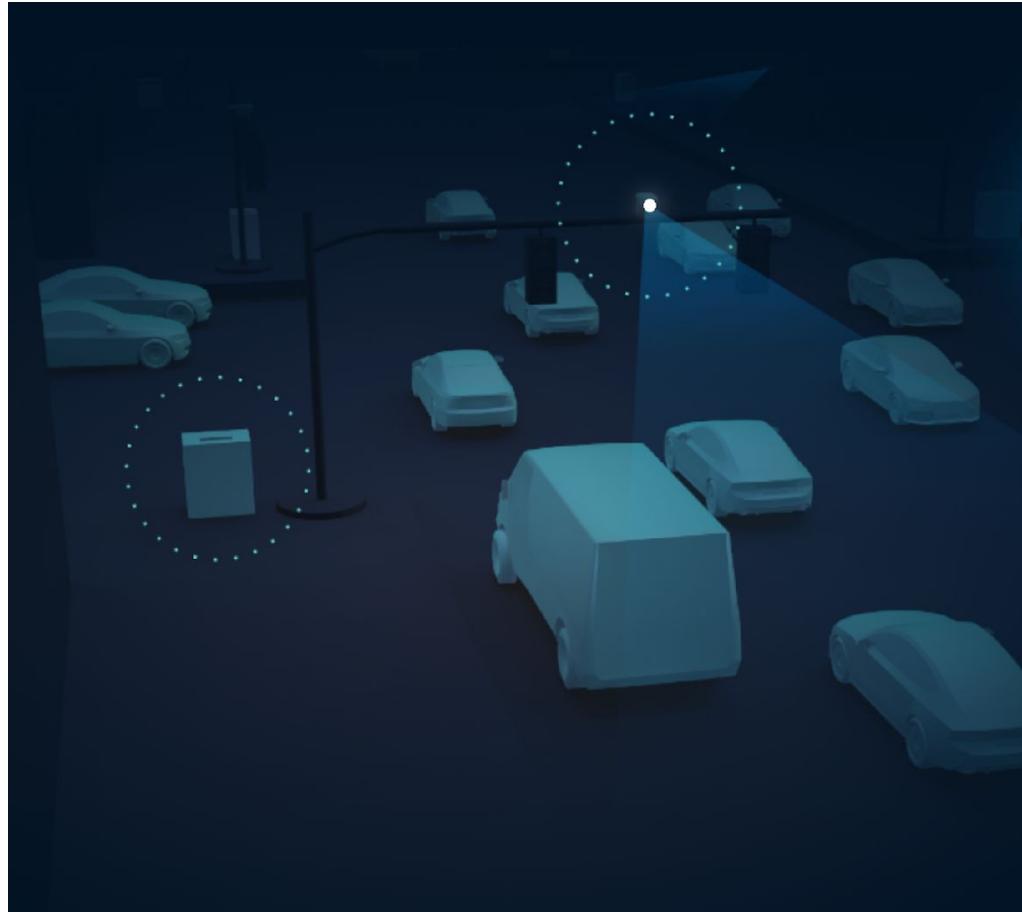
Cities define transportation policies which are implemented through the platform on both local intersection and city grid scales.

NoTraffic

OPTIMIZATION AT CITY-GRID LEVEL

-  Plug & Play AI sensors provide human-eye-level measurement of approaching road users.
-  Essential data of all road users is streamed to the cloud in real-time for additional processing.
-  The platform then operates autonomously to reduce delay time by optimizing traffic signals at the city grid level.

NoTraffic Sensor



PLUG & PLAY AI SENSORS PROVIDE A HUMAN-EYE-LEVEL MEASUREMENT OF ALL APPROACHING ROAD USERS

PLUG & PLAY IOT SENSOR

Installed at each intersection approach to provide road-user detection and classification via a fusion of machine vision and radar.

Users are classified at a human-eye level on the edge (bikes, pedestrians, trucks, buses, cars, emergency vehicles, etc.). Anonymized processed data is streamed to the cloud for city-grid coordination.

Connected vehicle capabilities (DSRC and C-V2X) are integrated directly into the sensor units.

CONTROL UNIT

Installed in the traffic light cabinet and retrofitting all types of existing traffic controllers.

The AI optimization engine aggregates sensor data from each approach, calculates optimization variables, and monitors safety.

The AI optimization engine also acts as a gateway to cloud-based data analytics software and the user portal.

NoTraffic

PLATFORM KEY FEATURES



CYBER-SECURED



PEDESTRIAN
/BICYCLE
PRIORITY



FUTURE PROOF:
V2X ENABLER



EMERGENCY
VEHICLE



PREEMPTION
(EVP)



TRANSIT SIGNAL
PRIORITY (TSP)



RED LIGHT
EXTENSION (RLE)

Future of Mobility (Digitizing Infrastructure)

Benefits

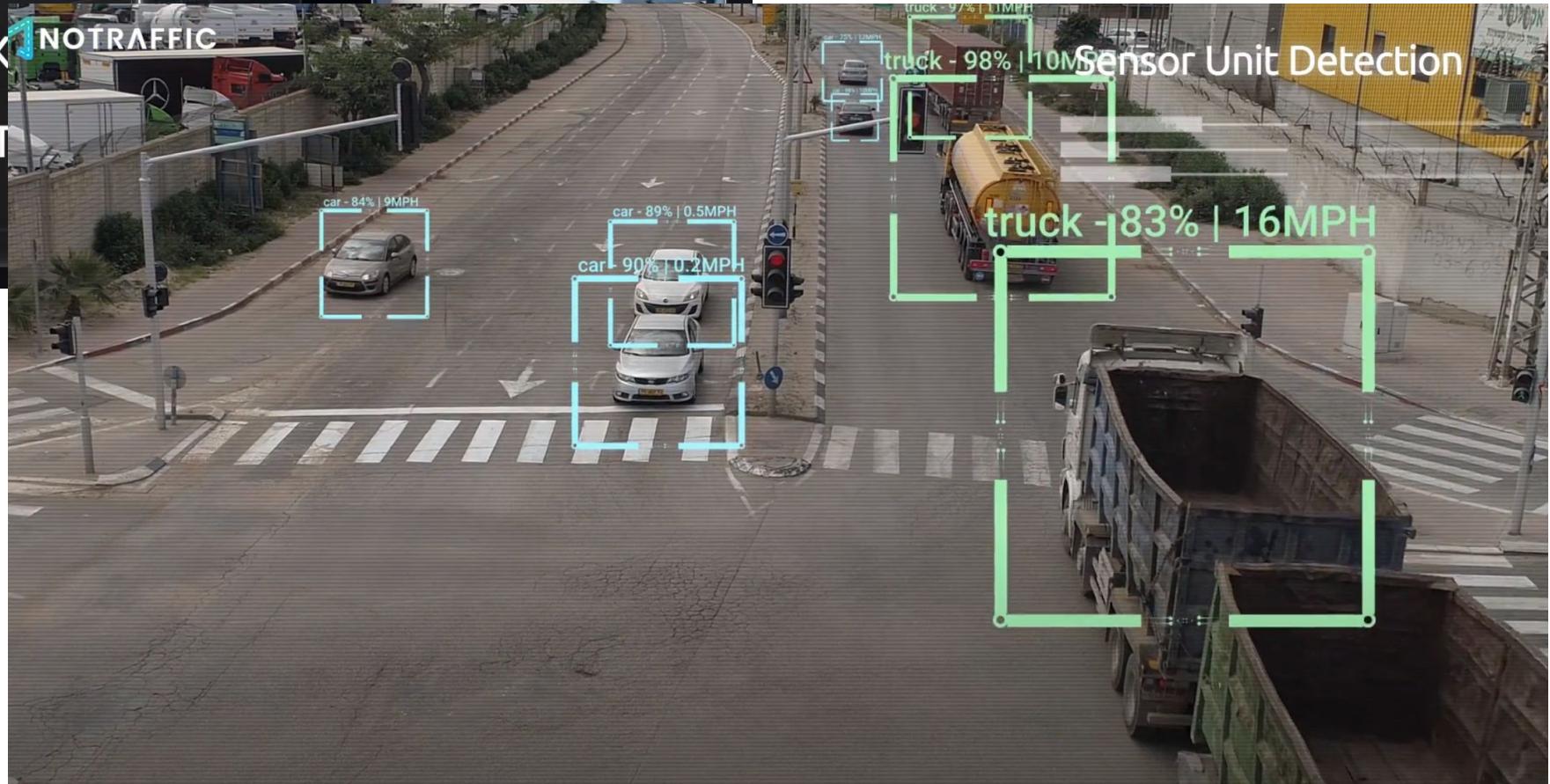
- Safety
- Personalized service
- Micro-mobility
- Data fusion
- Road as a Service



