



# **Illegal Passing and Stop Arm Enforcement**

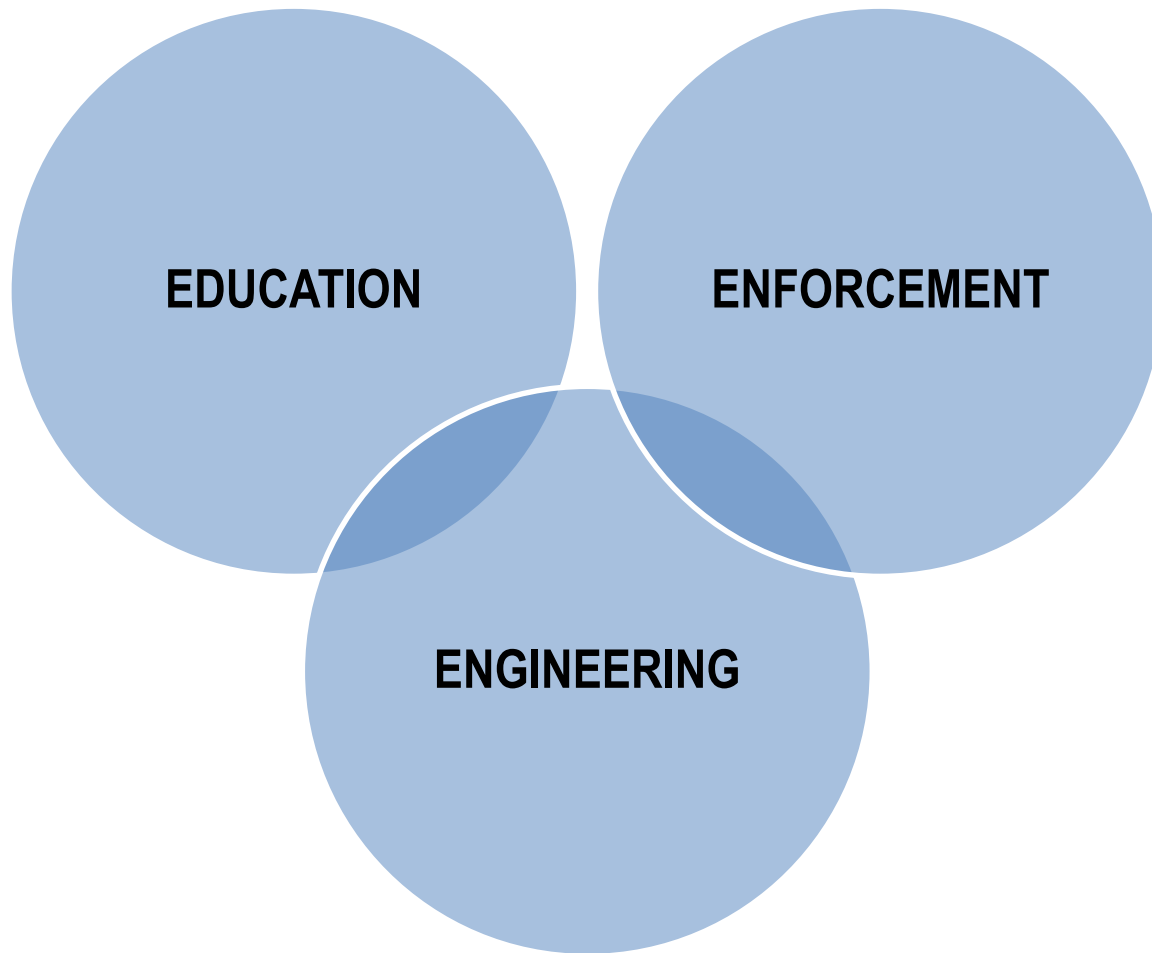
Derek Graham, North Carolina  
Mathew Palmer, NC State (ITRE)  
Pat Schofill, Georgia

# What's the Problem?

- School buses are incredibly safe, but...
- About 10 students are killed each year by motorists illegally passing school buses
- The “Danger Zone” remains our #1 challenge in moving toward the goal of zero fatalities to our student passengers



# 3 E's of TRAFFIC SAFETY





# Why do a Survey? - Education

- “Loading zone safety” has been a concern of student transporters nationally for over 40 years
- Florida was one of first states to survey illegal passing in 1995 and 2000; North Carolina did annual surveys
- NASDPTS identified need for national data on incidence of illegal passing
- NASDPTS coordinated first national survey in 2011
- One-day “snapshot” by bus drivers, mostly between March 1<sup>st</sup> and May 15<sup>th</sup> each year

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- Center for Urban Transportation Research Surveys, 1995 and 2000
- One-day snapshots of illegal passing incidents reported by Florida public school bus operators
- Findings uncannily consistent in both years
- About 10,500 instances per day, reported by 3,500 bus operators
- Equated to almost 2 Million in each 180-day school year

ILLEGAL PASSING OF STOPPED SCHOOL BUSES IN FLORIDA

FINAL REPORT

Prepared for

SCHOOL TRANSPORTATION MANAGEMENT SECTION  
Department of Education  
State of Florida

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February 1996





# History of National Survey

- Loading Zone Policy Forum at 2010 NASDPTS Conference in Portland, Oregon
- Resulted in Resolution #5 adopted by the membership November 1, 2010
- Notification and forms sent to each State Director February, 2011
- Surveys were conducted between March 1 and May 15, 2011

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# 2010 NASDPTS Resolution

**WHEREAS** the members of the National Association of State Directors of Pupil Transportation Services (NASDPTS) believe that any student fatality in the school transportation process is unacceptable, and

**WHEREAS** there continue to be student fatalities in the school bus loading zone resulting from motorists illegally passing school buses at passenger stops, and

**WHEREAS** several states have conducted counts of stop arm violations and the results have proved useful in showing the magnitude of the problem to law enforcement, state and federal agencies and the general public, therefore

**BE IT RESOLVED** that NASDPTS encourages each state to conduct an **annual one-day count of stop arm violations** with a target count date of one school day between March 1 and May 15, and

**BE IT FURTHER RESOLVED** that the NASDPTS Board of Directors will provide to each state recommended processes and will publish the results of the annual count by July 15 on the NASDPTS website and **will make the data available to the National Highway Traffic Safety Administration and American School Bus Council to be used for "Back To School" and other motorist awareness.**



# Reporting

- States were given the opportunity to report by two methods
- *State* report or *local district* report
- Some inconsistencies in reporting first three years; e.g., some totaled incidents; some totaled vehicles passing; survey now counts only vehicles

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# SCHOOL BUS ILLEGAL PASSING DRIVER SURVEY .... DATE: \_\_\_\_\_



DEAR SCHOOL BUS DRIVER: Our state is participating in a national survey of vehicles that illegally pass stopped school buses that are loading and unloading students. Please observe the vehicles that illegally pass your school bus while it is stopped with STOP ARM(s) extended and put an X in the appropriate blanks. Please report any vehicles observed illegally passing your stopped school bus. REMEMBER: Please take extreme caution when completing the form - YOUR MAIN RESPONSIBILITY IS TO THE SAFETY OF YOUR STUDENTS. Time permitting, please complete as much information as possible and submit to your supervisor by: \_\_\_\_\_. This form should be completed by each driver on the day of the illegal passing count. Please turn in this form to your supervisor EVEN IF THERE ARE NO VIOLATIONS TO REPORT.

School/District/Employer: \_\_\_\_\_

Driver (your) Name: \_\_\_\_\_

Bus #: \_\_\_\_\_

**INSTRUCTIONS: FILL OUT ONE ROW FOR EACH VEHICLE THAT PASSES YOUR BUS.**

*Example: If three vehicles pass at the same bus stop, use three rows. If there were no pass-bys of your bus on the day of the survey, leave all rows blank*

WHEN did the vehicle illegally pass your stopped school bus? (insert "X")	Vehicle Passed from WHAT DIRECTION?: (insert "X")	Vehicles Passed on WHICH SIDE of the Bus? (insert "X")
____ AM ____ Mid-day ____ PM	____ Front (Opposite Direction) ____ Rear (Same Direction)	____ Left (driver side) ____ Right (door side)
____ AM ____ Mid-day ____ PM	____ Front (Opposite Direction) ____ Rear (Same Direction)	____ Left (driver side) ____ Right (door side)
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Please report only violations that meet the following criteria:

- (1) BUS IS COMPLETELY STOPPED
- (2) BUS RED LIGHTS ARE FLASHING AND STOP SIGN(S) EXTENDED
- (3) VEHICLE(S) ILLEGALLY PASS BY THE RIGHT OR LEFT SIDE OF BUS DURING STOP

This data collection form should be completed by each bus driver on the day of the illegal passing count and should be turned in to a supervisor EVEN IF THERE ARE NO VIOLATIONS TO REPORT.

