

Predictive Stop Arm®

Protect Students from Stop Arm Violations



Improve Student Safety Loading/Unloading
Advanced Technology for the Danger Zone



- Enhance Student Safety
- Actively Notify when System Detects Probable Risk
- Aid Bus Operator with Inherent Blind Spots

Proactively protect students from stop arm violations — notify them when the system determines it may not be safe to cross

If the system detects a probable stop arm violation, students will hear “Danger, Get Back,” emitted from speakers mounted outside the school bus – Helping Keep Students from Harm’s Way

The Predictive Stop Arm is an innovative, patented solution that uses radar technology and predictive analytics to monitor oncoming vehicle traffic, measuring vehicle speed and distance from a school bus. Analytics algorithms process data from radar sensors and determine whether a vehicle is likely to have sufficient time to slow down and stop or whether a stop arm violation is probable. If the system perceives that students should not cross, students will hear “Danger, Get Back,” emitted from speakers mounted outside the bus and the bus operator will receive a visual alert inside the bus.

The Predictive Stop Arm helps students avoid accidents before they happen

83,944 stop arm violations occur each day nation-wide, equating to over 15 million violations in a school year.*

Every time a vehicle illegally passes a stopped school bus, students risk injury and death.

The Solution features three operational modes:



Inactive Mode

The system is not active (no warnings or alarms) while the bus is in motion or stopped in traffic. This minimizes any possible distraction to bus operators.



Predictive Mode

The system automatically transitions to predictive mode when the bus stops and turns on the flashing amber lights (the door remains closed and the stop arm is not extended). The system generates visual warnings to the driver if an approaching vehicle is traveling too fast and is located within a pre-set proximity threshold.



Monitoring Mode

Once the bus operator has determined it is safe for students to disembark, the stop arm has been extended and the bus door has opened, the system transitions to monitoring mode. The system generates a visual warning to the bus operator if it detects a vehicle approaching within the pre-set proximity threshold and this vehicle has reasonable time to stop.



If the system detects a vehicle approaching within the pre-set proximity threshold and the vehicle is unlikely to stop, the system issues a visible and audible warning to the bus operator and an audible warning is issued to the students advising them it's not safe to cross.

The Solution also Features:

- Multi-level visual alerts for the bus driver
- Audible alerts for the students
- Adverse operating temperature ranges from -30° to 50° C (-22° F to 122° F)
- Monitoring of up to three lanes of traffic

Customizable Settings:

Using student reaction time and vehicle speeds, the Predictive Stop Arm comes with a set of standard factory radar settings which can be customized on a per district basis. Radar settings can be configured and bulk loaded into buses through a user-friendly Web UI which supports most mainstream Web browsers.

* National Stop Arm Violation Count

1206-PREDICTIVE-STOP-ARM-BR-SB-070524

Copyright ©2024 Safe Fleet and its subsidiaries. All rights reserved. No part of this publication may be reproduced by any means without written permission from Safe Fleet. The information in this publication is believed to be accurate. However, Safe Fleet does not make any representation or warranty to that effect and does not assume responsibility for any consequences resulting from use of such information. Revisions or new editions of the publication may be issued (or not issued) in our discretion to incorporate such changes. **IMPORTANT NOTICE:** No system can prevent all incidents. Inattentive drivers, weather, erratic student behavior, and other factors can inhibit detection and overall system performance. Drivers must always keep proper lookout.

1.877.630.7366
safefleet.net

SAFE  FLEET
Driving Safety Forward™