



*Driving Smarter Traffic*

## Truck QUEUE Monitoring for Fenix Marine Services, Los Angeles Port

### Challenges

Transporting cargo through Ports in a timely fashion is increasingly affected by congestion on travel routes leading to Terminals and queues at the Terminal entrances. Due to increases in cargo volumes, truck wait times have significantly increased in the past few years, and these wait times have adversely impacted the overall supply-chain ecosystem. A significant challenge is a lack of metrics quantifying truck wait times on the roads leading to the Port gates. The lack of such data has hindered implementing strategies to improve the operational efficiency of the Ports and Terminals. Although technologies like RFID have been used to monitor truck movements inside the Ports, there are limited solutions to monitor truck wait-time on the city roads leading to the Ports.

### Solution

Fenix Marine Services is modernizing all operations at its terminal in Los Angeles (Pier 300). To effectively manage the terminal's truck queue, Fenix chose SMATS' real-time traffic sensors and data analytics platform. SMATS TrafficXHub™ sensors detect both Bluetooth and WiFi signals with an enhanced detection rate. The sensors were installed at strategic locations on the roads leading to the terminal and the terminal gates (figure 1). Solar powered sensors were used, resulting in a speedy deployment. Fenix installed a total of five sensors along the two roads leading to the two truck entrance gates. These two gates had no wait-time tracking system, making it difficult to measure traffic velocity through the terminal. The sensors capture real-time data on truck traffic which is processed by the the

### Project Summary

#### Customer

Fenix Marine Services

#### Partner

SMATS Traffic Solutions, Ottawa

#### Industry

Port

### Challenges

- Truck wait times were increasing significantly
- lack of metrics quantifying truck wait-times on the roads.

### Solution

- SMATS iNode™ data analytics web platform.
- SMATS TrafficXHub™ WiFi and Bluetooth sensors.

### Results

- Real-Time visibility of truck queues outside of terminal.
- Improvements in service times for trucks moving cargo.

“SMATS truck traffic wait-time monitoring allowed us to better measure and manage our traffic at the terminal gates. Real-time data has provided visibility where we had none and is helping us to better service the trucks. The system is easy to deploy and the SMATS team provided great technical expertise and support.”



**John Rosen, CTO**

SMATS web analytics platform, iNode™. iNode’s MAC address matching and outlier filtering, running in real-time, provides Fenix with an accurate picture of truck traffic enroute to the terminal (figure 2).

## Who is Fenix

Fenix Marine Services is the operator of the Pier 300 container terminal located at the Port of Los Angeles, one of the largest in the Western hemisphere. With a focus on seamless, integrated solutions, Fenix provides container handling services to shipping lines, railroads, and trucking companies. Fenix, through deployment and development of cutting edge systems, is fully digitalizing its terminal operations and changing the way terminals service the supply chain.



**Figure 1- Dashboard view of sensor on iNode™**

## Results

The sensors allowed live travel time monitoring of trucks coming to the terminal so that management can fully optimize daily traffic flow. Data collected by the SMATS system also allows Fenix to have productive, data-driven discussions with the trucking community as both work to maximize the flow of cargo through the terminal. The iNode’s advanced filtering algorithms identify outliers (parked/stopped trucks) and exclude passing traffic on an adjacent public street.

## Efficient Ports with SMATS

Optimizing Port operations is crucial for meeting tight schedules and deadlines. As Fenix strives to stay innovative and tech-forward, they recognized the value of live queue wait time data. Being able to monitor live queue times from the terminal’s entrances at any time gives operators and truck drivers the ability to make informed decisions. As shipping is a vital economic process, Ports must operate efficiently.

By using SMATS real-time traffic data technology, truck mobility through city streets can be vastly improved. With the use of sensors and analytics, operators can monitor congestion and easily pinpoint and solve mobility issues. As well, once the sensors are activated, collected travel time data is stored for historical access, empowering Port operators to track improvements. SMATS, with experience in the Port industry, has expertise in the challenges caused by congestion and how to deliver meaningful data to support optimization.



**Figure 2- Sample Main and Second gates wait times**