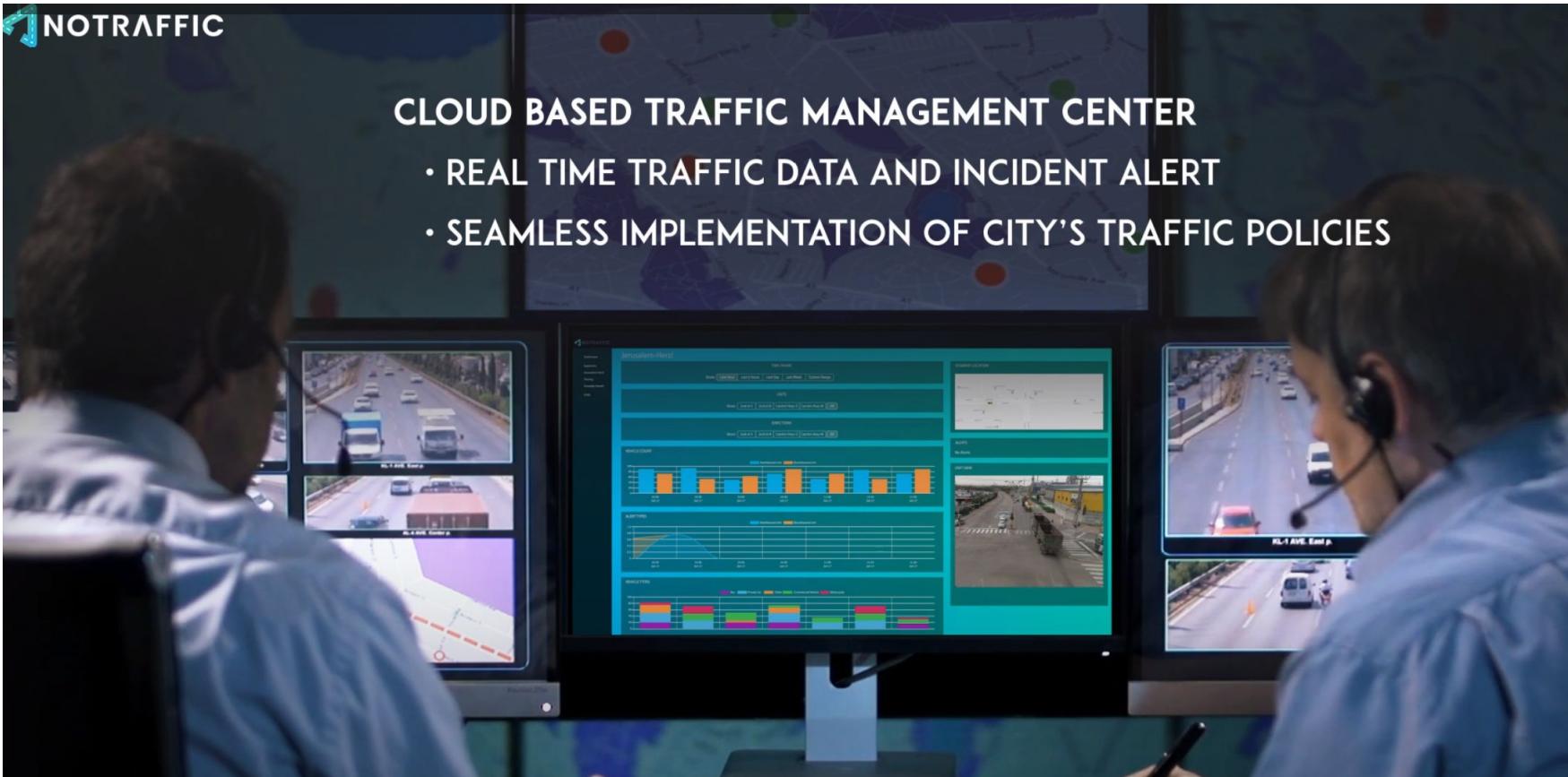
Safety

- PLUG & PLAY INSTALLATION
- REAL TIME OBJECT TRACKING
- VEHICLE TO INFRASTRUCTURE COMMUNICATION (V2I)