# Why Data?

“If it’s not written down, it didn’t happen!”

- Getting the word out, via Press Conferences, Public Awareness activities (*Education*)
- Specifications and equipment improvements (*Engineering*)
- Targeting violators (*Enforcement*)
- Policy changes (EEE)
- Bottom line: ***Improve Student Safety!***

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## ***Press Release***

### ***Increased State Survey Participation Shows Illegal Passing Still Prevalent***

July 21, 2016

**Baltimore, Maryland-** Today, the national association representing state directors of pupil transportation released the results of its 6th annual survey on illegal passing of school buses.

In a record 33 states throughout the country, plus the District of Columbia, almost 20 percent of the nation's school bus drivers participated in a one-day survey to report how many times motorists passed their stopped school buses illegally.

Over 96,000 school bus drivers reported that 74,421 vehicles passed their buses illegally on a single day.

Throughout a 180-day school year, these sample results point to more than 13 million violations by a segment of America's motoring public.

# 2016 Summary

- Number of states participating: 33
- Number of drivers: 96,540 (nearly 1/5 of the nation's estimated 485,000 school bus drivers)
- Number of vehicles passing illegally in one-day snapshot: 74,421
- Extrapolates to over ***13.4 million passes of buses surveyed*** in 180-day school year.
- Nationwide that's over 67,000,000 annually!



## 2016 Survey on Illegal Passing of School Buses--Summary Results

Name of Person Reporting	State	Survey Date	Number of Participating Bus Drivers	Illegal Passes Observed			Passed From		Passed On	
				AM	Mid-day	PM	Front	Rear	Left	Right
Dennis Watson	AK	05/11/2016	843	120	0	99	142	77	219	0
Chad Carpenter	AL	06/30/2016	9,504	649	0	856	1,211	294	1,447	58
Mike Simmons	AR	04/26/2016	2,491	266	0	440	564	142	677	29
Anna Borges	CA	04/12/2016	4,228	12,240	1,690	12,449	11,887	14,492	26,379	0
Local Reporting	CO	Various	841	273	29	209	337	181	448	14
Local Reporting	CT	Various	35	26	5	28	40	26	48	1
Gretchen Brumley	DC	04/06/2016	532	378	37	272	372	315	687	0
Ron Love	DE	05/06/2016	1,543	436	11	459	492	414	880	26
Local Reporting	FL	Various	8,007	4,625	167	4,831	5,363	4,086	9,127	329
T. Carlton Allen	GA	04/20/2016	11,237	3,958	36	4,295	5,703	2,586	8,177	112
James Kauhi	HI	04/15/2016	85	0	0	1	1	0	1	0
Max Christensen	IA	05/13/2016	1,246	66	7	92	114	51	158	7
Combined Local and State Reporting	IL	05/12/2016	6,164	1,186	216	1,351	2,093	660	2,675	78
Michael LaRocco	IN	04/26/2016	8,272	1,302	117	1,535	2,374	580	2,911	43
Local Reporting	KS	Various	2,163	421	52	520	736	233	952	11
Leon Langley	MD	04/20/2016	5,428	2,007	250	2,077	2,987	1,346	4,201	133
Local Reporting	ME	Various	622	58	15	67	125	7	138	0
Local Reporting	MI	Various	1,177	235	35	272	361	161	511	8
Lt. Brian Reu	MN	04/20/2016	2,621	250	10	270	454	75	520	9
Derek Graham	NC	03/16/2016	13,035	1,346	38	1,810	2,226	980	3,015	177
Don Williams	ND	05/11/2016	132	37	4	33	51	23	70	4
Local Reporting	NE	Various	390	39	10	36	51	34	84	1
Adam Greenwood	NM	04/27/2016	1,267	220	13	242	381	94	464	11
Diana Hollander	NV	05/19/2016	875	1,130	64	1,321	1,563	952	2,495	20
Peter Manella	NY	05/18/2016	1,359	445	15	542	358	113	954	48
Robert Harmon	OH	05/16/2016	147	65	0	0	65	0	65	0
Richard Podmore	SC	04/06/2016	1,491	222	11	316	341	183	521	9
Rebecca Rocha	TX	04/27/2016	2,726	1,320	84	1,522	1,782	1,144	2,829	97
Local Reporting	UT	Various	28	2	2	2	6	0	6	0
Local Reporting	VA	Various	241	79	3	96	121	48	166	0
Patrick J McManamon	VT	05/23/2016	45	8	0	9	7	10	14	3
Allan J Jones	WA	05/05/2016	3,792	702	70	794	847	718	1,517	47
Sherry Sadler	WV	04/13/2016	2,422	142	2	232	349	27	372	4
David Koskelowski	WY	02/10/2016	1,551	40	12	45	NA	NA	NA	NA
Totals	33 States plus DC		96,540	34,293	3,005	37,123	43,504	30,052	72,728	1,279
				46.1%	4.0%	49.9%	59.1%	40.9%	98.3%	1.7%
				74,421						

July 20, 2016

[www.nasdppts.org](http://www.nasdppts.org)

To contact any state director, go to [www.nasdppts.org/Directors/index.html](http://www.nasdppts.org/Directors/index.html)

# Multi-year Summary

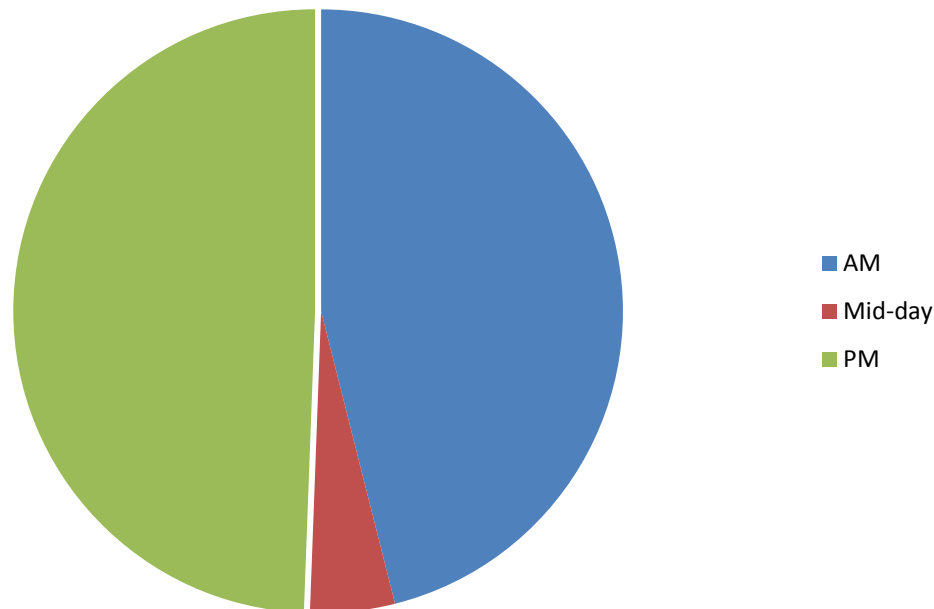
Survey Year	2011	2012	2013	2014	2015	2016
Number of States	28	26	29	29	26	33
Number of Drivers	111,914	99,930	108,436	97,265	102,371	96,540
Total Vehicles Passing Illegally	76,685	88,025	85,279	75,966	78,518	74,421
Vehicles Passing per Bus	0.69	0.88	0.79	0.78	0.77	0.77

**Stop Arm Violations**  
**Time of Day When Illegal Passes Occurred**  
**2016 National Illegal Passing Survey**  
**National Association of State Directors of Pupil Transportation Services**

AM: 34,293 (46.1%)

Mid-day: 3,005 (4%)

