commsignia

Transit Signal Priority

**Provide more reliable public services
with less disruption in traffic**

#1

Your number 1 goal:

Provide services to citizens efficiently and safely. The key to this is rapid movement in traffic, which is increasingly challenging.

Commsignia's integrated solutions can shorten emergency response times, make services more reliable and help make mass transit a popular choice again and connected urban maintenance fleets and buses can save on fuel costs and cause less disruption in traffic.

Expectations:

- There's no delay in emergency
- Buses arrive on time
- Reduced fuel consumption and costs
- Sustainable services

Commsignia's Transit Signal Priority solution enables firefighter, buses and city maintenance workers to move faster by automatically giving them priority at intersections. Vehicle-to-Everything (V2X) is the best choice, because once you deploy it, you can build many different services on the same equipment.

V2X-enabled cars can

- Warn drivers about vulnerable road users
- Send information about congested road
- Reroute vehicles to avoid hazards and road works
- Inform first responders of emergency situations

Get things done faster

Traffic on American roads is already congested, and slowly moving vehicles like trash trucks, snow plows and road maintenance can make the situation even worse. Give a clear way for these vehicles at intersections to let city fleets cause less disruptions in traffic. It'll be much easier to get to your city's target KPIs.

Easy deployment and maintenance

The Commsignia Central device and data management platform allows V2X road unit provisioning and maintenance simply from a central location.

Save fuel costs and improve response times

Scientific research shows that connected vehicles can decrease fuel consumption by as much as 22.1 percent by moving through traffic with optimized traffic lights. Also, drivers alerted by in-vehicle messages give way earlier to ambulance vehicles.

Works on a dedicated channel

Commsignia V2X communicates with smart intersections on a radio frequency dedicated for road safety, and it doesn't need a line of sight, unlike legacy optical TSP systems. V2X works from a distance, so it can provide much more time for other vehicles to stop safely and clear the way before prioritized vehicles.
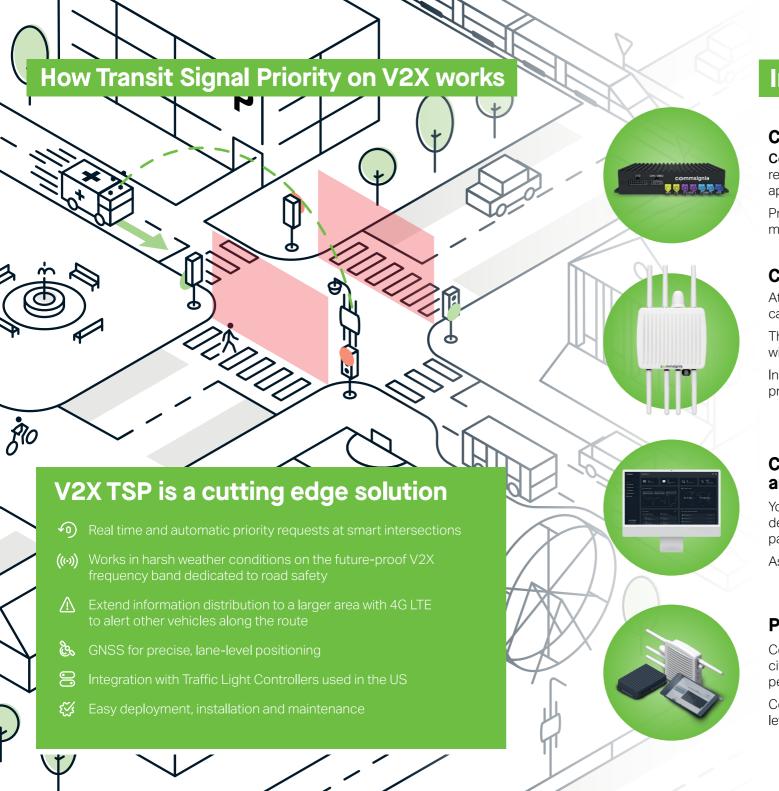
Multi-purpose technology

V2X has much more to offer besides TSP. Smart sensors integrated with the same V2X roadside unit improve Vulnerable Road User safety by sending alerts to nearby vehicles to help avoid collisions and red light violations.

Built to survive for a long time

Roadside units withstand and work flawlessly under harsh weather conditions. Real-time TSP requests are fulfilled in fog, heavy snowing and raining. What's more, as V2X penetration grows, applications like TSP will work even better, and cities get better insights about traffic.

How Transit Signal Priority on V2X works

Ingredients

Commsignia On-board Unit (OBU)

Connected Vehicles (CV) are equipped with a retrofitted or built-in V2X unit which runs safety applications such as Transit Signal Priority.

Priority requests can be fully automatic or manually initiated.

Commsignia Roadside Unit (RSU)

At smart intersections, traffic lights, sensors and cameras are integrated with a V2X roadside unit.

This allows V2X-enabled vehicles to communicate with the road infrastructure.

In this use-case Commsignia RSU negotiates the priority request with the traffic light controller.

Commsignia Central for overview and management

You can have a full overview of your existing deployment, monitoring and managing device level parameters and performance.

Assisting infrastructure owners and operators' daily life.

V2X TSP is a cutting edge solution

- Real time and automatic priority requests at smart intersections
- Works in harsh weather conditions on the future-proof V2X frequency band dedicated to road safety
- Extend information distribution to a larger area with 4G LTE to alert other vehicles along the route
- GNSS for precise, lane-level positioning
- Integration with Traffic Light Controllers used in the US
- Easy deployment, installation and maintenance

Professional services

Commsignia can tailor its products to meet your city's system requirements to provide a fully personalized solution.

Commsignia is always here to help you with multiple levels of support services.

About us

Commsignia is the largest company fully focused on V2X technology.

Our mission is to drive the industry forward and create innovative solutions ready for deployment.

We are members of

Interested?

Let us set up a demo for you!

Drop us a line at:
sales@commsignia.com