NOTRAFFIC SENSOR



Safety

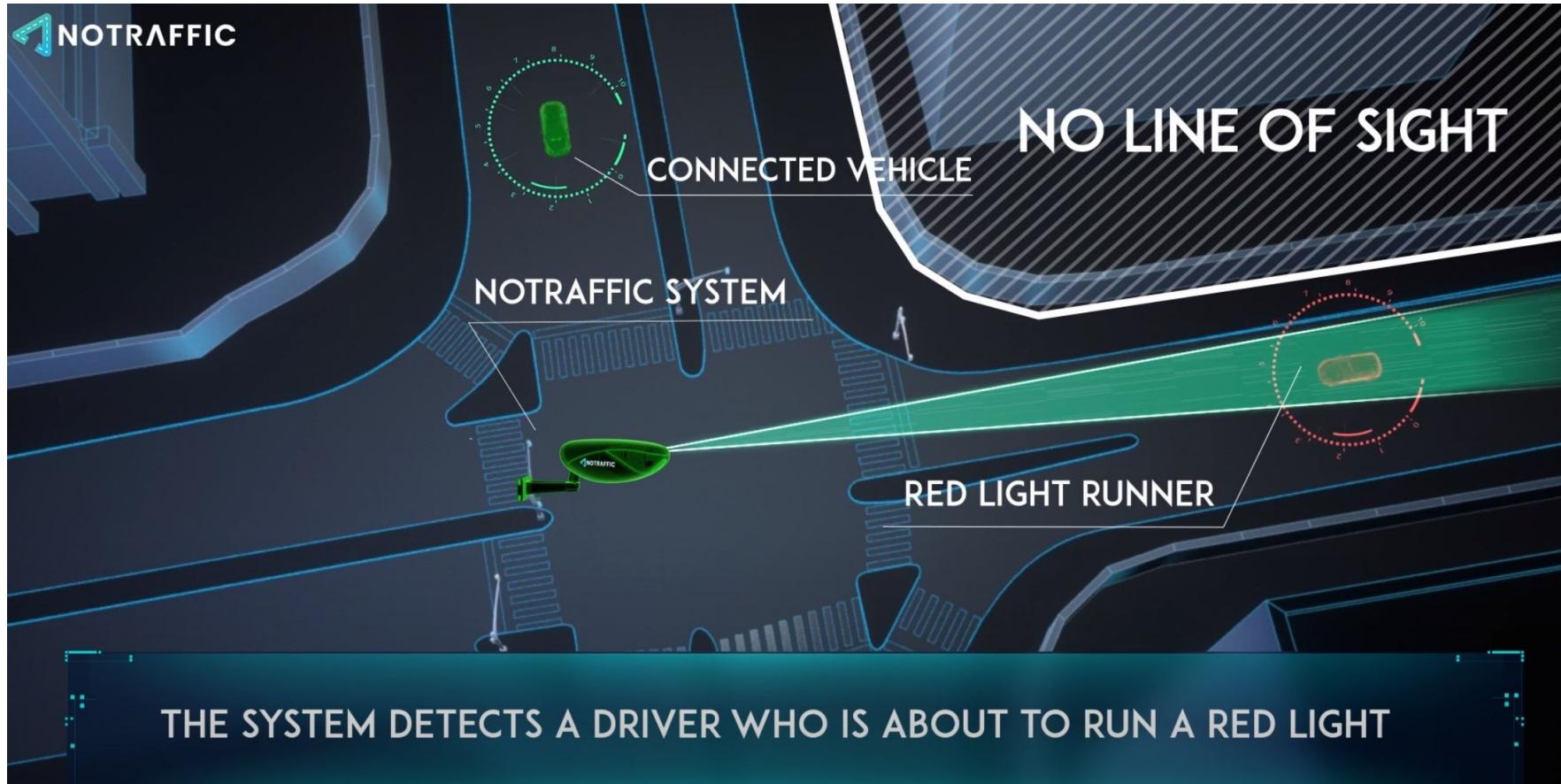


Safety



**RED LIGHT RUNNER
ACCIDENT PREVENTION**

Safety



Safety

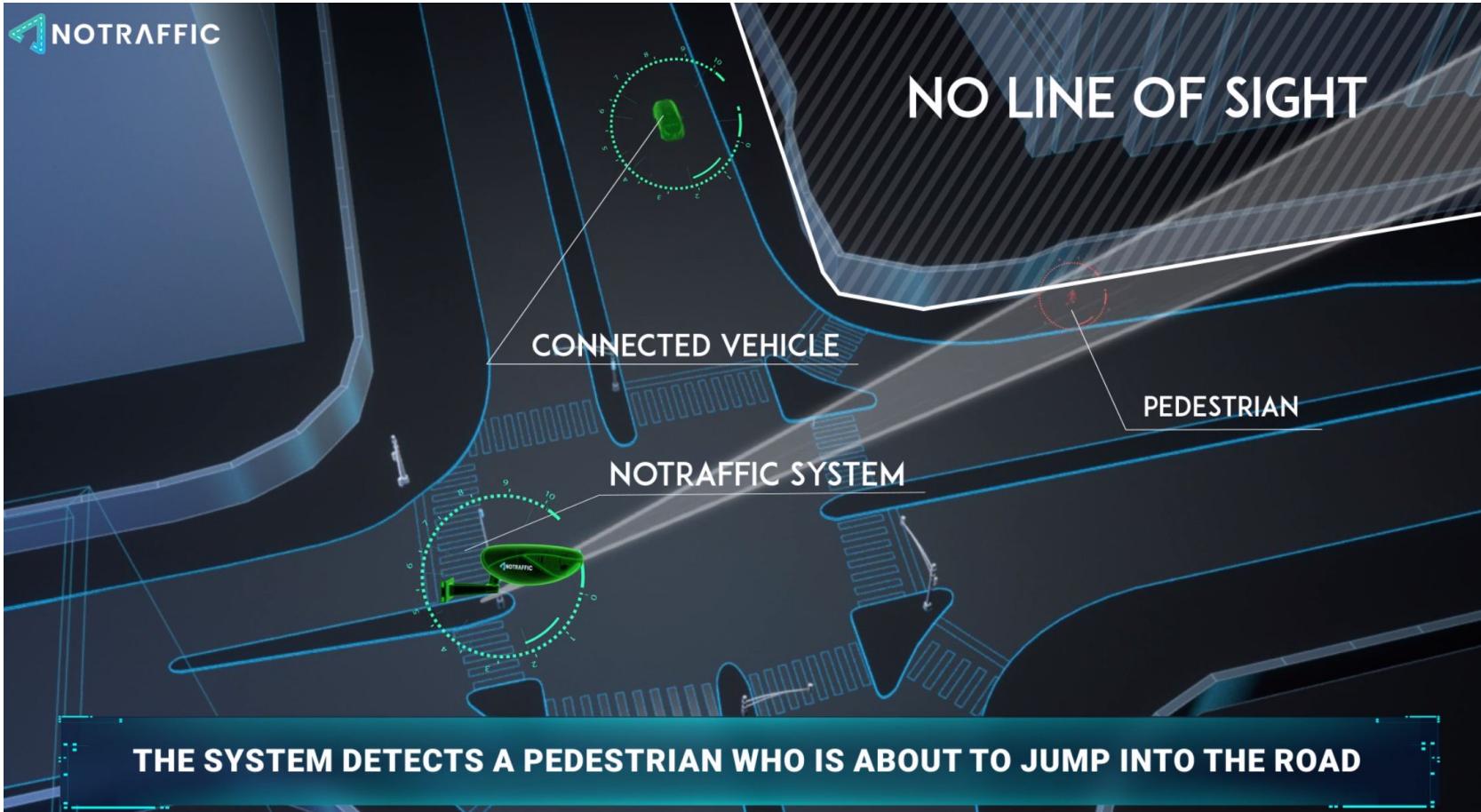


Safety



**PEDESTRIAN ACCIDENT
PREVENTION**

Safety



Safety



CASE STUDY

CASE STUDY

The City of
technical d
could meet
months of
the NoTraf
residents



59%

Direct cost savings



900hou

S

Delay Eliminated



\$331,38

0

Economic Benefit



11Tons

Emissions Reduced

Average total vehicle delay - daily

Before — NoTraffic optimization —



MIOVISION

- Miovision lays down the foundation for a more sustainable future, continually introducing new products that reduce emissions, improve road safety, and decrease congestion.
- Comprehensive and durable solutions suite include software only, full hardware & software, and portable all-in-one systems.
- Our Systems are built to withstand extreme conditions and poor visibility situations.
- Remotely manage and track your traffic network, safely, anywhere, at any time.

MIOVISION Solutions for healthy mobility

- Safer streets
- Complete streets
- Reduced emissions
- Efficient cities
- Reduced congestion

TRAFFIC ENGINEERING

✓ Miovision Scouts

- Collect traffic data: safer, more accurate and consistent data collection
- Miovision Scout® is an all-in-one, camera-based data collection device that is safely deployed at the roadside.
- Nonintrusive, durable and weatherproof, Scout is designed to work unattended in the field, for days at a time.

TRAFFIC ENGINEERING

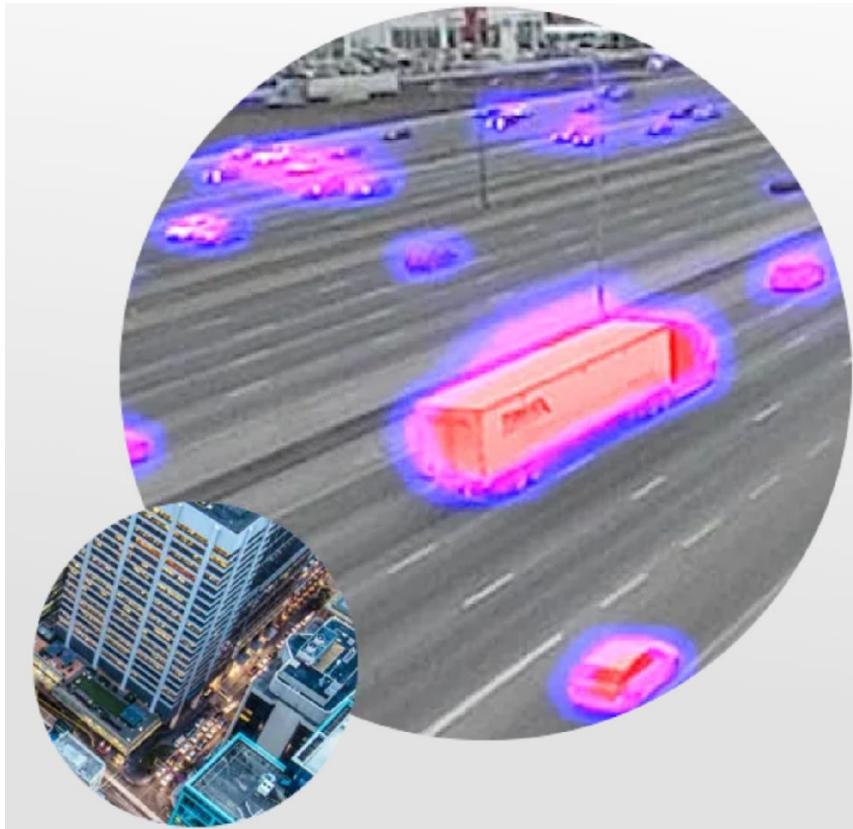
Scalable and customizable
study types

- Intersection and turning movement counts (TMCs). Tally of vehicle, bicycle, and pedestrian movements
- Pathway count. Count bicycle, e-scooter*, and pedestrian volumes on sidewalks, paths, or intersecting paths
- Roundabout count. Sum of movements from origin to destination
- Road volume data (ATR). Count vehicle, bicycle, and e-scooter volumes on a road segment
- Travel time. Using LTE, you can measure the time for traveling between two or more locations



*Custom classifications, such as e-scooters, are available by request.

