

# FREIGHT SIGNAL OPTIMIZATION PROGRAM

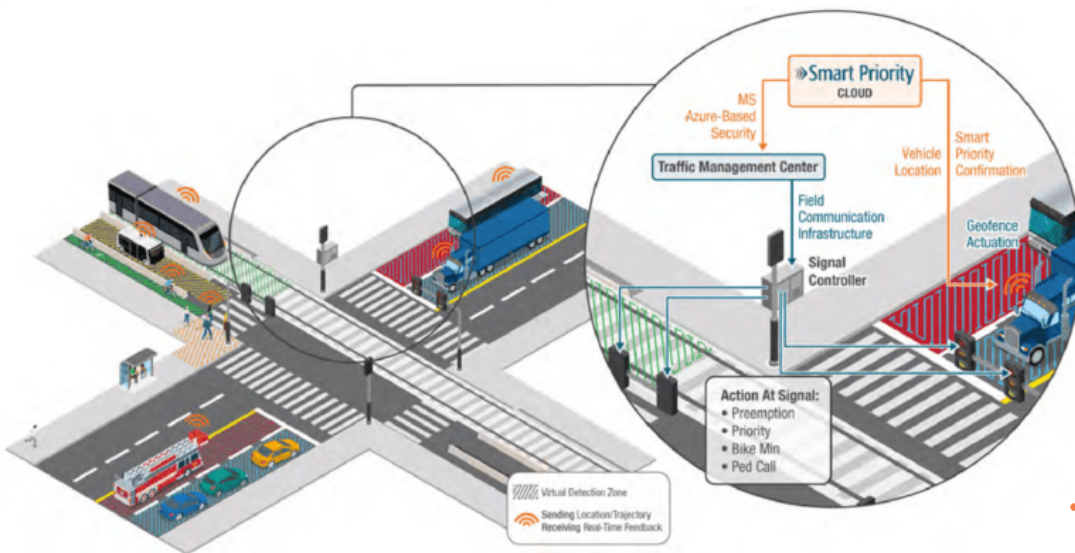


For more information or to sign up, visit:  
[WWW.FREIGHTPRIORITY.COM](http://WWW.FREIGHTPRIORITY.COM)

DFW is a natural focal point for the movement of goods by truck in North America. The region is a national railroad crossroads, a domestic and international air cargo hub, a national logistics center, and **one of the nation's largest inland ports where freight is moved, transferred, and distributed** to destinations across the state and around the world.

The ability for freight to move efficiently in DFW is critical for the economy and the environment. **Traffic signals are the primary reason for stop-and-go travel conditions.**

The North Central Texas Council of Governments' (NCTCOG) **Freight Signal Optimization Program (FSOP)** provides two complementary, cloud-based services to promote more efficient commercial truck movement by reducing stops at traffic lights. Currently reaching more than 1,000 intersections, when built out, EcoDrive will be available to well over 2,000 intersections located between distribution hubs and expressways in the region, helping trucks move more smoothly and goods arrive more quickly, using less fuel and emitting fewer greenhouse gas emissions.



- No new hardware to be installed at traffic signals
- No new hardware to be installed on trucks
- No changes to any city ATMS software
- Smart Priority works with any NTCIP-compliant traffic controller with signal priority capability
- Works with any high-resolution (1s-5s) AVL feed from a variety of third-party systems
- Can be used by freight operators without AVL by using an EcoDrive app -Personal Priority Assistant.

## HOW IT WORKS

The program is very simple. **The GPS location of the freight vehicle is shared** with the EcoDrive and Smart Priority software.

### EcoDRIVE APP

The EcoDrive app provides real-time advisory information to any mobile device. The driver will **know when the traffic signal will change**, as well as the **recommended travel speed**, to arrive at the traffic signal when it is ready to turn green.

### SMART PRIORITY SYSTEM

The Smart Priority system uses GPS location data from a truck's existing AVL system or from the EcoDrive app to provide **added green time**, as needed, to allow the truck to safely proceed through the traffic signal.