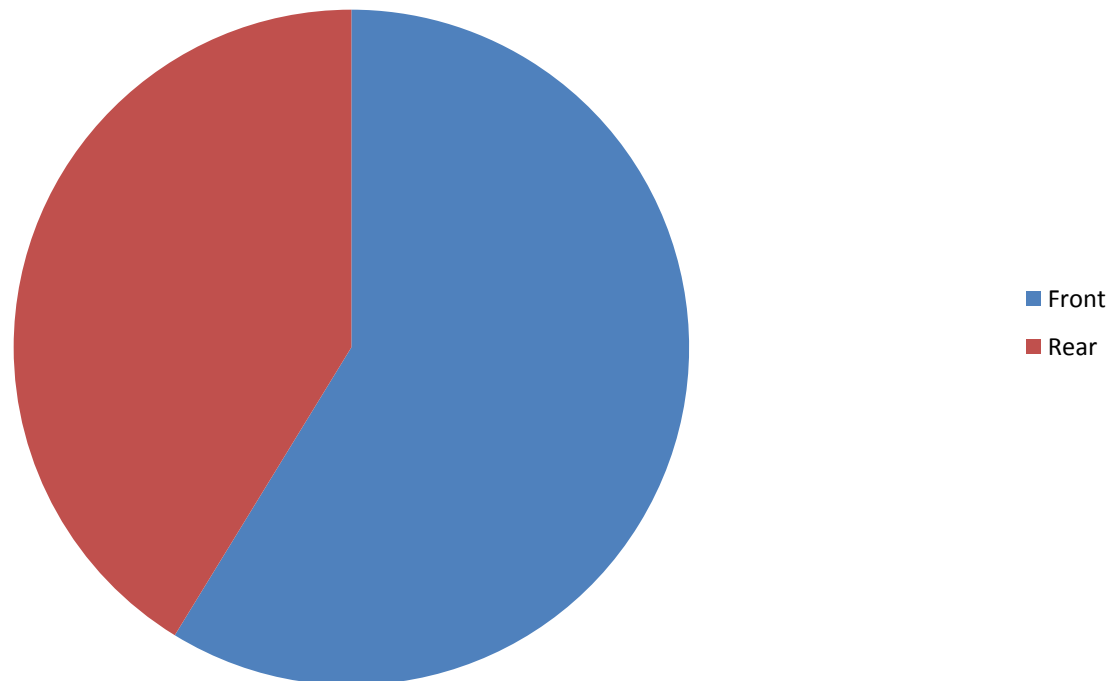
PM: 37,123 (49.9%)



**Stop Arm Violations**  
**Direction of Travel by Passing Vehicle**  
**2016 National Illegal Passing Survey**  
**National Association of State Directors of Pupil Transportation Services**

From the Front (opposite of bus): 43,504 (59.1%)

From the Rear (same direction as bus): 30,052 (40.9%)

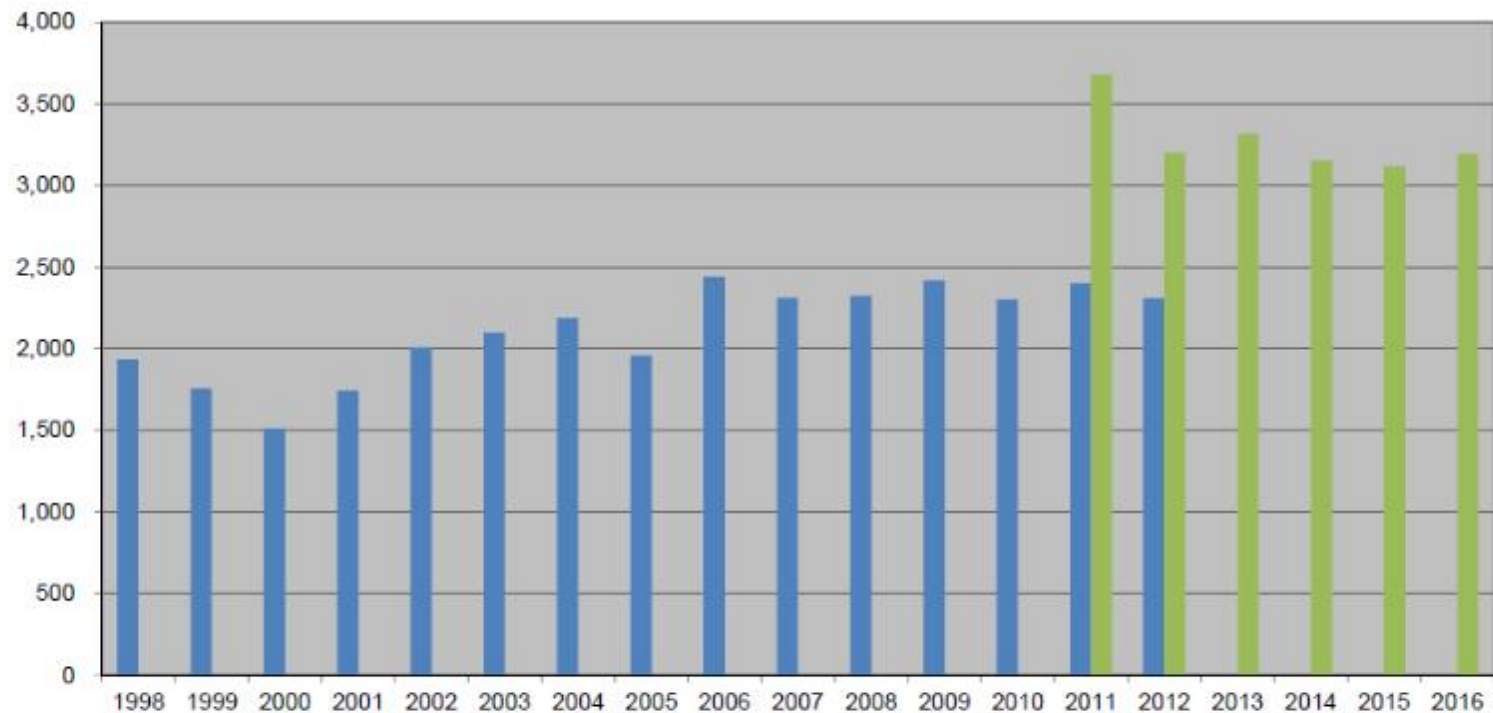




## ONE DAY School Bus Stoparm Violation Counts State of North Carolina

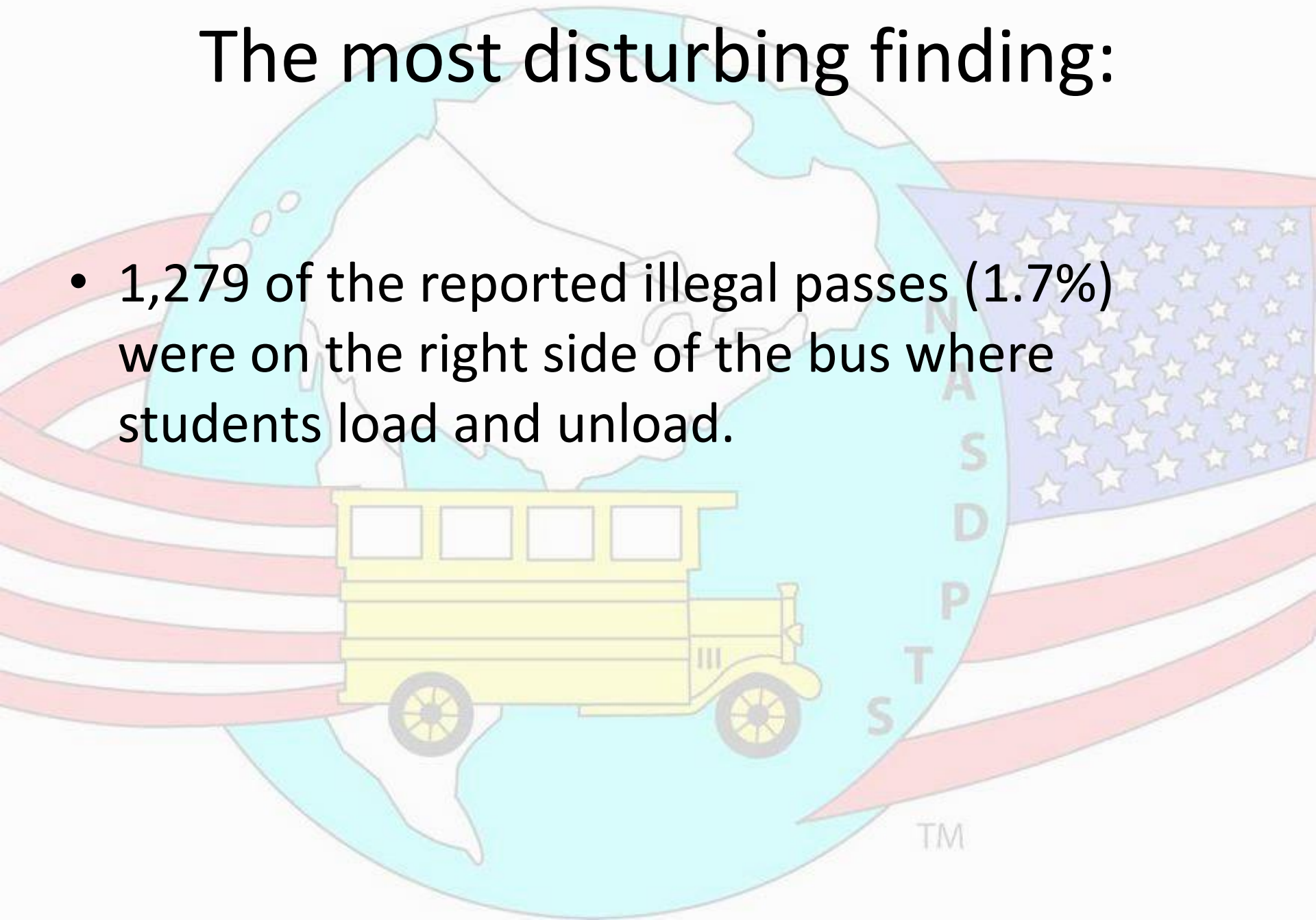
### Results of Annual One-Day VEHICLES Reported by School Bus Drivers

\*Prior to 2011 transition the number of INCIDENTS (in blue) were reported, regardless of the number of passing vehicles.