TRAFFIC ENGINEERING



Expand traffic data capabilities with advanced options

- ✓ Include all or some standard vehicle classifications
- ✓ Flexibility to choose pedestrians, cyclists, and custom classifications
- ✓ By request, custom classifications, like e-scooters, may be added for roadway, crosswalk, and pedestrian junction/pathway studies
- ✓ Selectable bin sizes of 1, 5, 10, 15, 30, or 60 minutes provide the granularity needed for any study

Talk to us →

TRAFFIC ENGINEERING

Industry validated traffic data accuracy



Albeck Gerken, Inc.
Transportation Engineers

We make green happen.®

96.4% vehicle volume accuracy

Accuracy comparison of non-intrusive, automated traffic
volume counting equipment



99.5% vehicle volume accuracy

Evaluation of non-intrusive technologies for traffic detection



99% intersection count accuracy

Comparison of Turning Movement Count data collection
methods for a signal optimization study



97.5% intersection count accuracy

AlburyCity comparison of traffic data collection methods

TRAFFIC ENGINEERING

✓ Scout Hardware

Built to work in the field

Miovision Scout[®] is a fully connected, industry-leading, portable, camera-based traffic data collection device. Rugged, reliable and weather-resistant, Scout can operate unattended in the field for days at a time.

[Watch the Scout video →](#)



TRAFFIC ENGINEERING

✓ Scout Hardware



Reduce time in the field with fully connected remote management

With LTE, your team can remotely change study requirements, monitor studies, and receive automatic notifications about the equipment in the field.

- ✓ Mac address capture for travel time data
- ✓ Remote management using the Miovision DataLink™ portal
- ✓ Get notifications for battery life, SD card storage limits, and more

[Learn about Miovision DataLink →](#)

TRAFFIC ENGINEERING

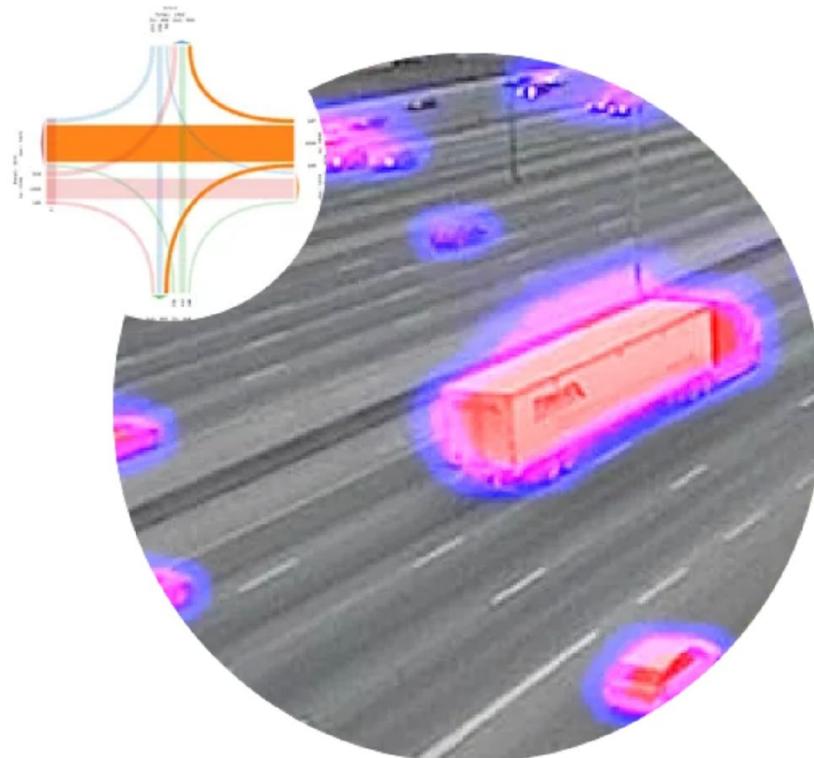
✓ Scout Hardware

Easily scale and customize studies

Whether you're counting vehicles, bikes, or people, if Scout can see it, Scout can count it. From turning movement counts (TMCs) to travel time, you can:

- Use a single, reliable, technology for your projects
- Perform multiple studies at the same time with one device
- Automatically collect travel time with every study

[Learn about traffic studies →](#)



TRAFFIC ENGINEERING

✓ Scout Hardware



Portable, durable and safe

With Miovision Scout, you can quickly respond to study requests and reduce your time in the field.

- ✓ Deployed at the roadside, keeping your team safe
- ✓ Set up in less than 15 minutes and take down even faster
- ✓ Designed and built to work in the field

TRAFFIC ENGINEERING

✓ Scout Hardware

All weather, all regions

From Alaska to Dubai, Scout is deployed in some of the world's most extreme climates. No matter the weather, you can rely on Scout.

- NEMA-rated device
- Operating range: -40°F to 140°F (-40°C to 60°C)

[Get a quote →](#)



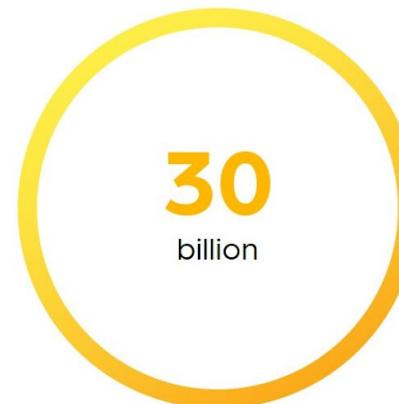
CASE STUDY



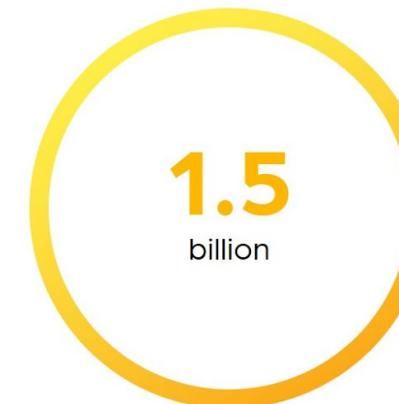
Customers



Countries



Vehicles Counted



Pedestrians Counted

CASE STUDIES

- City of Quincy, Massachusetts
- Modus Consult, an engineering firm based out of Germany
- The region of Waterloo, Canada
- The Town of Milton, a community west of Toronto
- City of Chicago
- The High Street/Mount Holly Bypass, Delaware
- Escambia County, Florida

Rhythm Engineering



Would you Like Your Traffic Signals to be Automated?



Would you like to retime your signals effortlessly?



Would You Like to Manage Congestion Better?



Would you like to improve pedestrian safety?

Products

- In | Sync
- code | GREEN
- CYCLOPS

In | Sync

- In | Sync solves the three main problems traffic engineers face.



OUTDATED TECHNOLOGY

The manual data collection process is **inaccurate and ineffective**. Timing plans are created using the outdated 50-year-old Webster model.

In|Sync

AI-POWERED TECHNOLOGY

In | Sync is the only truly adaptive traffic signal system. It **digitizes traffic signal operations** using the patented Greedy Algorithm.



NOT ENOUGH TIME

With the current way of timing traffic signals, it takes **over two months** to synchronize an arterial and the process is not scalable.

In|Sync

REAL-TIME COORDINATION

In | Sync lessens your workload by computing **real-time** green durations to vehicle demand at each local intersection.



LACK OF RESOURCES

The current ways of coordinating traffic signals are manual and **resource-intensive** and are, thus, often not funded.

In|Sync

COST-EFFECTIVE

Compatible with all existing hardware, In | Sync **enhances efficiency and reduces the cost** of traffic signal synchronization.

What is In | Sync?

More than an Adaptive Traffic Signal System.



In | Sync is a traffic bot. With a keen sense of **vision** and a powerful brain, **In | Sync** processes real-time data. It functions in **varying environmental conditions** and is **compatible with legacy hardware**. **In | Sync** adapts to changing traffic flow and **automatically synchronizes** your traffic signals.

[DOWNLOAD CATALOG](#)

What makes In | Sync Different?



TRULY ADAPTIVE,
NOT JUST RESPONSIVE



COMPATIBLE WITH
ALL EXISTING HARDWARE



DEDICATED STAFF TIME
NOT REQUIRED

code | GREEN

Why Are **90%** of Traffic Signals Not Optimized?

The lack of technology and tools has taken away traffic engineers' power to synchronize traffic signals.

We help make it better.



INSUFFICIENT TRAFFIC COUNT DATA

Timing plans are created based on a snapshot data collected during a single day. Manual data collection is usually inaccurate and resource-intensive.



