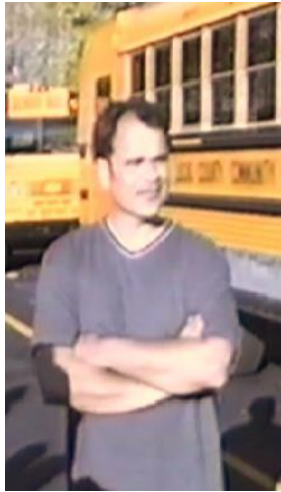


# School Bus Safety Report Card

Steve Gardner  
Founder/President  
Gardian Angel, LLC

[www.GardianAngelLLC.com](http://www.GardianAngelLLC.com)

# Qualifications of Presenter



- 20 years of experience as an ASE certified school bus mechanic
- 15 years of experience as a transportation supervisor
- Credited with organizing the first mock school bus disaster in the state of Ohio in 1996, which involved mentally and physically challenged individuals
- Inventor of the patented Guardian Angel® School Bus Safety Lighting System



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[Patent # US 8,669,853 B1](#)

# Top Safety Concerns When Boarding the School Bus

- Illegal school bus passing
- Distracted drivers
- Poor visibility



# Sobering Fact: 119

- “From 2003 to 2012, 174 school-age children died in school-transportation related crashes, 55 were occupants of school transportation vehicles and **119 were pedestrians.** “



**Focusing on the pedestrians: if each child’s life represents one floor in a building, it would exceed the tallest building in the western hemisphere, One World Trade Center, which soars above the city skyline at 104 stories.**

Compare that to the 119 stories that were taken away from their families too soon.

[NHTSA 2003 - 2012 Data \(Revised June 2014\)](#)

# What's the Law for Passing a Stopped School Bus in AL?



- You must stop when you are following or meeting a school bus or church bus stopped on the road while the stop signal arm is extended and displaying flashing red lights. Remain stopped until the stop signal is retracted and red lights are turned off. You should also stop when meeting or following a school or church bus which is stopped on a four to six lane undivided highway. A stop is not required on a divided highway having four or more lanes which permits at least two lanes of traffic to travel in opposite directions when meeting a school or church bus which is stopped in the opposing roadway or if the school or church bus is stopped in a loading zone which is a part of or adjacent to such highway and where pedestrians are not permitted to cross the roadway.



# Do You Know Where the Stop Arm Violations are Occurring?

- “Of the 75,966 stop-arm violations counted, **98%** were on the **left side** of the school bus (the driver’s side).”
- “More vehicles passed from the **front (58%)** than from the rear (42%)”



# Prior to 2000

- From 1979 – 1999 in Alabama there were **12** children fatalities in the loading zone of a bus.



[Kansas Department of Education/ School Bus Safety Unit](#)

# Continued Reports of Fatalities

- 2004 - 2005 Alabama: **1 fatality**

[2004 - 2005 National School Bus Loading & Unloading Survey](#)

- 2005 - 2006 Alabama: **1 fatality**

[2005 - 2006 National School Bus Loading & Unloading Survey](#)

- 2009 - 2010 Alabama: **1 fatality**

[2009 - 2010 National School Bus Loading & Unloading Survey](#)



# Fatality Excerpt

- Alabama: After the bus driver discharged the students, she released the brake and started moving the bus forward. The driver stopped the bus after she felt a thump. The bus driver never saw the three-year-old girl on the left side of the bus. The girl was struck and killed by the left front wheel of the bus.