# The most disturbing finding:

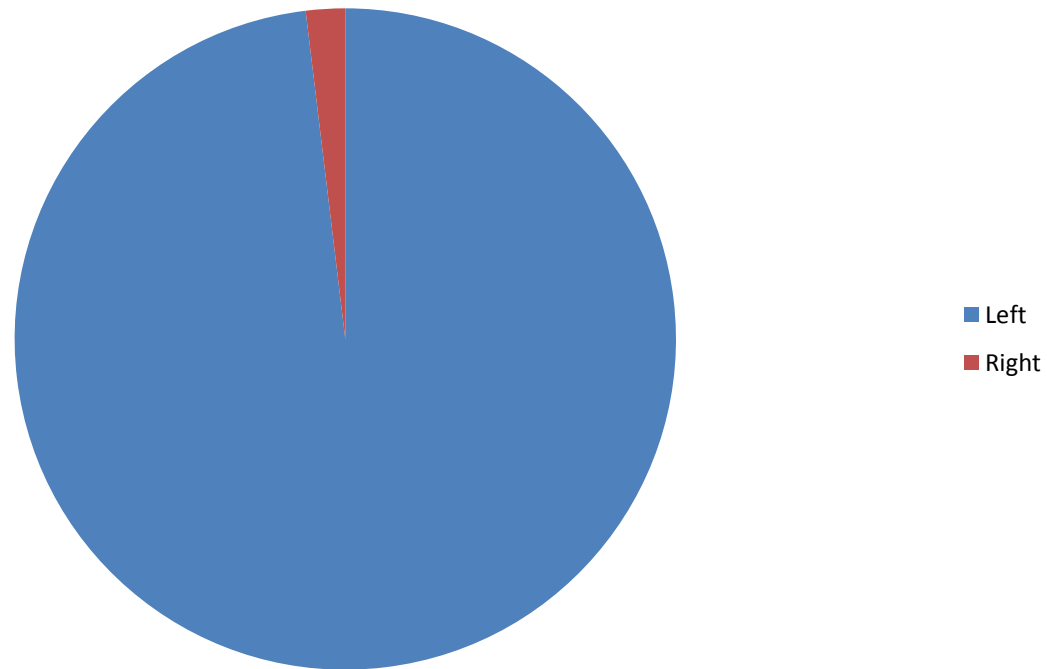
- 1,279 of the reported illegal passes (1.7%) were on the right side of the bus where students load and unload.



**Stop Arm Violations**  
**Side of Bus Where Vehicles Passed**  
**2016 National Illegal Passing Survey**  
**National Association of State Directors of Pupil Transportation Services**

Left Side: 72,728 (98.3%)

Right Side: 1,279 (1.7%)



# ENGINEERING

- STROBING LED LIGHTS
- STROBING STOP SIGN
- DRIVER HAND SIGNAL
- 3 POSITION SWITCH
- EXTENDED STOP SIGN

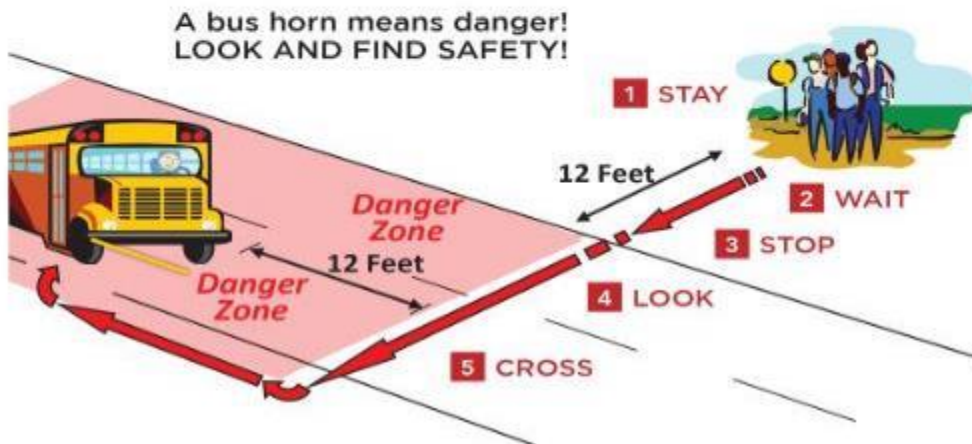


# Crossing procedure - AM

## Crossing the Street to Board the School Bus

### STUDENT AND PARENT INSTRUCTION

- 1 STAY:** on your side of the road, 12 feet away from traffic.
- 2 WAIT:** for the bus to stop and the stop arm to extend. The Driver will be holding his left palm up for you to wait for traffic to stop
- 3 STOP:** and look for traffic both ways, then check again.  
When it is OK the driver will give you a "thumbs up" and then point in the direction you will walk to cross the street
- 4 LOOK:** for moving traffic both ways as you walk directly across the road.
- 5 CROSS:** 12 feet in front of the bus in full view of your driver. Be careful in the danger zone and board the bus without delay.



**Crossing the Highway  
is DANGEROUS –  
Cars May Not Stop!**

**Your life depends on the following:**

- You must LOOK BOTH WAYS for moving cars. If a car is moving, do not step into the road.
- PAY ATTENTION! Take ear buds out! Don't talk or text!
- If you hear the HORN, look and find safety!
- PARENTS, even if you are crossing with your child, please follow these same steps.

For more information go to [www.ncbussafety.org/safety](http://www.ncbussafety.org/safety)  
or contact NC Department of Public Instruction,  
Transportation Services 919-807-3570.

# MORNING

# Crossing procedure - PM

## Crossing the Street when Exiting the School Bus STUDENT AND PARENT INSTRUCTION

### Crossing the Highway is **DANGEROUS** - Cars May Not Stop!

Your life depends on the following:

- You must **LOOK BOTH WAYS** for moving cars. If a car is moving, do not step into the road.
- **PAY ATTENTION!** Take ear buds out! Don't talk or text!
- If you hear the **HORN**, look and find safety!
- **PARENTS**, even if you are crossing with your child, please follow these same steps.

For more information go to [www.ncbussafety.org/safety](http://www.ncbussafety.org/safety) or contact NC Department of Public Instruction, Transportation Services 919-807-3570.

# AFTERNOON



- 1 LOOK:** for traffic in all directions, especially to your right, before you step off the bus. Cars sometimes pass on the right side. When OK...
- 2 WALK:** away from the right front of the bus in full view of your driver, going past the extended bus crossing arm. Then stop and...
- 3 WAIT:** Your Bus Driver will be holding his right palm up for you to wait until all traffic is stopped.
- 4 STOP:** When it is OK to cross, the Driver will give you a "thumbs up" and then point in the direction you will walk to cross the street
- 5 LOOK:** for moving traffic as you promptly cross and move 12 feet off the road.



Students should be taught to look both ways before they step off the bus

# NC – Move to “3 POSITION SWITCH”

- Historically - since the advent of amber lights in 1985 – the North Carolina passenger door switch has controlled the door, the crossing arm, the stop sign and the red lights.
- At the same instant, we have been indicating to students that it is time to board AND indicating to motorists that it is time to stop

# NC – Move to “3 POSITION SWITCH”

- Bus comes to a complete stop
  - Switch is off – position 1
- Driver activates the red lights and stop sign
  - Position 2
- When Safe, driver activates the door and crossing arm
  - Position 3



# Extended Stop Sign

- A group of friends near Winston-Salem observed the problem of passing motorists and student injuries and fatalities
- Conceived of equipment that could make a difference
- Made it happen
- [www.crossingguard.com](http://www.crossingguard.com)



Sunday, July 40, 2015

# Extended Stop Sign







# ENFORCEMENT

“Increasing enforcement of your illegal passing law is a critical goal. How vigorously you can pursue this goal will depend on the law enforcement commitment and resources in your community. Studies have shown that, **without the threat of enforcement and without the public actually seeing or hearing about the law being enforced (this includes prosecution and conviction), your program will have little, if any, impact.**” NHTSA

# STOP ARM CAMERAS

- Automated enforcement – license tags
- Support for law enforcement to prosecute the illegally passing motorist
- Public Awareness



# Wyoming

- House Bill 005, which went into effect on March 7th, 2014, requires every school bus in the state to have cameras on both sides of the stop arm (the stop sign that extends into the street when students are boarding or exiting the bus). In the event that a car passes a bus while the stop arm is out, camera footage will be able to show a license plate number and the make, model and color of the vehicle.