COMPLEX WORKFLOW

Workflow is broken with manual data collection, timing plan generation and input into an ATMS software. Often, practitioners give up on this process.



LACK OF RESOURCES

The signal timing process requires months of work and many resources. Most signal re-timing projects are ill-funded as well.

code|GREEN

AI-POWERED DATA COLLECTION

code|GREEN uses the same Artificial Intelligence hardware and models used by autonomous vehicles. Traffic count data is continuously collected 24/7/365 with unparalleled accuracy.

code|GREEN

REAL-TIME COORDINATION

code|GREEN allows you to collect data, create timing plans, deploy and control your intersection using **ONE SOFTWARE**. Welcome to the world of **2-Minute Timing Plans**.

code|GREEN

COST-EFFECTIVE

code|GREEN is a cost-effective, easy-to-use, seamlessly integrated solution. It is fully compatible with all your existing traffic signal technology like cabinets, controllers and ATMS.

What is code | GREEN?

Collect, Create, Control: A Single Solution that Does It All



code | GREEN is the first-ever complete signal timing and operations solution. It seamlessly integrates accurate data collection, timing plan generation, and deployment using a single software system.

→ LEARN MORE

How does it work?

code|GREEN integrates all workflows into one seamlessly integrated software. This is the only software that a traffic engineer needs to collect data, create timing plans, and download/deploy timing plans to the signal controllers.

→ LEARN MORE



code | GREEN

Imagine What You Can Do

Generate Timing Plans in Less Than 2 Minutes



NEVER HAVE TO COLLECT TRAFFIC COUNTS

code|GREEN collects accurate turning movement data for timing plan creation, 24 hours a day, 7 days a week. The data collector tracks and counts vehicles with the same technology used in mission-critical, autonomous driving.



CREATE TIMING PLANS FOR EACH DAY OF THE WEEK

Armed with real-time data, you can create timing plans for each day of the week. The architecture is fully digital and there isn't any transition between timing plans. You are free to run multiple timing plans throughout the day.



DON'T HAVE TO FIGHT WITH MULTIPLE SOFTWARE APPLICATIONS

code|GREEN is the only software you need for your signal operations. From data collection to timing plan deployment in the field, all workflow is integrated. We have cracked the code for effortless timing plan creation and deployment.

CYCLOPS

- ✓ Vehicle recognition system

Introducing a revolutionized vehicle recognition system powered by Neural Networks and Deep Learning.

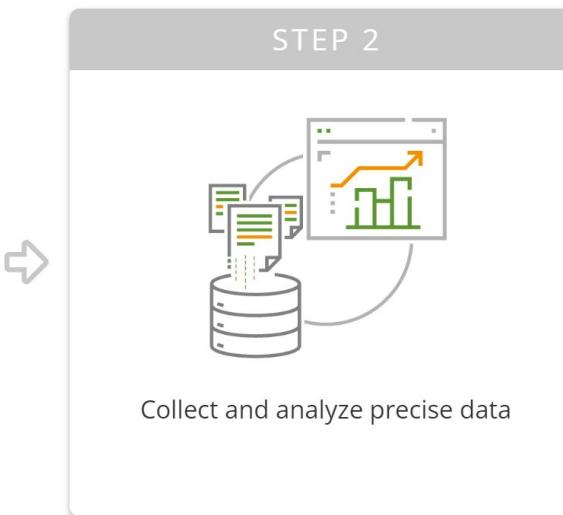
- ✓ Pedestrian and bike detection

Improve pedestrian and bike safety using AI technology with exceptional accuracy and 24/7 data collection.

CYCLOPS



CYCLOPS 3-Step Field-Proven Method To Improved Pedestrian/Bike Safety



Case Studies

The company operates in 3,000 intersections in 32 States and 160 Cities and positively impacts over 7,500,000 motorists daily.



Flir Products in Intelligent Transportation Systems

Urban

(<https://www.flir.com/browse/intelligent-transportation-systems/traffic-sensors/>)



Vehicle presence sensor
TrafiCam
Model: TrafiCam Narrow
[Go to Product Support »](#)

FLIR TrafiCam is a vehicle presence sensor that combines a CMOS camera and a video detector in a single unit. FLIR TrafiCam detects moving and stationary vehicles at signalized intersections. Via detection outputs, vehicle presence information is transmitted to the traffic controller so that signal timing can be adjusted dynamically. This way, vehicle waiting time at traffic lights is reduced and traffic flows are optimized.

PRODUCT VARIATIONS:

TrafiCam Narrow ▾

[REQUEST INFO](#)

Flir Products in Intelligent Transportation Systems

- **Inter-Urban**

(<https://www.flir.com/browse/intelligent-transportation-systems/traffic-cameras/>)



Thermal imaging camera for traffic monitoring

FC T2-Series

Model: FLIR FC317 T2, 320 x 240, 17° FOV

[Go to Product Support »](#)

FLIR FC-T2 sensors deliver superior image accuracy and reliability for traffic monitoring applications. The FLIR FC-T2 thermal camera can monitor vehicles in a wider variety of conditions than traditional visible-light sensors. By detecting the heat of all objects in the scene, the FC-T2 operates in broad daylight or total darkness, poor weather and even light fog. Combined with FLIR's vehicle presence detection boards, the FC-T2 makes a great solution for intersection traffic control.

PRODUCT VARIATIONS:

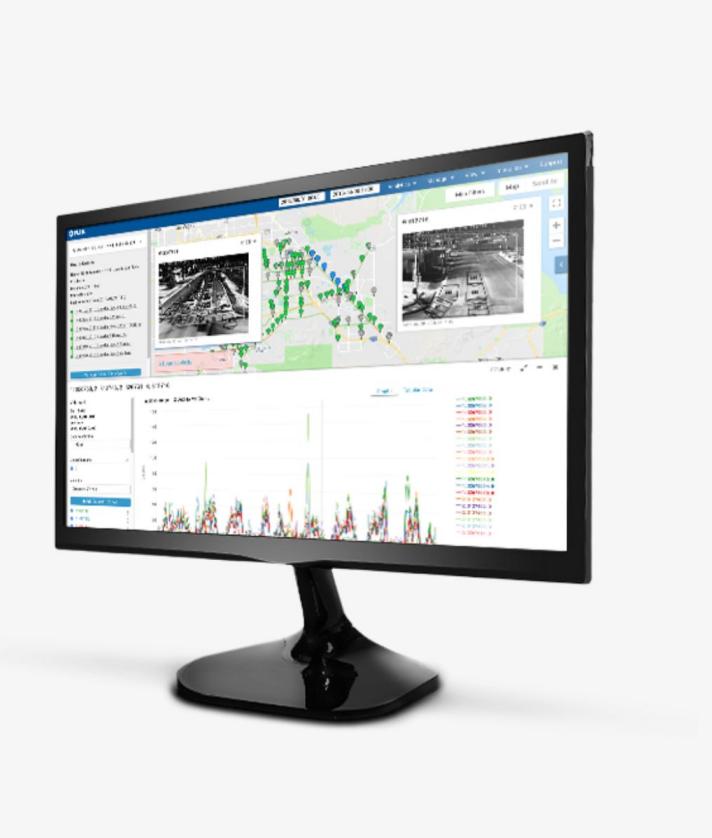
FLIR FC317 T2, 320 x 240, 17° FOV ▾

[REQUEST INFO](#)

Flir Products in Intelligent Transportation Systems

- **Traffic Management Software**

[\(https://www.flir.com/browse/intelligent-transportation-systems/traffic-software/\)](https://www.flir.com/browse/intelligent-transportation-systems/traffic-software/)



FLIR's Smart City Platform
Acyclica by FLIR

[Go to Product Support »](#)

The Acyclica smart city platform provides the information and insight necessary to understand congestion. Acyclica transforms mountains of data into actionable information to help agencies understand travel times, traffic patterns and congestion. From point-and-click origin - destination analysis to real-time congestion mapping, Acyclica helps agencies understand how people are moving. A range of automated reports, powerful user interface, and comprehensive APIs ensure that data is where you need it, when you need it.

[REQUEST INFO](#)

Wavetronix



Wavetronix Products

- Arterial & Freeway System



EXPANSE SYSTEM COMPATIBLE

SmartSensor HD

Smart traffic depends on accurate, reliable data. SmartSensor HD is the only vehicle detector that provides all the data you need, including per vehicle speeds, vehicle counts, average speed, 85th percentile speed, occupancy and more.

