



OHIO

School Bus Safety Working Group

REPORT

January **2024**

An examination of the safety of those traveling on Ohio school buses and recommendations for improvement.



"When a tragedy occurs, we owe it to parents and to the public to determine if more can be done to keep bus drivers and their passengers safe."

– Mike DeWine, Governor of Ohio



MIKE DEWINE
GOVERNOR OF OHIO

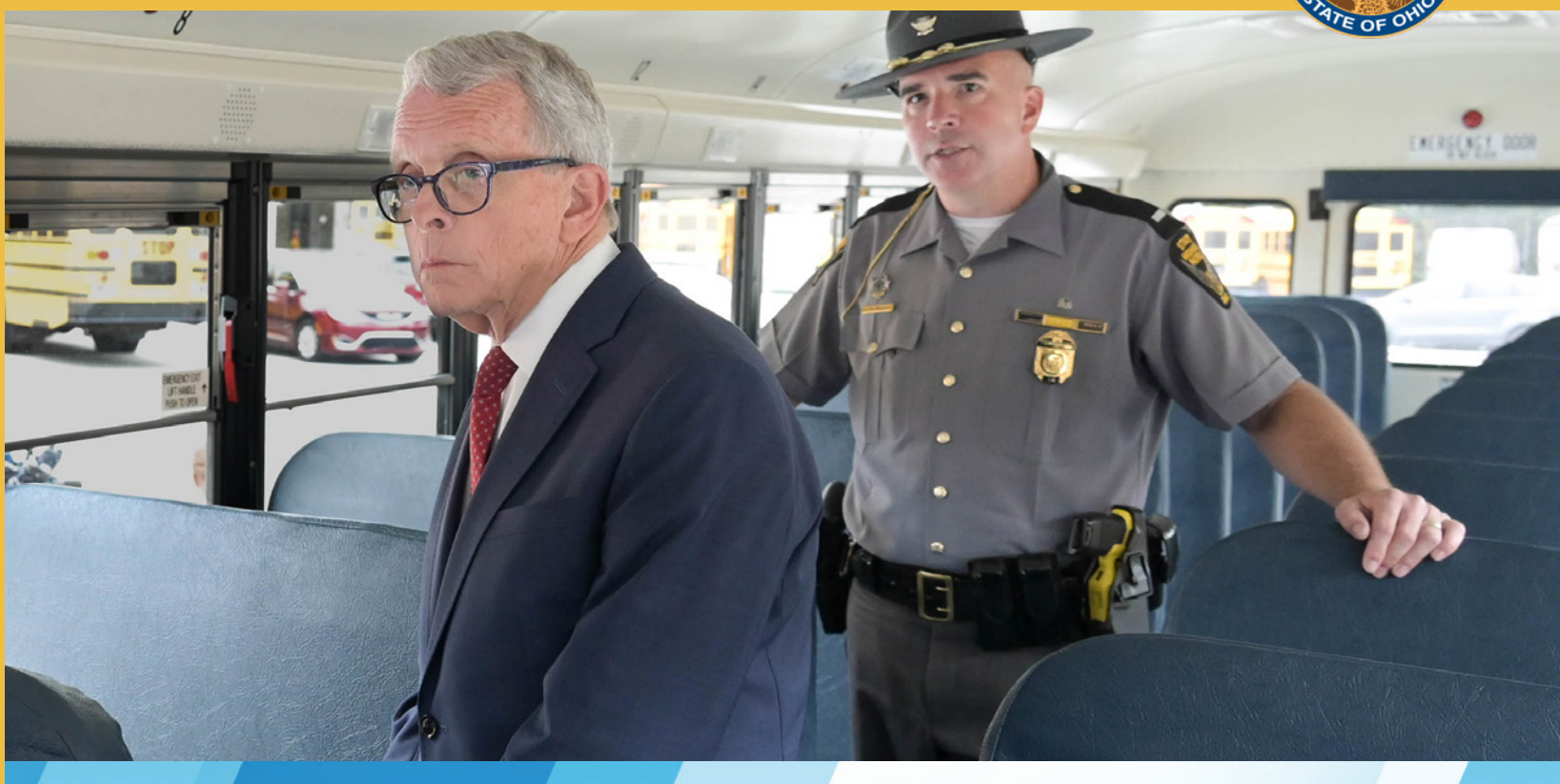


Department of
Public Safety



Department of
Education &
Workforce

Letter from the Governor



Dear Fellow Ohioans,

Every school day, approximately 15,000 large, yellow school buses cover around 710,000 miles to and from schools in our 88 counties. In most cases, these buses travel back and forth without incident, but when a tragedy occurs, we owe it to parents and the public to determine whether more can be done to keep bus drivers and their passengers safe.

I created the Ohio School Bus Safety Working Group in August 2023, after a devastating school bus crash killed 11-year-old Aiden Clark and injured several other children in the Northwestern Local School District near Springfield.

I asked the group to thoroughly review all aspects related to school bus safety in Ohio – from seat belts to driver licensing to bus design – and to offer recommendations on any improvements that can be made to prevent future tragedies. This report contains the group's recommendations.

I am grateful to each member of the Ohio School Bus Safety Working Group, and I thank them for volunteering their time to evaluate the issues impacting school bus safety. The recommendations in this report will serve as an important guide to help ensure those traveling on school buses in Ohio are as safe as possible.

Sincerely,

A handwritten signature of Mike DeWine in black ink.

Mike DeWine
Governor

Table of Contents

Ohio School Bus Safety Working Group Membership5