06-09-2015 Tue 07:05:15

76 ° 46' 33.2" W

35 ° 48' 41.7" N

Speed: 0.86 MPH

SUs: 12/0.8

IPCamera 01

# Stop Arm Cameras in NC

- Appropriation 2013-2014 and years forward
  - 2 systems per LEA per year
  - Some LEAs applied for more cameras
- Over 2000 buses with stop arm cameras in place across the state (13,000 buses)













01-28-2015 Wed 15:56:05

83 ° 15' 27.4" W

35 ° 28' 7.8" N

Speed: 0.00 MPH

SUs: 11/0.9

IPCamera 03

# ITRE Study

- Conducted a survey of all LEAs in the fall, 2014
- NOTE: In North Carolina the offending motorist must be able to be identified by the school bus driver, law enforcement officer, etc



# **Procedure to Provide Video/Photos to Local Law Enforcement**

- Forty-six of 84 respondents described a procedure used to provide video and photos from camera systems to local law enforcement personnel.
  - email (12 responses)
  - flash drive/DVD (9 responses)
  - Several LEAs make direct contact with local law enforcement

## Descriptions of Procedures (examples\_

- “I call and tell them I have it if they need or want it for court”
- Download it, review it, then forms and copy of camera download hand delivered to authorities



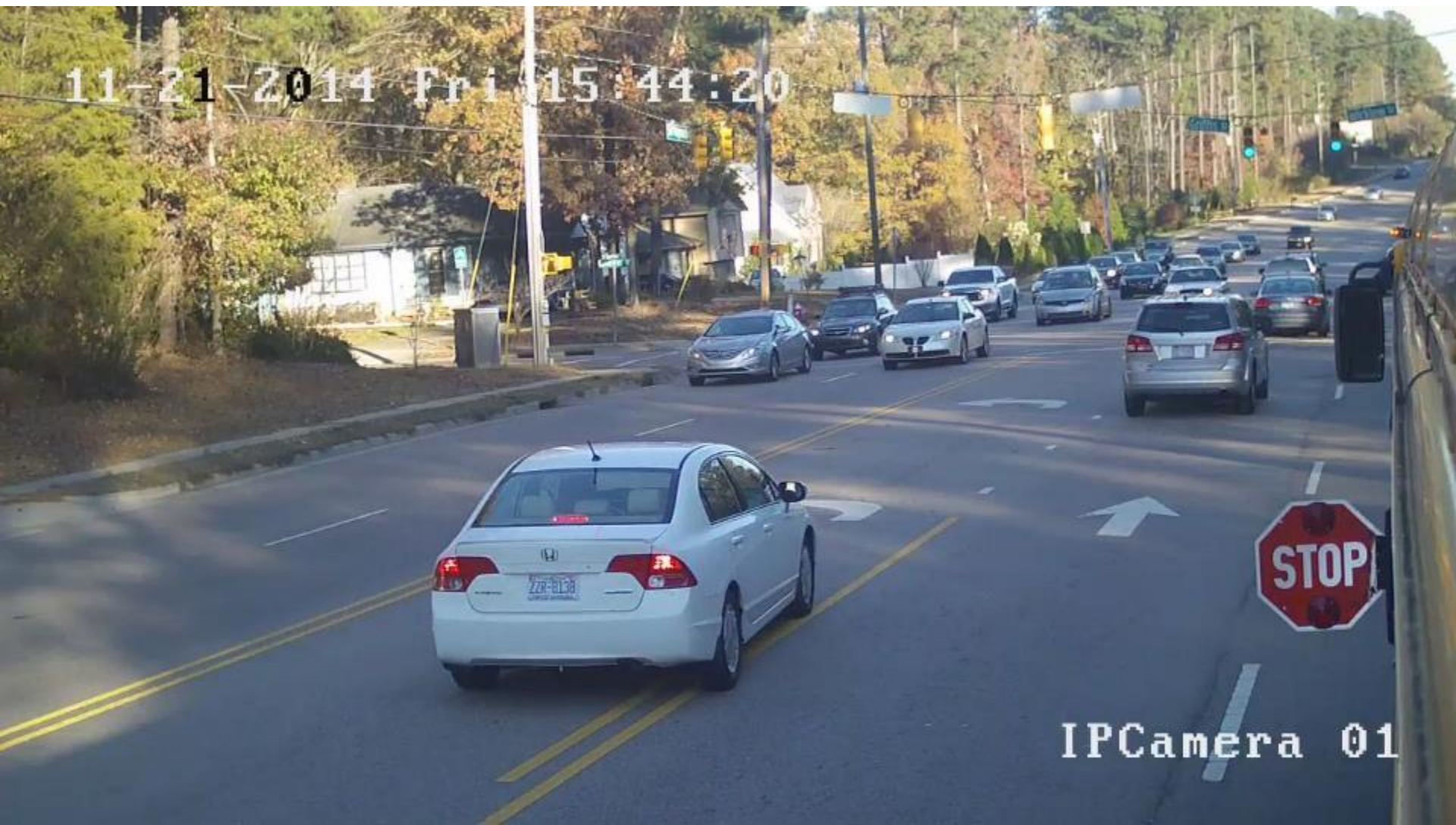
## “Describe interactions with law enforcement”

- 79 responses to this question
- 27 simply rated their interactions as “highly positive,” “very positive,” or “positive.”
- One “neutral” and one “negative” response were also submitted.
- Seven LEAs indicated that they had no interactions with law enforcement personnel in this area

# Contact in the local District Attorney's Office

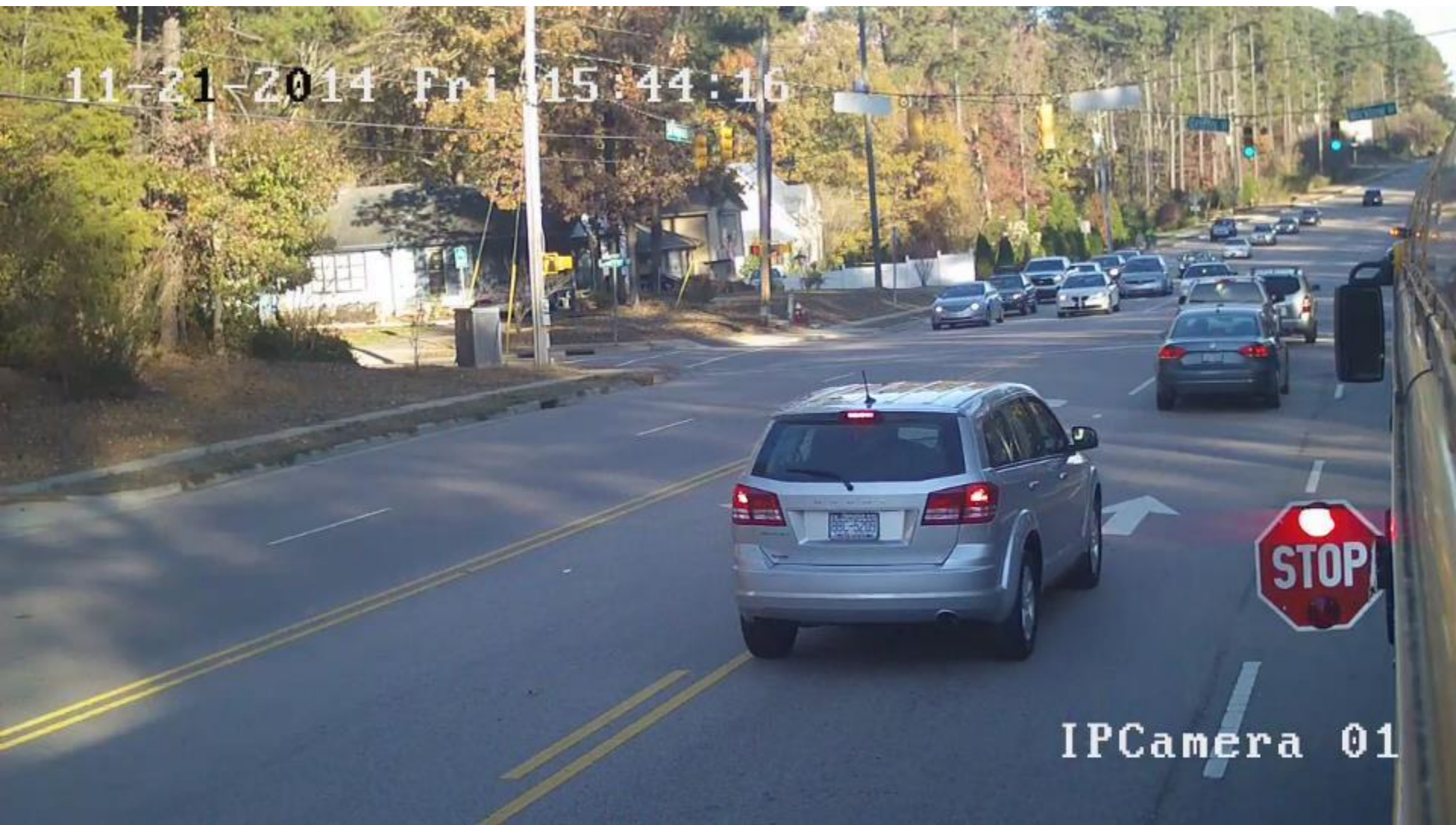
- LEAs were asked to provide information on their primary contact in the local District Attorney's Office including:
  - 31 LEAs provided a contact name
  - 7 LEAs responded “unknown”
  - 5 LEAs responded “none”
  - 5 LEAs responded “N/A”
  - 30 LEAs did not respond