[Learn more >](#)



SmartSensor V

For Superior detection on a budget SmartSensor V provides detection for freeway and arterial applications for up to eight lanes of traffic out to 200 feet. Accurate and reliable, SmartSensor V provides valuable data sets for basic ITS applications.

[Learn more >](#)

Wavetronix Products

- Intersections



SmartSensor Advance

Bridge the gap between safety and efficiency with intelligent dilemma zone protection. Only SmartSensor Advance uses dynamic ETA tracking to protect vehicles that need it.

[Learn more >](#)



SmartSensor Advance Extended Range

High-profile vehicles have different dilemma zones than cars. Don't protect them the same way. SmartSensor Advance Extended Range protects the vehicles that really need it.

[Learn more >](#)



EXPANSE SYSTEM COMPATIBLE

SmartSensor Matrix

See your intersection with Radar Vision! SmartSensor Matrix uses high-definition, multi-beam radar to see all vehicles, moving or stopped, even in difficult conditions.

[Learn more >](#)

Iteris

- Iteris is creating an ecosystem that bridges software and sensors, private and public, road and vehicle – unified by a common cloud, and seamlessly integrated to unlock continuous value.

A data-driven, dynamic ecosystem

Iteris

- Smart sensors
- Smart vehicles
- Smart Apps
- Smart systems

Smart Sensors

Hybrid detection sensors

- Reduced dilemma zone conflicts
- Protect vulnerable road users
- More detailed & accurate data



The Power Of Vantage Vector Hybrid Detection

The Vantage Vector® system is an all-in-one detection sensor that combines video and radar for stop bar and advance zone detection to enable advanced safety and adaptive control applications.

Compatible with the Vantage Next® and Vantage Apex™ systems, the Vantage Vector detection sensor includes all the proven benefits of Iteris video detection, including high accuracy, superior reliability, remote video viewing, pedestrian detection, and bicycle differentiation, and no trenching or pavement cutting for installation.

Smart Sensors

Video detection sensors

- Easier to install and maintain
- Powerful
- Smart
- Adaptable



The RZ-4™ Advanced WDR (RZ-4 AWDR) is Iteris' premium video detection camera. Optimized for traffic video detection, the RZ-4 AWDR combines Iteris' best-in-class all-weather performance video detection with Wide Dynamic Range (WDR) technology - using the advanced imager technology to handle extremes in light and dark and severe glare conditions.

Smart Sensors

- Radar detection sensors

This video stream can also be used in place of other surveillance cameras to stream live video to your traffic management center video wall and mobile applications from Iteris.



The VantageRadius® traffic sensor is the industry's leading 4D high-definition (HD) radar detection system with an integrated high-resolution video camera for traffic monitoring and detection verification.

Iteris



Our Capabilities
Our Platform
Our People
Our History

Who We Serve

10k

public agency and commercial
customers

Our Coverage

200k+

smart sensors installed



Built By Experts

440

industry, technical and domain
experts

The cities and towns we serve

- City of Irvine, CA
- City of Suffolk, VA
- City of Fremont, CA
- Los Angeles County, CA
- Delaware Valley, NJ
- San Bernardino County, CA
- Kane County, IL

State DOTs we serve

- State of Florida
- State of Utah
- State of California
- State of Texas
- State of Hampshire

Federal & National Governments we serve

- Federal Highway Administration
- National Highway Institute
- Transport Canada (Canada's federal transportation agency)

ARGOS Vision

- The ARGO Vision AI engine serves a dozen companies worldwide in marketplaces such as Augmented / Virtual Reality, Smart Manufacturing, Video-Analysis, Bio-metrics, Big Data and much more.
- ARGO Vision is focused on the development of solutions for low-power consumption and ultra low-cost architectures.
- Our artificial intelligence engine empowers "CyclopEye", the most advanced neural sensor for smart parking guidance system.

ARGOS Vision Skills

- Real-time object detection
- Real-time classification
- Text OCR
- Augmented – Virtual reality
- Manufacturing – Industry

Econolite

- Econolite is committed to employing advanced technologies that reduce travel time, ease congestion, enhance transit operations, provide safer mobility, and improve quality of life.

Econolite Sensors



 **Autoscope[®]**
VISION

AUTOSCOPE

SENSORS

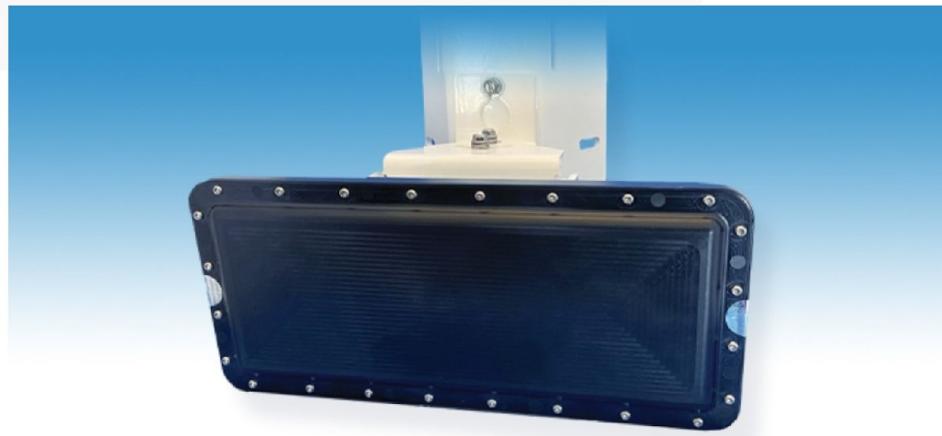
Building on more than three decades of proven above-ground video detection experience, Autoscope Vision delivers the highest levels of accuracy and performance in an easy-to-use detection solution that supports Pedestrian, Bicycle, and Vehicle detection for all ITS applications.

Econolite Sensors

EVO RADAR

SENSORS

The Econolite EVO RADAR sensor is a one-stop-shop detection product that is the latest, most capable radar on the market. EVO RADAR uses forward-fire FMCW MIMO radar design and technology to achieve superior traffic detection accuracy and reliability across a variety of detection objectives, including stop bar, advance, departure, bicycle, and pedestrian detection.



EVO RADAR™

Econolite Sensors



 **AccuSense®**

ACCUSENSE

SENSORS

Econolite's line of AccuSense sensor solutions provide enhanced levels of vehicle, bicycle, and pedestrian detection capabilities and data necessary for state-of-the-art traffic management and ITS programs. As a result, AccuSense can help the latest ITS programs deliver on the promise for safer intersections and highways for all roadway users.

Econolite Services

- Iowa DOT
- Lloydminster, Canada
- Sault Ste. Marie, Ont., Canda
- Cranberry Township, PA
- Nashville, TN
- Fort Collins, CO
- Newport Beach, CA
- Madison, WI
- South Denver Metropolitan Area

