



Improve traffic safety and efficiency with Hayden AI

Safe Sense eNX41 Camera

for School Buses



The Safe Sense eNX41 Camera

At Hayden AI, we've engineered our Safe Sense iNX41 camera to drastically improve the scalability and efficiency of the traffic enforcement process for school bus stop arm violations in communities across the country. Despite actually being illegal in all 50 states, school bus stop arm violations are one of the most routinely un-enforced traffic safety violations by local law enforcement and municipalities. Studies have shown that, without the threat of enforcement and without the public actually seeing or hearing about the law being enforced, most laws will have little, if any impact.

By using advanced AI that can process real-time data combined with industrial AIoT devices, Hayden AI is turning a city's existing school bus fleet into a true "smart" fleet that completely automates the detection and reporting of school bus stop arm violations to city officials. Making our schools and the communities they reside in a safer place for our young, pedestrian bus riders.

The Safe Sense eNX41 camera:

- Professional front-end and back-end with automated data flows
- Identifies and reports on all state and local variations of the school bus stop arm violations to include two lane, multilane lane, and divided highways
- Capable of collecting real-time LPR data to provide schools and/or law enforcement with public safety alerts
- 911 integration with local emergency authorities
- Comprehensive rules engine, specifically designed around the city's municipal codes and regulations
- Real-time surveying of curb assets
- Capable of providing dynamic updates to city's existing GIS maps





The Safe Sense platform is comprised of:

- Industrial AIoT device with smart cloud processing
- Browser-based portal that can be easily accessed by city officials

The Safe Sense iNX41 reduces:

- Injuries and fatalities caused from school bus stop arm violations
- Response time of 911 services to emergency situations

Over 26 million students ride a school bus each day in the U.S. When you evaluate the constant daily interaction between school buses and motorists, the primary safety risk is that those young student bus riders are also in fact partial “pedestrian commuters,” as they do have to walk to and from their bus each and every day. Because of this, a law was created that states when a school bus stops to drop off or pick up students and its red lights are flashing with its “stop-arm” extended, motorists approaching that bus from either direction must stop as well or be issued a violation. But motorists often just don’t want to stop, they want to get where they are going with little interruption and as quickly as they can.

This has created such an issue that when a survey of 3,000 drivers was conducted by the National Highway Traffic Safety Administration, 99% of those interviewed deemed school bus stop arm violations as “The most dangerous unsafe driving behavior” over all other high risk behaviors, including driving through a stop sign or light, speeding, passing in a no-passing zone, and even racing another driver.

Predictive Alerts and 911 Integration

Bus drivers receive visual and audible alerts on violations as they occur, while also having a direct data link to 911 and first responders in the event of an emergency situation.

In an emergency, the Safe Sense eNX41 camera provides:

- Precision location data
- Sends life-saving information directly to 911 services
- Improves response time of first responders



**“The greatest risk to your child is not riding a bus,
but approaching or leaving one.”**

National Highway Traffic Safety Administration

According to the 2018-2019 National School Bus Loading & Unloading Survey of all 50 states:

- 8 school children deaths were reported in or around the loading or unloading areas of a school bus (33% increase from the previous school year)
- 7 of those children were killed by other vehicles passing the school bus (133% increase from the previous school year)

According to the 2019 National Association of State Directors of Pupil Transportation Services, 39 states conducted a one-day survey with over 27% of their school bus drivers reporting:

- 95,319 vehicles passed their school buses illegally (13% increase from the previous school year)
- The sample results point to more than 17 million violations over a 180-day school year

According to a survey by the New York Association for Pupil Transportation:

- Up to 50,000 cars per day pass a stopped, working school bus in the state
- 2,047 cars per day passed stopped buses on the right side where school children exit



The power of vision

City leaders need better tools to help them collect and make sense of community challenges. In particular, they want data about various aspects of city operations to help inform decision-making on quality of life issues. After all, with competing demands and limited resources, it's vital for city leaders and the community to choose the right priorities. We've built a solution for this. Using a variety of sensors installed on city fleet vehicles--making privacy a priority--we can identify and collect actionable insights for enforcement agencies to include traffic, fire, health, sanitation, building and city codes, and many other areas impacting government services.



Contact Us

USA (Headquarters)

Hayden AI Technologies, Inc.
492-B 9th Street
Oakland, CA 94607, USA
(628) 233-2900

Japan

Hayden AI Technologies Japan G.K.
EGG JAPAN
Shin-Marunouchi Building
1-5-1, Marunouchi
Chiyoda-ku, Tokyo 100-6510, Japan

Customer Support

support@hayden.ai

Press

press@hayden.ai