11-21-2014 Fri 15:44:20



IPCamera 01





# Civil Fines

- NC Legislation proposes issuing fines to the owner of a passing vehicle based on the license tag
- This option is already approved in locations across the country

- PICTURES OF LICENSE PLATES TAKEN FROM STOP ARM CAMERAS
- DISCUSSION OF HOW AUTOMATED ENFORCEMENT WORKS
- CBS NEWS:

<https://www.youtube.com/watch?v=nptKsH0sYgM>





# **Illegal Passing and Stop Arm Enforcement**

Derek Graham, North Carolina  
Mathew Palmer, NC State (ITRE)  
Pat Schofill, Georgia

# Southeast States Pupil Transportation Conference

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## Stop Arm Enforcement

### Updates from North Carolina: SB 55 / Automated Stop Arm Enforcement

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SCHOOL PLANNING AND TRANSPORTATION GROUP  
INSTITUTE FOR TRANSPORTATION RESEARCH AND EDUCATION  
CENTENNIAL CAMPUS @ NORTH CAROLINA STATE UNIVERSITY  
JULY 26, 2017

# Purpose

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Key objectives for today

## **1. Recap NC Senate Bill 55**

“School Bus Cameras and Civil Penalties Bill”

## **2. School Transportation Implications**

What does the new legislation mean?

- Installation and Operation
- Use of Photos and Videos
- Additional Considerations

## Senate Bill 55: Signed July 25, 2017

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Since 1999, 14 students killed getting on or off of a school bus, including high school student in Onslow County (2017).

NC Governor Roy Cooper signed SB 55 (School Bus Cameras & Civil Penalties Bill) into law on Tuesday, July 25 2017.



# Overview: SB 55 Legislative Amendments

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## **Component One**

Establish County Ordinance and Plan for Partnership between the County, LEAs and Law Enforcement.  
(§153A-246)

## **Component Two**

Rules for Installation and Operation of Automated School Bus Safety Camera Technology.  
(§115C-242.1)



## Component 1: Create Ordinance and Plan

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- 1.1 Establish the Authorization for Civil Penalties**
- 1.2 Stop Arm Violation Definition and Penalty Scale**
- 1.3 Violation Data Needed for Citations**
- 1.4 Elements of the Ordinance Process**
- 1.5 Planning Support for LEAs**

## 1-1 / Civil Penalty Authorization

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### **County Ordinance**

A county may adopt an ordinance for the civil enforcement of G.S. 20-217 **by means of an automated school bus safety camera** installed and operated on any school bus located within that county.

### **Civil Penalty, Not Infraction**

Notwithstanding the provisions of G.S. 14-4, in the event that a county adopts an ordinance pursuant to this section, a violation of the ordinance shall not be an infraction.

### **Not Relevant for Injury or Death**

Shall not apply to any violation of G.S. 20-217 that results in injury or death.

## Summary 1-1: Civil Penalty Authorization

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### **1 Create County Ordinance to Authorize Penalties**

→ Think through County support for ordinance

### **2 Civil Penalty Only, Not Relevant for Infraction. Also, not Relevant for Injury or Death**

→ Be aware if law enforcement is processing the incident as a criminal matter, injury, or loss of life

## 1-2 / Stop Arm Violation: Definition and Penalty

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### **Non-Criminal (Civil Penalty)**

Violations of the ordinance shall be deemed a non-criminal violation for which a civil penalty shall be assessed and for which no points and no insurance points shall be assigned to the registered owner or driver of the vehicle.

### **Penalty**

The amount of such penalty shall be:

- \$400.00 for the first offense
- \$750.00 for the second violation
- \$1,000 for each subsequent violation of the ordinance

## Summary 1-2: Definition and Penalty

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### **1 Non-Criminal Infraction; It's a Civil Penalty**

- Civil matter and will not result in points for the state of NC license or insurance. Fines levied against registered owners of vehicles.

### **2 Amount of Penalty**

- The amount of such penalty escalates over each infraction.



# 1-3 / Stop Arm Violation: Citation Requirements

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## **Violation Data Requirements**

The date and time of the violation, the location of the violation, the amount of the civil monetary penalty imposed, and the date by which the civil monetary penalty shall be paid or contested.

## **Violation Image**

An image taken from the recorded image showing the vehicle involved in the violation.

## **Law Enforcement Affirmation of Violation**

Statement by a law enforcement officer employed by a law enforcement agency stating that, based upon inspection of the recorded images, the owner's motor vehicle was operated in violation of the ordinance.

## Summary 1-3: Citation Requirements

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### **1 Violation Data Requirements and Imagery**

- Pay careful attention to the data elements that are needed (i.e. pictures/video, time, place, processing dates)

### **2 Law Enforcement Affirmation of Violation**

- Will need to partner with local law enforcement to obtain stop arm violation statements

## 1-4 / Elements of Stop arm Violation Process

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### **60 Day Notice**

The notice of the violation shall be given in the form of a citation and shall be received by the registered owner of the vehicle no more than 60 days after the date of the violation.

### **Citation Contestation**

A person wishing to contest a citation shall, within 30 days after receiving the citation, deliver a written request for a hearing accompanied by an affidavit stating the basis for contesting the citation.

## 1-4 / Elements of Stop Arm Violation Process

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(§20-217 - SECTION 5)

### **Archival of Violation Incident Video**

A county that adopts an ordinance as provided in G.S. 153A-246, as enacted by this act, shall **maintain records of all violations of that ordinance for which a civil penalty is assessed.**

Upon request, the county shall provide **at least five years** of those records to the North Carolina Child Fatality Task Force and the North Carolina General Assembly.

## Summary 1-4: The Stop Arm Violation Process

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### **1 60 Day Notice and Citation Contestations**

- Overall, districts have 60 days from an incident to file a civil penalty. Then, violators have 30 days to pay or contest penalty.

### **2 Archival of Violation Incident Video**

- Will need to establish system for identifying and storing incident videos that are processed for violation penalties. Time limit on this archive is five years.



## 1-5 / Planning Support for LEAs

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(§20-217 - SECTION 6)

### **Resources from State BOE and DPI**

Within 90 days of the enactment of this act, the State Board of Education shall develop a **model request for proposals (RFP)** and a **model contract** that may be used by the local boards of education in letting contracts.

The State Board of Education and the Department of Public Instruction shall provide technical assistance to a local board of education on this process upon a request by the local board.

## 1-5 / Planning Support for LEAs

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### **Interlocal Agreements**

Any local board of education, board of county commissioners, and law enforcement agency may enter into an interlocal agreement.

Any agreement entered into pursuant to this subsection may include provisions on cost-sharing and reimbursement to which the local board of education, board of county commissioners, or law enforcement agency freely and voluntarily agree for the purposes of effectuating this section and G.S. 153A-246.

## Summary 1-5: Planning Support for LEAs

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### **1 Contract Resources from State BOE and DPI**

- NC BOE and DPI have three months to develop a Model RFP and Contract for working with third parties, such as video technology firms.

### **2 Technical Assistance from State BOE and DPI**

- More information forthcoming.

### **3 Interlocal Agreements with County, LEA, Law**

- Opportunity to Establish Cost and Reimbursement Structure.

## Component 2: Install Stop Arm Cameras

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- 2-1 Establishing Authorization to Install**
- 2-2 Stop Arm Camera Partnership Opportunities**
- 2-3 Warning Sign Requirement**
- 2-4 Share Evidence in Criminal Proceeding**

## 2-1 / Authorization

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### Establishing Authorization to Install

Automated school bus safety cameras may be installed and operated **on any school bus operated by a local board of education within a county that has adopted an ordinance** under G.S. 153A-246.



## 2-2 / Stop Arm Camera: Partnership Options

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Districts have three distinct partnership options regarding the installation and operation of the stop arm violation camera system.