Gridsmart

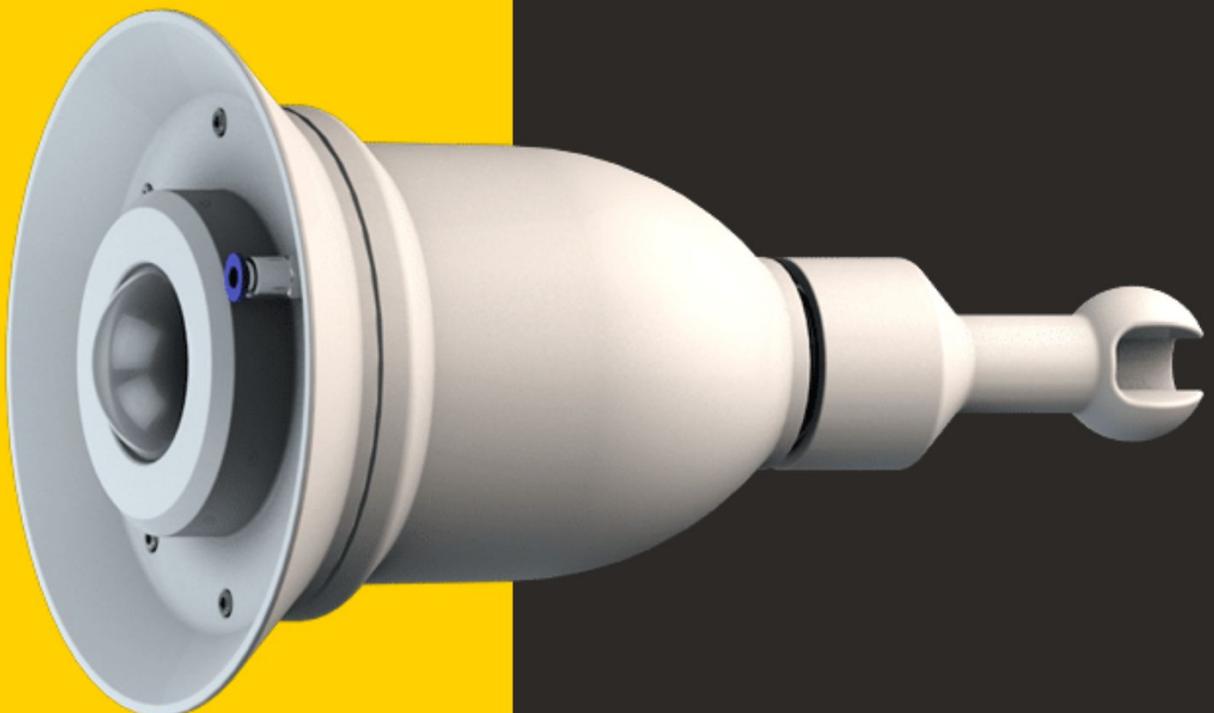
- GRIDSMART designs, engineers, and assembles products for the **Intelligent Transportation Systems** industry and provides services to municipal partners around the world.
- Our vision is to Improve One Billion Lives by making transportation safer and more efficient for drivers, vulnerable road users, and equipment installers and maintainers.
- GRIDSMART pioneered the world's first single-camera solution for intersection actuation, traffic data collection, and situational awareness.

GRIDSMART Products

HORIZON TO HORIZON VIEW

SMARTMOUNT **Bell Camera**

GRIDSMART's iconic Bell Camera features the original fisheye lens with horizon to horizon viewing capabilities and is the world's first single-camera solution for intersection actuation, traffic data collection, and situational awareness.



GRIDSMART Products



EDGE COMPUTING

The GRIDSMART System Processor

Highlighting each intersection's phases, calls, and status with bright, multi-colored LEDs, the GRIDSMART System Processor runs the GRIDSMART Engine, a suite of vision-tracking algorithms that build a 3-dimensional model of approaching objects.

GRIDSMART Products

YOUR OWN TMC

GRIDSMART App

The GRIDSMART Cloud is where customers can download Client software and firmware updates. Our existing Client modules are Performance, Performance Plus, and Pedestrian.



GRIDSMART Products

— COMPLEX SITES

Traditional Camera

The GRIDSMART Bell Camera fulfills the lion's share of your intersection demands. If you are looking for advanced detection, add a Traditional Camera. For bigger or more complex sites, the GRIDSMART Processor can support two Bell Cameras. Our Traditional Camera comes in when you need advanced detection or detection at an underpass or garage exit.



GRIDSMART Case Studies

- Florida Department of Transportation
- City of Laramie, Wyoming
- Bell Road Highway, AZ
- City of Athens, GA
- Thailand

Rapid Flow - Surtrac

What is Surtrac?

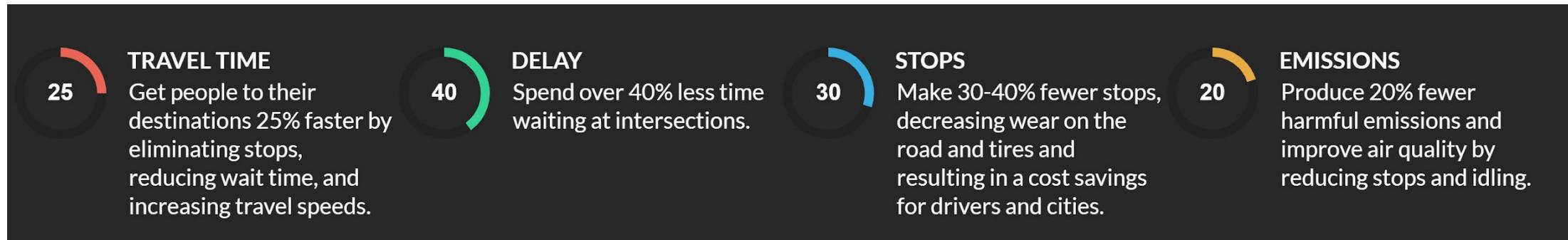
Surtrac is an innovative approach to real-time traffic signal control, combining research from artificial intelligence and traffic theory. Surtrac optimizes the performance of signals for the traffic that is actually on the road, improving traffic flow for both urban grids and corridors and leading to less waiting, reduced congestion, shorter trips, less pollution, and happier drivers.



Intelligent Traffic Signal Control

Surtrac is the most advanced traffic signal control system on the market today. Using patented technology developed in the Robotics Institute and Traffic21 Labs at Carnegie Mellon University, Surtrac combines cutting-edge research in artificial intelligence and traffic theory.

Rapid Flow - Surtrac



Unlike other systems which may take minutes to respond to changes in traffic, Surtrac adapts in real-time to changing traffic by optimizing traffic flows every second. Surtrac coordinates traffic flows on complex grids, not just on arterials or corridors with much less dynamic traffic patterns. Surtrac optimizes for many modes of travel, keeping vehicles, cyclists, pedestrians, and transit moving and safe.

Surtrac – Real-time Adaptive Traffic Signal Control

Surtrac - Real-time Adaptive Traffic Signal Control

- **Real-time Response to Actual Traffic**

Surtrac optimizes every second based on actual traffic flows

- **Decentralized & Inherently Scalable**

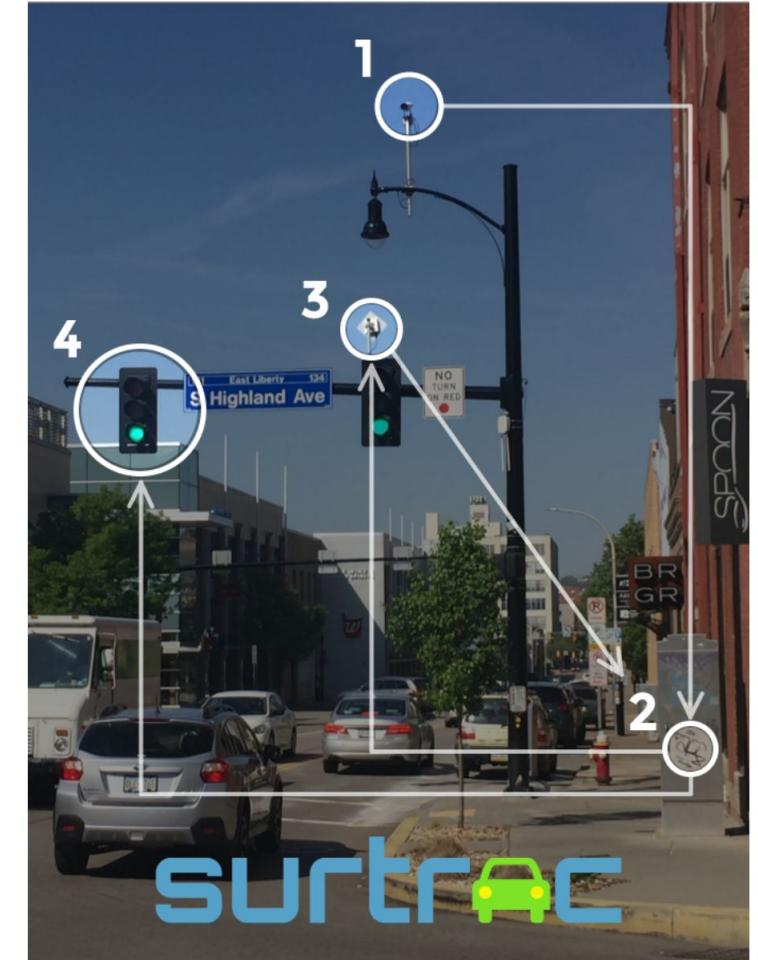
Surtrac is decentralized and scalable to networks of any size & shape

- **Optimized for Complex Grids, Not Just Corridors**

While Surtrac is capable of handling suburban corridors with a single dominant flow, it really shines when optimizing more complex grid networks with multiple competing flows that change throughout the day