# Recommendation for Alabama

## The patented Gardian Angel® School Bus Safety Lighting System

- Warns motorists to pay attention while the stop arm is out
- Alerts drivers that students are crossing
- Traffic can clearly see children boarding
- Students can see where they step to prevent falls
- Keeps children safe and out of the “danger zone”
- Illuminates through inclement weather, extreme climate change, even creates a visible path in daylight



[Patent #US 8,669,853 B1](#)

# What is the Gardian Angel®?

- See our promotional video and more at [www.GardianAngelLLC.com](http://www.GardianAngelLLC.com)

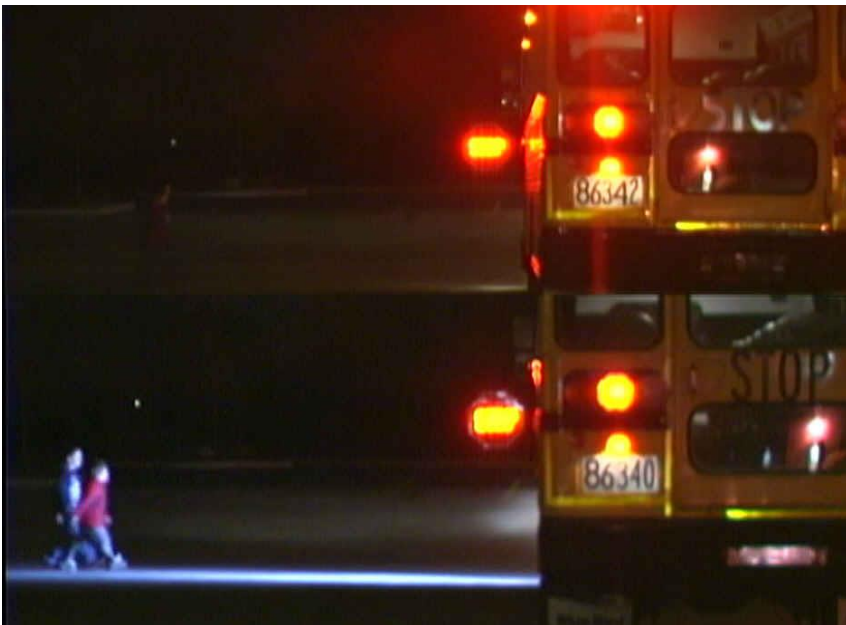


# About the System



- The lighting system works with any type of bus (A/C/D) and installation can typically take under thirty minutes.
- The lighting system even works on buses equipped with multiplex wiring.
- There are no additional switches for the driver to operate. The system automatically turns on when the red lights are activated, and turn off when the entrance door of the bus is closed.

# Consider This



- Stop sign cameras are infrared. In darkness, every car is gray in color.
- The Gardian Angel® can show the camera the actual color of the offending vehicle, which is required in some states in order to prosecute.



# Specifications



- DOT SAE lens markings ensures peace of mind during vehicle inspections.
- IP 67 certified with O-ring sealed construction – extra protection from dust & water immersion.
- It operates in temperatures of -40 to +65 degrees Celsius.
- Current draw is 1.66 Amps at 12.8 VDC.

# Effectiveness of the System



- Preliminary data from field test in WY revealed at least a 50% reduction of coal trucks running the school bus red lights on a major road.
- Data after completion of the pilot study in WY revealed only one vehicle running a driver's red lights since installing the lighting system.
- The pilot was deemed a success and we were given state approval.

# Endorsements



- Gardian Angel® is endorsed by the **Michigan Association for Pupil Transportation.**
- We have numerous customer surveys that display the driver's positive opinions of the system.
- Entire fleets are now using our technology.

# States Allowing the Gardian Angel ®



- **Michigan** (2013)
- **Wyoming** (June 2014)
- **Mississippi** (Aug. 2014)
- **Vermont** (Oct. 2014)
- **North Carolina** (Nov. 2014)
- **Nevada** (Dec. 2014)
- **Colorado** (Dec. 2014)
- **Nebraska** (Jan. 2015)
- **New Jersey** (Jan. 2015)
- **Wisconsin** (Jan. 2015)
- **Missouri** (Jan. 2015)
- **Texas** (Jan. 2015)
- **Alaska** (Jan. 2015)
- **Idaho** (April 2015)

# Ordering Information



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Thank you!