

SEEING EVERY ANGLE IN REAL TIME



OVERVIEW

The Full Picture

Blind spots abound on a vehicle as large as a school bus, and as federal regulations have required school bus seats to be taller there's been an unintended consequence. It's created blind spots inside the bus by making it harder for cameras to see over the higher seat backs. For Zach McKinney, Director of Transportation for Hamilton Southeastern Schools, keeping students and drivers safe meant finding a camera system that could capture every angle. "We found that a traditional camera lens would not capture what's going on inside of the seat compartments further back. That's when I have an issue because I need to see down inside every seat," he said. McKinney said they decided on Gatekeeper's Wide Angle Camera for its total coverage inside the bus, the safety it would provide their students and drivers, and their established familiarity with Gatekeeper's user-friendly G4 Vision software. Gatekeeper's Wide Angle Camera was initially installed on one bus as a pilot project and McKinney said they have been so pleased with the system that they have already added it to almost 30 of their buses.



CLIENT: Hamilton Southeastern Schools

INDUSTRY: Public Schools

LOCATION: Multiple

SIZE: Over 21,500 students

GATEKEEPER SOLUTION -WIDE ANGLE CAMERA SYSTEM

CAMERA

- Four 160° wide angle fisheye cameras
- Analog High-definition 1080p 30FPS
- Convenient and simple calibration procedure

MOBILE DIGITAL VIDEO RECORDER

- 5 channel high-definition
- Dual Core
- H.264 Video Compression



Hamilton Southeastern Schools

THE CHALLENGE

Dangerous Blind Spots

Children are kept safe from accidents in school buses by using tall seat backs that are padded with energy absorbing material and spaced tightly together. In 2009, a federal rule went into effect that raised the minimum height of seat backs on new school buses from 20 inches to 24 inches for better crash safety. As schools replace their buses, there's been an unintended impact of having the higher seat backs: less visibility. Drivers could no longer see their passengers and conventional cameras were unable to see over the higher seat backs. While children are now better protected from crashes, McKinney said there have been new safety issues created inside the bus. "For the driver, there's no way for them to be able to look in their student mirror and see that happening. For instance, most recently vaping has been a nationwide issue, especially in our adolescents and children. What they're doing is vaping by hiding down the seat back," he said. Bullying, harassment and vaping are some of the most common issues on a bus that require behaviour management. If a bus driver cannot see what's happening and neither can the camera, then accountability becomes a challenge, and lengthy incident resolutions can strain district resources. Having interior cameras that capture every detail down into the furthest seat can help drivers by being the eyes and ears for administrators, as well as better protect students by providing a higher level of accountability.

THE APPROACH

Total Visibility

McKinney said Hamilton Southeastern Schools chose Gatekeeper's Wide Angle Cameras for a pilot installation because it addressed the visibility issue they were finding in buses with the new, higher seat backs. Behaviour management and resolving incidents are critical aspects to keeping school buses a safe place. If the bus driver can't see what's happening inside the bus and cameras aren't capturing the full story it becomes extremely difficult for the driver to monitor and maintain behaviour. Incidents also become almost impossible to untangle and resolve without the proper footage. Gatekeeper's Wide Angle Cameras are designed to overcome the visibility challenges that come with high seat backs. This total coverage means that administrators have the indisputable evidence they need for behaviour management and fast incident resolutions. "The coverage is phenomenal from a safety standpoint. I can view exactly what I need to view on the bus from front to back. It's giving me what I need in order to address any kind of behavior issues," McKinney said.

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THE SOLUTION

The Right Footage

McKinney said that when incidents occur inside the bus, Gatekeeper's Wide Angle Cameras has meant they always have the right footage. Resolutions are now faster and students are kept safer. "There's no way we can function safely without having it," McKinney said. If parents want to see footage of a given incident, he said that using Gatekeeper's G4 Vision software makes it easy to extract clips to show parents evidence that's indisputable. "This system has been valuable for us not only for the quality of the footage, but also ease of use when trying to go back and find video of an incident and make clips and capture it," he said. The complete coverage also helps relieve some of the strain on drivers with the knowledge that every incident and behavior inside the bus is being recorded and captured.



Hamilton Southeastern Schools, School buses

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THE RESULTS

Successful Pilot Project

The camera coverage, the quality of the footage and the ease-of-use for accessing the footage has turned a pilot project for Hamilton Southeastern Schools into a system they want on their entire fleet. "We started with just one install to test it out. But now, this is the system we want installed on every bus moving forward," McKinney said. Paired with Gatekeeper's G4 Vision software, McKinney said viewing and extracting footage from the buses has been simple and fast. Gatekeeper's Wide Angle Cameras have provided Hamilton Southeastern drivers and administrators peace of mind knowing they are keeping children as safe as possible once they enter one of their school buses. District resources are also less strained now that incidents get resolved faster with footage that can't be disputed. "The reality is, as a parent you don't really know what happened until you have that video evidence put in front of you. With this system we know we're going to have what we need."

GATEKEEPER

Gatekeeper Systems Inc.

301-31127 Wheel Avenue Abbotsford, BC
V2T 6H1 Canada

Gatekeeper Systems USA Inc.

200 Rittenhouse Circle Suite 7E Bristol, PA
19007 USA

www.gatekeeper-systems.com

Toll free -1 888 666 4833