A Message from the Ohio School Bus Safety Working Group Chair 6

Executive Summary 7

Bus Driver Recruitment and Retention
Recommendations 9

Training and Education
Recommendations 11

School Bus Safety Features
Recommendation 14

Road and Traffic Safety
Recommendations 16

Emergency Response
Recommendations17

Commercial Bus Services
Recommendations 18

Appendix..... 19



Ohio School Bus Safety Working Group Members



Andy Wilson, Director, Ohio Department of Public Safety (chair)
Melody Coniglio, Northeast Region Director, Ohio Association for Pupil Transportation
Jeff Dornbusch, Vice President, Benton-Carroll-Salem School District Board of Education
Carolyn Everidge-Frey, Senior Executive Director, Center for Advancing Professional Supports, Ohio Department of Education and Workforce
Dean Fadel, President, Ohio Insurance Institute
Judith French, Director, Ohio Department of Insurance
Paul Imhoff, Director of Governmental Relations, Buckeye Association of School Administrators
Col. Charles Jones, Superintendent, Ohio State Highway Patrol
Jack Marchbanks, Director, Ohio Department of Transportation
Jessica Mead, Parent
Erin Reed, Assistant Policy Director, Office of Ohio Governor Mike DeWine
Davida Russell, School Bus Driver, South Euclid Lyndhurst City School District
Jessica Voltolini, Interim Director, Ohio Department of Education and Workforce
Robert Widener, President, Ohio School Bus Mechanics Association
Chris Woolard, Interim Ohio Superintendent of Public Instruction, Ohio Department of Education
Jingzhen (Ginger) Yang, MPH, Ph.D., Principal Investigator, Center for Injury Research & Policy, Abigail Wexner Research Institute, Nationwide Children’s Hospital

Governor’s Office Staff Acknowledgements:

Jill Del Greco, Communications Advisor
Caitlyn Flis, Assistant Policy Director
Marjorie Yano, Assistant Policy Director

Special Thanks:

