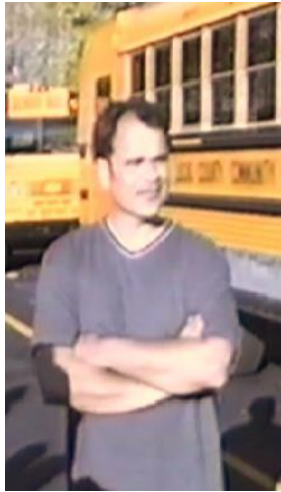


# School Bus Safety Report Card

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 PA?



- When the bus stops with its red lights flashing and its stop arm extended, you must stop at least 10 feet away from the bus whether you are behind it or coming toward it on the same roadway or approaching an intersection at which the school bus is stopped. Remain stopped until the red lights stop flashing, the stop arm has been withdrawn, and the children have reached a safe place. There is only one exception to the school bus stopping requirement. If you are approaching a school bus that is stopped with its red lights flashing and stop arm extended and you are driving on the opposite side of a divided highway, (i.e. concrete/metal barriers, guide rails or trees/rocks/streams/grass median), you do not have to stop.

[State Laws](#)

# 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 Pennsylvania there were **24** children fatalities in the loading zone of a bus.



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

# Continued Reports of Fatalities

- 2004 - 2005 Pennsylvania: **1 fatality**

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

- 2005 - 2006 Pennsylvania: **1 fatality**

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

- 2008 - 2009 Pennsylvania: **1 fatality**

[2008 - 2009 National School Bus Loading & Unloading Survey](#)

- 2009 - 2010 Pennsylvania: **1 fatality**

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

- 2011 - 2012 Pennsylvania: **1 fatality**

[2011 - 2012 National School Bus Loading & Unloading Survey](#)



# Fatality Excerpt

- Pennsylvania: A six-year-old male was dropped off by his school bus near his home. Without notice the student ran out in front of the school bus and was struck by the front wheels. He later died from his injuries.



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

# Recommendation for Pennsylvania

## 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)

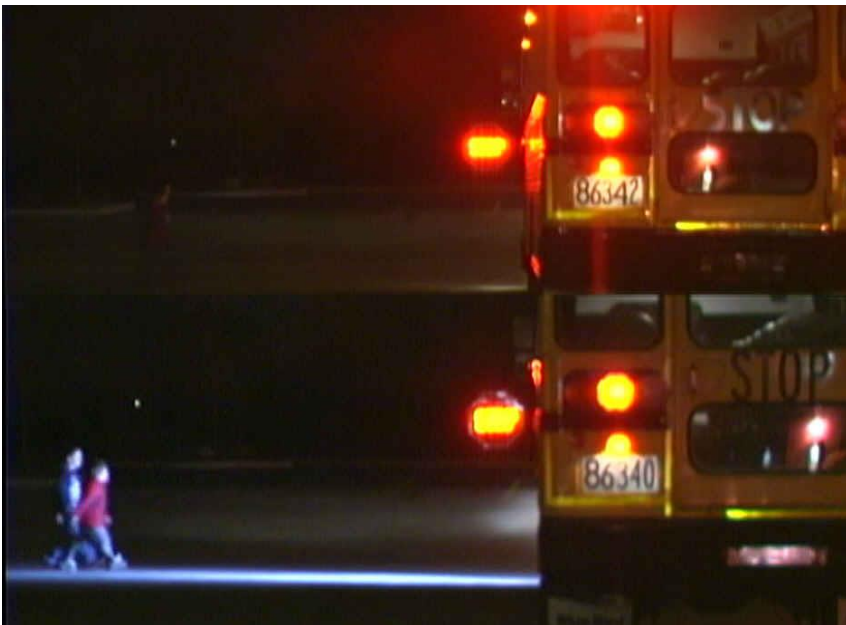


# About the System



- 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 Guardian 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!