- **Multi-modal Optimization**

With advanced sensing, Surtrac can integrate vehicle, pedestrian, bus, and bicycle traffic flows according to pre-specified priorities

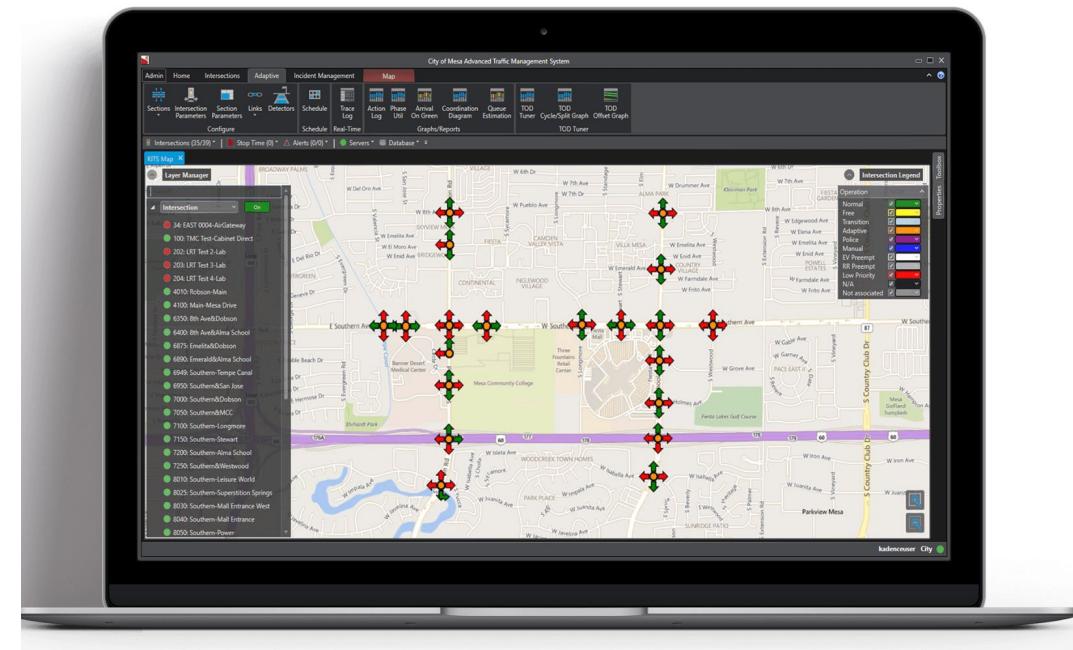


Surtrac's Deployment in:

- Quincy, MA
- Portland
- City of Atlanta, GA
- Pittsburgh Neighborhoods

Kadence: A Kimley-Horn Software Solution

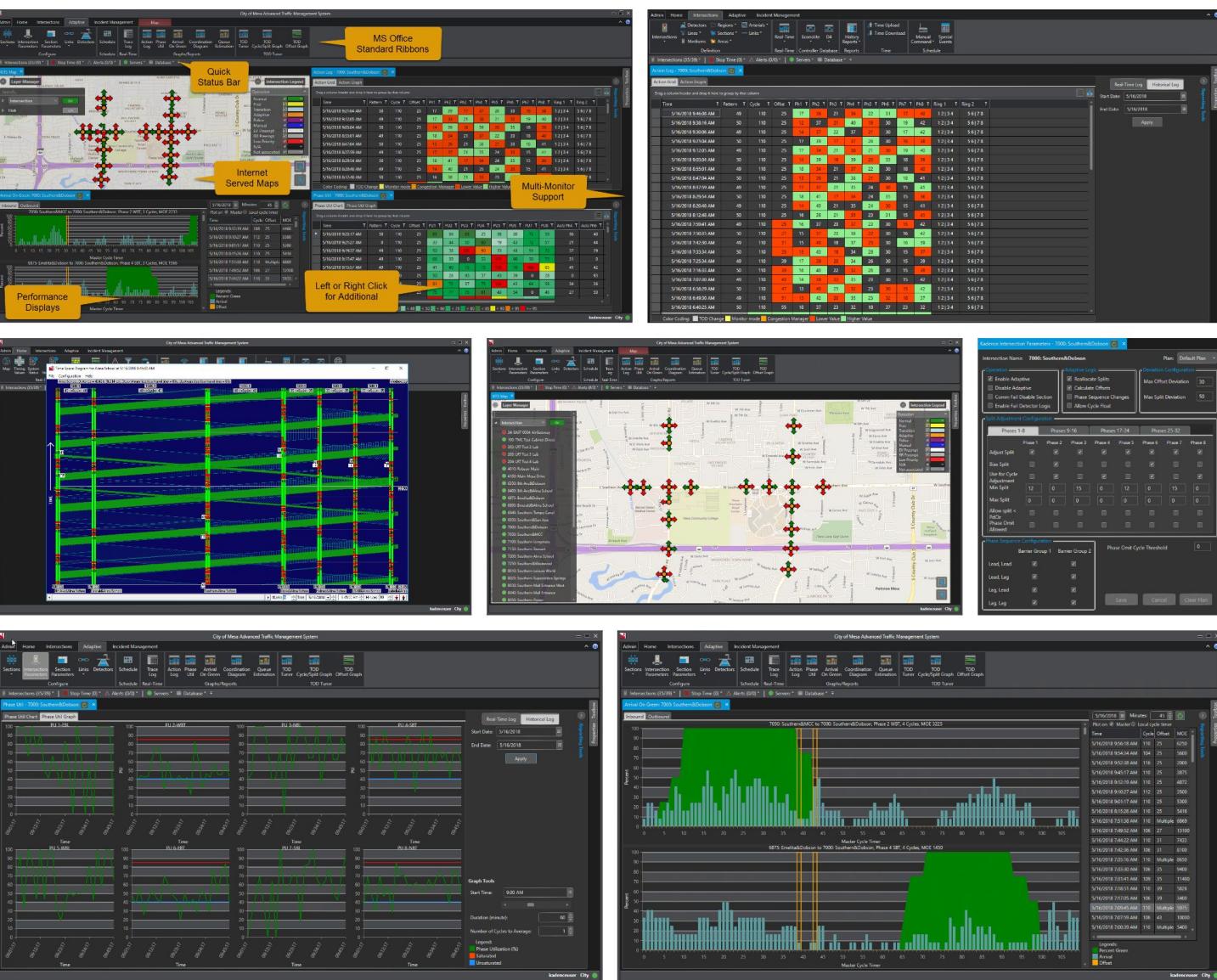
- Optimize Traffic Signal Timing to Balance Performance for Safety and Efficiency
- Kimley-Horn's Kadence™ software solution is a vital tool in a traffic engineer's toolbox.
- With zero field components to manage, maintain, or upgrade, this integrated system will help your agency meet its objectives and increase performance.



Kadence

Common agency objectives that Kadence™ can help you achieve:

1. Maximize throughput on a coordinated route
2. Provide smooth flow on a coordinated route
3. Provide access equity for all phases at an intersection
4. Manage the length of queues
5. Optimize operation to minimize phase failures



TransCore - ACDSS

- Adaptive Control Decision Support System (ACDSS)
- Intelligent control for smarter signals

The integration of KLD's Adaptive Control Decision Support System™ (ACDSS) into TransCore's state-of-the-art TransSuite® traffic management software provides an adaptive control strategy that can be used as part of a larger, area-wide traffic signal control system. Traffic engineers can now conduct real-time analysis and change signal patterns at the touch of a button, helping to alleviate congestion before it worsens.



ACDSS Applications

- Optimization of arterial signals
- Urban adaptive control and congestion management to preserve capacity and improve mobility
- Supports integrated real-time simulation for on-line performance evaluation.

TransCore

About TransCore

TransCore's 79-year heritage supporting the transportation industry includes expertise in toll systems, systems integration, customer service centers, design consulting, operations, maintenance, traffic management systems, intelligent transportation systems, and RFID manufacturing. TransCore has installations in 46 countries and a vast portfolio of intellectual property. In 2013, Engineering News-Record (ENR) ranked TransCore No. 169 out of the Top 500 Design Firms.

TransCore operates as a wholly owned subsidiary of Roper Industries, a diversified growth company that is a constituent of the S&P 500, Fortune 1000, and Russell 1000 indices. Roper provides engineered products and solutions for global niche markets, including water, energy, transportation, medical, education, and SaaS-based information networks.