Amanda Agnew, PhD, The Ohio State University
Alex Armitage, Ohio Department of Public Safety
Albert Burleigh, Blue Bird Corporation
Judy Converse, Ohio Traffic Safety Office
Catherine Cooper, Bartholomew Consolidated School Corporation
Jimmie Dawson, Willoughby-Eastlake City School District
Emily Davidson, Ohio Traffic Safety Office
Rodell Davis, Franklin County Board of Developmental Disabilities
Joey DiOrio, Ohio Facilities Construction Commission
Chad Duncan, IC Bus
Dan Grothause, Ohio School Safety Center
Colleen Hall, Solon City School District
Lt. Molly Harris, Ohio State Highway Patrol
Lt. Tyler Harris, City of Hilliard Division of Police
Cait Harley, Ohio Department of Transportation
Chief Tim Holman, German Township Fire & EMS

Sgt. Trevor Jasper, Ohio State Highway Patrol
S/Lt. Christopher Kinn, Ohio State Highway Patrol
Jocelyn Lowe, Ohio Department of Public Safety
Sheriff George Maier, Stark County
Joelle Magyar, Avon Lake City School District
Julie Mansfield, PhD, The Ohio State University
Sima Merick, Ohio Emergency Management Agency
Jessica Horowitz-Moore, Ohio Department of Education and Workforce
Carolyn Noland, Ohio Bureau of Motor Vehicles
Doug Palmer, Ohio School Boards Association
Matt Perkins, Van Wert City School District
Kristin Poland, National Transportation Safety Board
S/Lt. Aaron Reimer, Ohio State Highway Patrol
Ricky Stanley, Thomas Built Buses
Eric Taylor, Cleveland Metropolitan School District
Jane Anne White, Wooster City School District

Letter from the Public Safety Director

Executive Summary



In August 2023, Governor Mike DeWine convened the Ohio School Bus Safety Working Group to review policies, procedures, data, and expert testimony around school bus safety. The group was charged with inspecting all facets of the student transportation process and providing data-driven recommendations on areas where improvements can be made. With this mission in mind, the group convened six times through the end of 2023.

Dear Fellow Ohioans,

In the months since Governor Mike DeWine formed the Ohio School Bus Safety Working Group, members have studied school bus safety in depth – from bus inspections and driver training to crash risks, school bus technology, and lessons learned from previous crashes. We believe this is the first time in Ohio’s history that the state has examined school bus safety topics with this level of scrutiny.

Our goal was to make sure all stakeholders had a voice at the table, including bus drivers, mechanics, government agencies, and parents. During the course of our work, group members engaged in candid discussions with one another and subject matter experts.

I want to emphasize that despite the tragic school bus crash in Clark County last year, school buses remain one of the safest modes of transportation for children to and from school, thanks in large part to the dedication that school bus drivers have to the safety of the students in their care. School buses are involved in less than 1% of all crashes in the state, and before the Northwestern Local School

District school bus crash, Ohio had not had a death on a school bus since 2010. The goal of the group was not to determine whether school buses are safe but how to make them safer.

The recommendations outlined in this report should serve as a starting point to prevent more families from experiencing the tragedy of losing a child to a crash on a school bus. I hope this report will also serve as a powerful reminder that safety is everyone’s responsibility.

On behalf of all members of the task force, I want to thank Governor DeWine for the opportunity to make a difference for Ohio’s school children.



Sincerely,

Andy Wilson
Director, Ohio Department of Public Safety

The school bus safety working group was made up of stakeholders from the education field, government agencies, and local communities, including parental representation. Group members spoke with subject matter experts, accepted public comments, and streamed all meetings online to ensure transparency.¹

Since 2010, two children have been killed in school bus crashes in Ohio.² While the working group recognizes that these tragedies - and all school bus-related injuries - are unacceptable, members concluded that school buses remain the safest mode of transportation for students traveling to and from school. Data from the Ohio State Highway Patrol show that school buses are involved in less than 1% of all crashes in the state.³ In the past six years, far more school-age children and teenagers have been killed or injured in Ohio while riding in a passenger vehicle, walking, or riding a bike. With this in mind, working group members sought to identify opportunities to make school buses even safer than they are today. The following recommendations demonstrate that everyone – from school employees to state employees to members of the public – has a responsibility to ensure that school bus travel is as safe as possible.

