## notraffic

# **Al Detection**

NoTraffic's fusion sensors detect all road users in real-time with high accuracy, even in poor weather and lighting. By combining radar and video, the system sends precise calls to the traffic controller, enabling safer, more efficient signal operations.



## NoTraffic at the Intersection

### **Sensors**

NoTraffic simplifies detection with one Sensor per approach. Each Sensor provides full coverage including: advance detection, stop bar, pedestrian crosswalks, and bike lanes. Sensors have flexible mounting options for any intersection layout.

## **Nexus**

The Nexus Omni supports all cabinets and controllers. Thin & rack mountable (1U /43 mm height), the Nexus is installed in the cabinet and connects directly to the traffic controller linking the intersection to the cloud with integrated LTE connectivity.





# **Fusion Detection for All Road Users in All Conditions**

## HD 1080 Video

- Visual verification of detection
- ✓ Object-based detection, classification, and tracking
- ✓ Lane determination

### 60 GHz Radar

- √ High resolution radar
- Detection of pedestrians to trucks
- Highly accurate range & speed
- Weather penetration



## **True Fusion Output**

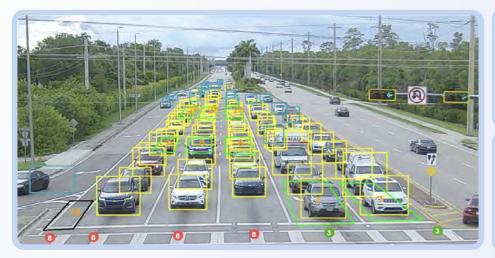
- ✓ Location
- Speed
- Lane
- Classification
- All weather detection

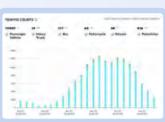


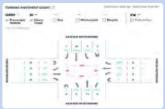
# **Insights That Go Beyond Detection**

Gain real-time, insight-rich, visibility into intersection performance and access the tools you need to assure road user safety, reduce congestion, lower emissions, and improve the quality of life for residents.

- ✓ Turning movement counts
- √ Signal performance measures
- √ Safety analytics
- ✓ Live video & real-time alerts
- √ Access to the Mobility Store







## From Insights to Action -**Mobility Applications Store**

As a centralized hub for data, analytics, and mobility applications, our platform offers software enhanced functionality to optimize traffic flow, enhance safety, and streamline operations. With over-the-air updates and V2X capabilities, it adapts to evolving needs, ensuring long-term traffic management efficiency.

- √ A hub for all mobility applications
- ✓ New functionality with no additional hardware
- ✓ Optimization to maximize the capacity of infrastructure
- √ Safety applications to meet Vision Zero Goals
- √ Scalable solutions for traffic management



## Software-Defined Detection

zones and configure complex scenarios. improving traffic management



### **Ped Actuation**

calls to controllers, eliminating the need



## Intelligent Transit Detection

like light rail and sends signals to



#### Remote Cabinet Access

Leverage NoTraffic connectivity to enable remote secure access to manage traffic



## Front Panel Access

Leverage NoTraffic connectivity to enable

remote secure access to the traffic signal controller front panel



### Near-Miss Insights

Uncover safety issues with statistics and videos of near-miss traffic events



### Intersection Safety Insights

Safety 🤅 VRU

Provides deep analytics of red-light running to help agencies identify at-risk ctions to improve safety



#### Pedestrian Protection Zone

Detects pedestrians in the crosswalk and extends crossing times, enhancing safety



### Dilemma Zone

Safety \* VRU

Detects a driver's trajectory and extends the green time to reduce sudden stops and red-light running risks



### **ATSPM**

Displays detailed measures on signal performance, helping engineers identify underperforming intersections



## Comprehensive Traffic Counts

Maintains stop bar and turning movement counts by lane and vehicle class, to track improvements over time



## Optimization Mode

Detects and classifies custom vehicles like light rail and sends signals to controllers for optimized operations



#### Al Timing Plan

Generates Al timing plans that leverage accurate, detailed, traffic data generated from fusion Al Detection



#### Vision-based Transit Signal Priority (v-TSP)

Automated transit vehicle detection and prioritization without the need for additional fleet hardware



#### **Emergency Vehicle** Preemption (EVP)

Receives preemption calls and adapts emergency vehicles



#### Situational Awareness

Delivers HD video and metadata tracking intersection movement, empowering agencies to assess incidents effectively

## Constant 24/7 Support

Traffic runs 24/7, so NoTraffic's US-based managed service is staffed for 24/7 support to keep your infrastructure running.

- √ 24/7 monitoring of all Edge Devices
- ✓ Remote troubleshooting and support
- ✓ Over-the-air service and updates
- ✓ System alerts response team





# **Key Features**

## **Detection**

- ✓ All weather detection: fog, rain, snow, sun glare, night, etc
- √ Advance detection to 720 ft
- ✓ Detection accuracy 99.5%
- √ Count accuracy 95–105%

## Object based classification and tracking

- √ Live 1080p video streams of each approach
- √ Road user classes: pedestrian, bicycle, motorcycle, car, bus, truck, and custom classifications
- ✓ Zone creation support for stop bar, advance, bicycle lane, dilemma zone, pedestrian crosswalks, etc
- ✓ Trajectory tracking (location, speed, and heading) and category through entire approach

## Connectivity

- √ Wireless or wired communications from Sensors to Nexus
- √ V2X-ready with software activation
- ✓ Build in multi-band cellular connectivity
- ✓ Universal cabinet and controller compatibility
- √ Cyber Security certifications SOC 2 Type II and ISO 27001

## Installation and Service

- √ US based service team with 24/7 staffed support
- √ Flexible Sensor mounting options from mast arms to span wire (Height: 18-33 ft)
- √ Sensor housing rating IP67 per IEEE 60529
- ✓ Nexus rack mountable at 1U (134 in) height
- ✓ Modular I/O smart harnesses for all controller types (NTCIP, SDLC, NEMA TS 1 and TS 2, Caltrans C1/C11)

## **Al Mobility Platform**

NoTraffic empowers agencies to optimize infrastructure, enhance efficiency, and improve safety by transforming intersections into a connected, digital network. Solve your traffic needs with a single platform powered by state-of-the-art technology.