### **Installation and Operation Options**

1. School District Installs and Operates
2. School District Contracts with Private Vendor
  - Max Contract Length is 3 Years
3. Statewide BOE Contracts with Private Vendor
  - Upon request by 1+ Local BOE

## 2-3 / Warning Sign Requirement

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An automated school bus safety camera installed on a school bus must be **identified by appropriate warning signs** conspicuously posted on the school bus.

All warning signs shall be consistent with a statewide standard adopted by the State Board of Education in conjunction with local boards of education that install and operate automated school bus safety cameras on their school buses.

## 2-4 / Share Evidence in Criminal Proceeding

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Any photographs or videos recorded by an automated school bus safety camera that capture a violation of G.S. 20-217 **shall be provided to the investigating law enforcement agency** for use as evidence in any proceeding alleging a violation of G.S. 20-217.

# Review: Legislative Amendments

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## **Component One**

Establish County Ordinance and Plan for Partnership between the County, LEAs and Law Enforcement.  
(§153A-246)

## **Component Two**

Rules for Installation and Operation of Automated School Bus Safety Camera Technology.  
(§115C-242.1)

Re-Written: **§20-217**

# Questions

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## ***Contact***

Mathew Palmer

Research Scholar / NCSU ITRE

[mathew.palmer@ncsu.edu](mailto:mathew.palmer@ncsu.edu)

# School Bus Stop Arm Enforcement

Pat Schofill

State Director, Georgia





# Stop Arm

## Enforcement Program

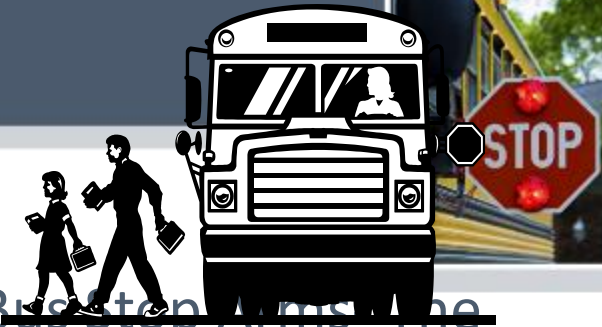
Georgia has long had a law regarding School Bus Stop Arms. The driver's duties have remained unchanged for decades- STOP MEANS STOP! However, Enforcement efforts were limited to "catch as you can", bus drivers reported violations, but officers were limited in enforcement actions.

December 2009- As Kindergartner Carla Campbell got off the bus, a driver passed her school bus and killed her mother.

2010- Began Working with Generation Skills of Ed to push lawmakers for legislation.

July 2011- Law was changed to allow for Stop Arm Violation.

November 2012- Beg

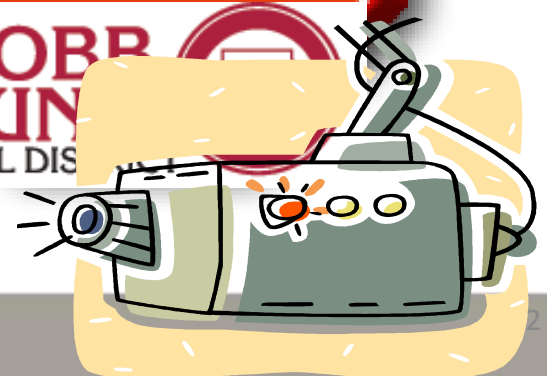


History



OPERATION  
STOP ARM™

COBB COUNTY  
SCHOOL DISTRICT



*National School Bus  
Loading And Unloading Survey*



2009-2010 = 5 GA Bus Stop Fatalities

2010-2011 = 2 GA Bus Stop Fatalities

2011-2012 = 2 GA Bus Stop Fatalities

2012-2013 = 2 GA Bus Stop Fatalities

**Georgia Led the Nation  
for 3 Consecutive Years**

# 1995 – 2013 Bus Stop Fatalities



## Struck by Motorists – 13

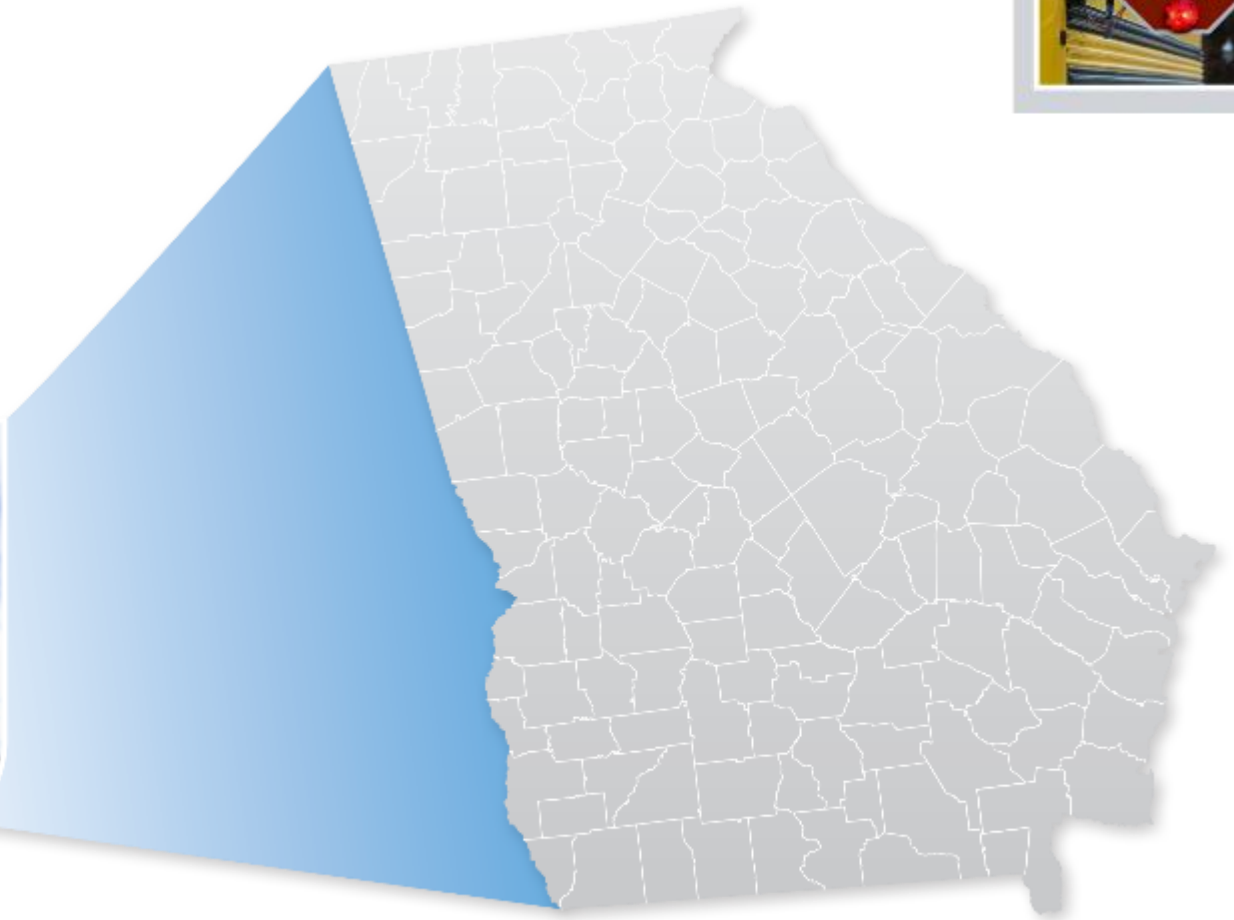


Description	AM or PM	Total	Where
Possible willful pass	2- AM 3- PM	5	From front x 4 From rear x 1
Lost control of vehicle	1- AM 1- PM	2	Right side of bus x 2
Boarding @ Unscheduled stop	6- AM	6	Front of bus x 2 Other x 4

# Annual Driver Survey



## Georgia... leads the nation in school bus fatalities



### 1-Day Snapshot

12,136 Participating School Buses

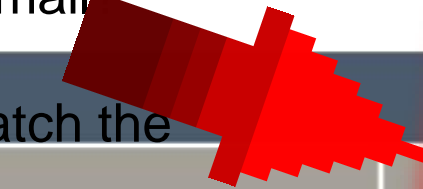
**6,807 Illegal Passing Vehicles**

# Stop Arm Enforcement Program



So, What do you do if you get one of these in the mail?  
You've got options:

1. Go on line to watch the violation
2. Pay on line
3. Pay using the stub at the bottom
4. Request a hearing date
5. Transfer the liability (if a friend was driving your vehicle and/or you sold it without keeping your tag)



Cobb County Police Department  
School Bus Stop Arm Safety Program  
PO Box 22061  
Tempe, AZ 86286-2061

NOTICE OF VIOLATION

Bad Driver  
Marietta, GA 30009

NOTICE #: 3991300007413  
PIN: 7496  
View your video & images, and pay with your Visa or MasterCard at [www.ViolationInfo.com](http://www.ViolationInfo.com)  
Amount Due: \$300.00  
Due Date: 03/15/2013

02/09/2013 3:46 PM GPS DESCRIPTION (Latitude, Longitude, Date, Time)  
33.90483 -84.54243

Bad Driver  
Marietta, GA 30009

MARIETTA, GA 30009

OFFENSE School Bus Stop Arm Violation, §40-6-163  
You, as the registered owner of the vehicle described above, are alleged to have failed to stop before reaching or overtaking a school bus on a highway while the visual signals were in operation. (Under Georgia Code §40-6-163 you are presumed to be the driver, but such presumption may be rebutted as outlined on the reverse side.)