Traffic Fatalities & Injuries Ages 18 and Younger 2018-2023*				
		Fatal Injuries	Serious Injuries	Minor Injuries
SCHOOL BUS		1	20	370
BICYCLE		23	231	1,272
PEDESTRIAN		69	575	1,716
PASSENGER VEHICLE (Adult Driver)		168	1,655	17,253
PASSENGER VEHICLE (Teen Driver)		234	1,919	16,047

Source: Ohio State Highway Patrol *2023 data preliminary

Of students enrolled in Ohio’s public schools, about 44% ride a school bus.⁴ A 2016 Ohio Department of Transportation survey found that about 44% ride to school in a passenger car or van, 9% of students said they typically walk to school, and 2% ride a bicycle.⁵ Nine-to-15-person passenger vans are also an option for school transportation, but very little data is available on how widely they are used in Ohio.

Ohio School Bus Safety Working Group Recommendations

- 1

School districts should identify, share, and encourage bus drivers to participate in professional development opportunities.
- 2

The Ohio Department of Education and Workforce should work with the Ohio Department of Public Safety to create and offer wellness programming specific to school bus drivers. School districts should develop policies to ensure bus drivers can take advantage of this wellness support.
- 3

School districts should develop school bus driver performance review policies and conduct annual performance evaluations.
- 4

The Ohio Department of Education and Workforce should require and provide a curriculum for six hours of annual bus driver training.
- 5

The Ohio Department of Public Safety and Ohio Department of Education and Workforce should partner to expand advanced driver training for school bus drivers in Ohio.
- 6

The Ohio Department of Education and Workforce should adopt rules requiring school districts to offer school bus safety orientation to students, parents, and guardians at the beginning of each school year.
- 7

The Ohio State Highway Patrol should initiate collaboration between state and local law enforcement partners to develop law enforcement training on school bus inspections and the most common safety risks for student passengers.
- 8

The Ohio Department of Public Safety should develop educational materials and wide-ranging public service announcements on school bus traffic safety laws and best driving practices.
- 9

The Ohio Department of Education and Workforce should assess whether it is appropriate to increase the minimum number of required training hours for school bus mechanics.
- 10

The Ohio Department of Education and Workforce should work with the Ohio General Assembly to develop and fund a grant program to help school districts invest in school bus safety features such as, but not limited to, seat belts. The grant program should be needs-based.
- 11

The Ohio Department of Public Safety should work with the Ohio General Assembly to strengthen penalties for drivers who violate traffic laws in school zones and around school buses.
- 12

The Ohio Department of Transportation should support cities, townships, and villages to assess safety conditions on local roads located in and around school zones.
- 13

School districts should conduct safety audits of their bus routes, bus stops, and school pick-up/drop-off sites on school property to reduce safety risks and mitigate the severity of school bus crashes.
- 14

School districts should engage school bus drivers in critical incident response planning and include them in realistic, scenario-based critical incident exercises.
- 15

The Ohio State Highway Patrol should hold regular school bus stakeholder meetings to identify and mitigate gaps in critical incident responses to school bus crashes and other bus-related security issues.
- 16

The Ohio Department of Education and Workforce should expand its post-crash report to collect additional information and publish the data annually to inform future policy decisions and aid in determining school bus driver professional development needs.
- 17

School districts should adopt policies that require a thorough evaluation of contracted commercial bus services.
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Bus Driver Recruitment and Retention

Supporting and investing in bus drivers is critically important to the goal of keeping students safe. Despite employing more than daily 17,000 drivers, Ohio’s school districts still struggle with a shortage of qualified individuals to cover 710,000 routine miles each school day.⁶ Driver shortages inevitably result in a greater burden being placed on the remaining drivers, increasing the stress and burnout of the entire bus driver workforce and ultimately impacting student safety.