The use of EcoDrive limits the need to change the existing signal timing plan through interventions like added green time.

### FREIGHTPRIORITY.COM

FreightPriority.com is where participants can **find information** about the program, **sign up**, and **view program indicators**. Agency users can also **securely login to Smart Priority** through this website to access information related to their participating signals.

### PUBLICCOORDINATE PORTAL

Through the PublicCoordinate portal, agencies and truck operators are able to **provide feedback** on locations and routes, letting the team know how the system is working and what could be improved.



INNOCITY PARTNERS

## TO PARTICIPATE

Ultimately, there are no hard commitments. Participation is completely voluntary and **there is no cost to participate.**

### FREIGHT OPERATORS/DRIVERS

Drivers can register as a user on [FreightPriority.com](https://www.freightpriority.com) or contact [doug.gettman@kimley-horn.com](mailto:doug.gettman@kimley-horn.com) to get started.

A vehicle's **GPS coordinates are shared** using the existing in-vehicle telematics device or using the EcoDrive App downloaded on an Apple or Android device.

Fleet operators will need to talk to their AVL/telematics provider to let them know their truck location can be shared.

**AVL Suppliers can contact [doug.gettman@kimley-horn.com](mailto:doug.gettman@kimley-horn.com)** for more information on project participation and communication with their fleet customers.

### LOCAL GOVERNMENT AGENCIES

Local governments can register as a user on [FreightPriority.com](https://www.freightpriority.com) or contact [kent.kacir@kimley-horn.com](mailto:kent.kacir@kimley-horn.com) to get started. Local governments **provide mapping data** for the physical location of traffic signals and **inform the project team** of any major intersection changes, like construction.

Each agency's IT department will need to **permit limited secure traffic** to pass through their firewall over a specified port to allow the Smart Priority system to interface with traffic signals. A **VPN tunnel** between the Smart Priority system and the agency traffic signals is preferred. Other options are also available.

Staff members are invited to participate in optional status report and stakeholder meetings to **discuss performance.**

## DATA PROTECTION & PRIVACY

**The data is anonymized and never used to track individuals.** All data hosted in the Smart Priority cloud will remain the property of the supplier, whether that is the public agency, the AVL supplier, or the truck operator.

The FSOP will not re-use, re-sell, or otherwise manipulate the data for any purpose outside of the **operation of the FSOP service or demonstration** of the FSOP service operations to other public agencies, AVL suppliers, and/or truck operators. No information on truck ownership, registration, device MAC, and driver PII will be retained except where explicitly necessary and protected according to industry standard PII policy and technologies.

## ACCESS TO DATA ANALYTICS

The program will develop **key performance indicators (KPIs)**. A customized dashboard, accessible through [FreightPriority.com](https://www.freightpriority.com), will report KPIs to all users with access credentials, which will consist of all freight operators, AVL suppliers, participants and agency stakeholders.

## PROGRAM BENEFITS



### PUBLIC HEALTH

- Better Air Quality
- Increased Multi-Modal Safety



### QUALITY OF LIFE

- Reduced Congestion
- Better Commute Times



### ECONOMIC DEVELOPMENT

- Improved Route Efficiency
- Increased Revenue/Decreased Costs



### EQUITY

- Available for all truck fleets and drivers with a smartphone on board, regardless of size

For every **5,000 FREIGHT STOPS** that are eliminated at traffic lights **EACH DAY**, the benefits are:



**3,800 MIN**  
travel time saved  
for truck drivers



**\$1,500**  
fuel and operational  
costs saved &  
4 mpg fuel efficiency



**1,300 KG**  
emissions saved

**OVER A YEAR,**  
this accumulates to more than:



**16,000 HRS**  
travel time saved  
for truck drivers



**\$400,000**  
fuel and operational  
costs saved



**325 METRIC TONS**  
emissions saved