YEAR 2013 MAKE FORD MODEL EXPLORER STYLE MP COLOR GRAY  
NUMBER PA77124 STATE GA

Certificate: Based on the inspection of recorded images, the motor vehicle was operated in disregard of a visual signal on the school bus stop arm in violation of OCGA 40-6-163 as evidenced by the images shown and each defendant was not authorized by law.

BADGE # 8358

Pay with your Visa or MasterCard at [www.ViolationInfo.com](http://www.ViolationInfo.com) or mail your check or money order with this coupon to the address below:

NAME: Bad Driver  
NOTA: Marietta, GA  
PIN: 30009

COBB COUNTY, GEORGIA  
Payment Processing Center  
PO Box 742828  
Cincinnati, OH 45274-2828

AMOUNT DUE: \$300.00

1 3991300007413 000018777405 300007





3

26

13.5V BUS 709  
03/04/2008 03:30:52 PM



# Georgia Law: Senate Bill 57

## Illegal Passing of School Bus Arm



- Non-criminal traffic infraction – civil penalty
  - \$300 – 1<sup>st</sup> offense
  - \$750 – 2<sup>nd</sup> offense
  - \$1,000 – 3<sup>rd</sup> offense; within a 5-year period
  - No points; not reported to insurance
  - Revenue shared with school systems
- Reviewed by law enforcement officer
  - Sworn statement required
- Citations
  - Issued to the owner of the vehicle
  - Issued within 10 days of violation
  - Date and time of violation recorded

# Stop Arm Enforcement Program

Save yourself  
some serious



YOU could  
Save a LIFE!



- 6 Points on Driving Record
- A Conviction Under 21 Years of Age Constitutes License Suspension

**When a Stop Arm Camera Captures You, the Penalties are:**

- A fine of \$300.00 for the first offense
- \$750.00 for the second offense
- \$1,000.00 for the third offense, within a five year period.

*Ticket will be issued to the owner of the vehicle.*

*According to the NHTSA, 21 children under the age of 19 die every year as pedestrians getting on and off buses*

*On average, each school bus is illegally passed once every day.*



# Stop Arm Enforcement Program



Lesson Learned along the way:

Get with COURT administrators  
They need time  
Educate Judges about  
Stay in front of the Public  
Brochures, Bookings

We screen about 100  
those

That's 85 Stop Arm Violations PER DAY!!!



# Program Basics



## Objective:

- Change dangerous driver behavior
- Increase student safety
- No driver interaction
- **Violator-funded: No cost to District**
- Complete solution: violation to paid citation



# External Cameras



**Violation Detection Camera**



Detects vehicles illegally passing the stop arm.

**License Plate Camera**



Captures license plate of violating vehicle.

**Stop Arm Violation  
Overview Video Camera**



Records vehicle illegally passing the stop arm.

# End-to-End Solution





# Image Review

Clayton County, GA  
VIOLATION  
PROCESSING

ALERTS HOME CHANGE CLASS LOGOUT HELP REPORT BUG

Violation Workflow Document Management Records Configuration

Police Review  
Hide Navigation

Overview 1 Overview 2 Overview 3 Overview 4

Image/Video Controls  
Gamma: All  
VIDEO REVERT RESET

Violation Count: 278 REFRESH COUNT ANALYZE IMAGE

2012/08/13 07:12:10 W0375319 S107032731 S5415734 RL AL DC GANER10

State: GA Plate: BUC789 ACCEPT REJECT  
Select Reject Reason: SUPER REVIEW RECROP QUEUE HISTORY

Violator Information  
☐ Commercial  
Last: SMITH First: JOHN Middle:   
Addr. 1: 1234 MAIN STREET Addr. 2:   
City: COVINGTON State: GEORGIA - USA Zip: 30016

Vehicle Information  
VIN #: 1234500001234 Year: 2007 Style:   
Make: FORD Model: EXPLORER Color:   
Reg. Exp.: 201304

Confidential & Proprietary

Axis vps  
© Copyright 2012 American Traffic Solutions Inc. All Rights Reserved

Law Enforcement Review Screen



Requires less than  
30 seconds to review a  
violation event

# Sample Notice



Cobb County Police Department  
School Bus Arm Enforcement Program  
140 North Marietta Pkwy  
Marietta, GA 30060  
1-866-790-4111  
Pay with your Visa or Mastercard at  
[www.ViolationInfo.com](http://www.ViolationInfo.com)

This infraction will not be a part of your driving record and will be processed as a parking infraction.

## NOTICE OF INFRACTION

NOTICE #: 021050001234  
PIN #: 0123

Amount Due: \$250.00  
Due Date: 04/13/2012

JOHN SMITH  
1234 MAIN STREET  
COVINGTON, GA 12345

INFRACTION Illegal Passing of Stopped School Bus				
VIOLATION DATE 03/28/2012		VIOLATION TIME 7:30 PM		FINE AMOUNT \$250.00
VEHICLE PLATE # BUC78		STATE GA		
YEAR 2006	MAKE HYUNDAI	MODEL SONATA	STYLE SEDAN	COLOR
LOCATION 3113.67N 8753.3W				
REGISTERED OWNER JOHN SMITH				
DEFENDANT JOHN SMITH				
STREET ADDRESS 1234 MAIN STREET				
CITY COVINGTON		STATE GA	ZIP 12345	
I certify as true and correct under penalty of perjury under the laws of the State of Georgia that, based upon my review of photographs made by an automated traffic camera, I have probable cause to believe, and do believe, that on the date and at the time and location indicated above, the operator of the vehicle described above was in violation of 40-6-153. The images show the vehicle and its license plate, portray a fair and accurate representation of the location listed above and show that the vehicle operator was illegally passing a stopped school bus. The registered owner of the vehicle is named above.				
OFFICER Sgt. Karl May, Cobb County Patrol		RADGE # XXXX	ISSUE DATE 04/03/2012	

TO VIEW YOUR IMAGES AND VIDEO LOG ON TO [WWW.VIOLATIONINFO.COM](http://WWW.VIOLATIONINFO.COM). YOU WILL NEED YOUR NOTICE # AND PIN # PRINTED AT TOP OF THIS PAGE



Pay with your Visa or Mastercard at [www.ViolationInfo.com](http://www.ViolationInfo.com) or mail your check or money order with this coupon to the address below

You must respond no later than midnight of the DUE DATE to one of the following methods:

1. PAY THE \$250.00 PENALTY (see back for payment options); OR
2. REQUEST A MITIGATION HEARING TO EXPLAIN THE CIRCUMSTANCES (see back for explanation of hearing); OR
3. REQUEST A HEARING TO CONTEST THE INFRACTION (see back for explanation of hearing); OR
4. SUBMIT A DECLARATION OF NON-RESPONSIBILITY (see back)

This notice represents a determination that a school bus arm violation has been committed. This determination will be final unless you request a mitigation or contested hearing or submit a declaration of non-responsibility within 15 days.



NAME: JOHN SMITH		DUE: 04/13/2012	
NOTICE #: 021050001234	VERSION: 1	ISSUED: 04/03/2012	
PLATE: BUC78	STATE: GA	TYPE:	

Cobb County Police Department  
School Bus Enforcement Program  
140 North Marietta Pkwy  
Marietta, GA 30060



- 1<sup>st</sup> class mail
- PIN
- Payment instructions
- [www.ViolationInfo.com](http://www.ViolationInfo.com)

J. Sender  
456 Everyw  
Johnsontow





# Community Outreach

- Public awareness
  - Press releases
  - Public service announcements
  - Editorial board and radio interviews
  - Public opinion polling & monitoring
  - [Video](#) Segments
- Education
  - Why cameras are needed and used
  - Costs of not enforcing
  - Keeping children safe
  - Benefits received



# Stop Arm Enforcement Program



How does the video enforcement system work?

Is the Program effective?

In 2011 school bus drivers reported a violation is per day. In the most recent study at the drivers reported a drop to 873 violations per day.

**That's EFFECTIVENESS OF EFFORTS!!**  
**Stop Arm Compliance is UP**  
**Stop Arm Violations are down!**



# Stop Arm Enforcement Program



What are you doing to  
prevent school bus related  
tragedies in your  
jurisdiction?