To better understand issues impacting bus driver recruitment and retention, working group member and school bus driver Davida Russell directly solicited feedback from 1,163 drivers and school bus aides across the state. Although many reported looking forward to seeing students each day and noted the opportunity to make a difference in children’s lives, 62% of respondents said they felt unsupported by school administrators, especially when dealing with the challenging behavior of some kids.⁷ Some drivers also reported feeling, at times, unsafe due to harassment by certain parents and students and cited the job’s high expectations and low pay as barriers to recruitment and retention.

Overall, working group members concluded that school districts could better recruit and retain bus drivers by further investing in their professional development and personal wellness.

Recruitment and Retention Recommendations -----

- 1

School districts should identify, share, and encourage bus drivers to participate in professional development opportunities.
- 2

The Ohio Department of Education and Workforce should work with the Ohio Department of Public Safety to create and offer wellness programming
- 3

School districts should develop school bus driver performance review policies and conduct annual performance evaluations.

High-quality continuing education opportunities benefit bus drivers and positively contribute to student safety; however, the working group found that there is a significant disparity regarding bus drivers’ awareness of and access to professional development.⁸ The Ohio School Bus Safety Working Group recommends school districts regularly identify high-quality professional development, communicate the availability of those opportunities, and facilitate their bus drivers’ participation. Working group members believe that access to high-quality professional development opportunities will positively impact student safety, improve job satisfaction, increase productivity, allow bus drivers to refine and learn new skills, and attract and retain experienced drivers.

specific to school bus drivers. School districts should develop policies to ensure bus drivers can take advantage of this wellness support.

Because school bus transportation is a stressful and, at times, dangerous profession, wellness programs can be an important tool for bus driver health.⁹ In addition to regularly encountering aggressive and distracted drivers, bus drivers also must mediate high-risk interactions with students and parents. These recurring stressors can adversely impact bus drivers’ mental and emotional well-being and threaten driver retention. The Ohio School Bus Safety Working Group recommends the Ohio Department of Education and Workforce make wellness programming available to bus drivers to equip them with strategies to react to and recover from high-stress situations. The agency should partner with the Ohio Department of Public Safety to create programming similar to the wellness support programs developed for law enforcement officers.¹⁰

- 3

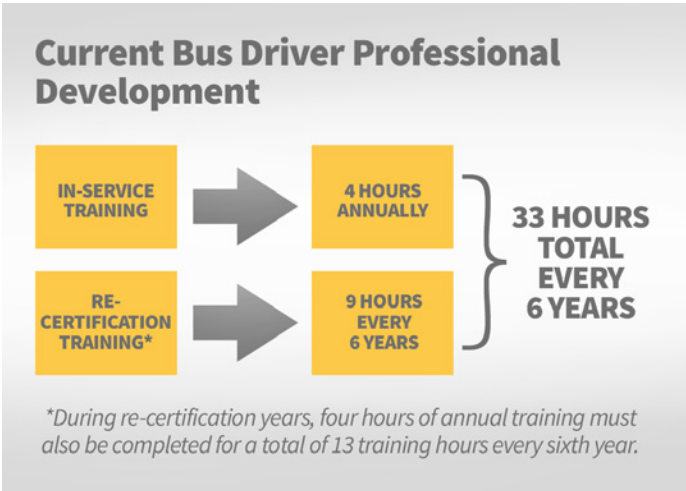
School districts should develop school bus driver performance review policies and conduct annual performance evaluations.
- As with any profession, school bus drivers can benefit significantly from constructive engagement with district leaders. Performance reviews can instill confidence and boost morale, while also allowing for timely professional growth if transportation expectations are not met. Performance evaluations also offer employees a chance to express their on-the-job concerns directly to district leadership. The Ohio School Bus Safety Working Group recommends that Ohio’s school and district administrators conduct annual reviews with bus drivers that identify strengths and pinpoint areas for growth. Administrators should address concerns raised by bus drivers as part of the review process. Districts needing guidance on developing a performance review specific to bus drivers should contact the Ohio Association for Pupil Transportation.¹¹



Professional Development, Training, and Education

Transporting students to school is an incredibly important responsibility, and Ohio maintains a thorough onboarding process that ensures drivers are adequately prepared for this duty. School districts must ensure that prospective employees’ driving records are acceptable and must conduct both Ohio Bureau of Criminal Investigation and Federal Bureau of Investigation background checks on all applicants. Bus driver candidates must complete 27 hours of new driver training, including 15 hours of pre-service classroom instruction and 12 hours of behind-the-wheel instruction, while simultaneously working to obtain a commercial driver’s license before the district can issue a school bus driver certificate.

Equally as important as this initial training and certification is **continued professional development** for Ohio’s bus drivers. Ohio’s current professional development requirements include four hours of in-service training every year, with an additional nine hours of recertification training every sixth year.



During discussions with the Ohio Department of Education and Workforce, Ohio Bureau of Motor Vehicles, and Ohio School Boards Association, the working group noted that Ohio requires more minimum hours of training for new bus drivers than most surrounding states, but the quality of post-employment bus driver training across districts varies.¹² While Ohio law prescribes the topics that annual in-service training can cover, there is no uniform curriculum, resulting in varying levels of professional growth across the state.¹³

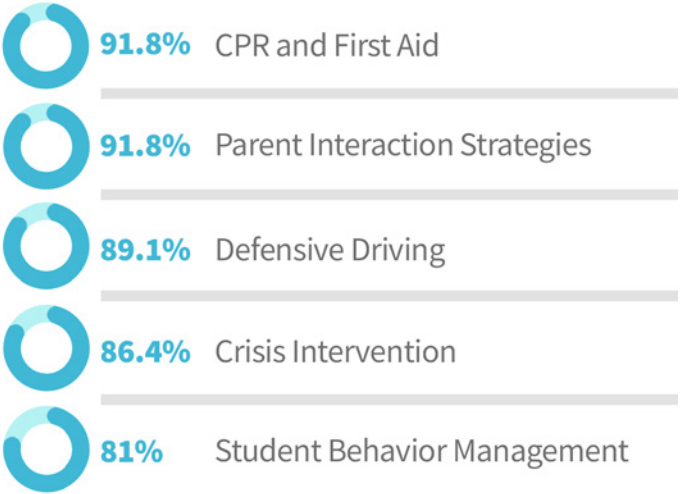


Annual Bus Driver Professional Development Training Topics

- | | |
|---|--|
| <ul style="list-style-type: none">■ CDL requirements■ Safety and emergency procedures■ Transporting preschool and special needs students■ Public and staff relations■ Highway/railroad crossing safety■ Driving■ Student management | <ul style="list-style-type: none">■ Defensive driving■ First aid■ Motor vehicle laws■ Sign, signal, and pavement markings■ Fuel conservation■ Radio/cell phone communications■ Detailed route sheets■ Defensive driving |
|---|--|

Advanced school bus driver training was also found to be of interest to school bus drivers. An overwhelming majority of surveyed bus drivers noted a need for more in-depth advanced training on various topics.¹⁴

Training Requested by Bus Drivers



Source: Davida Russell, Euclid Lyndhurst School District. Survey of Ohio School Bus Drivers, Dec. 1, 2023.

Improvements in **public education opportunities** were also noted by the working group. 65% of school board representatives who responded to the Ohio School Boards Association’s survey recommended that communities improve school bus safety messaging aimed at members of the public, including teenage drivers, adult drivers, and pedestrians.¹⁵ Educational opportunities for parents and guardians of students who ride buses also were suggested.¹⁶

Professional Development, Training, and Education Recommendations

4 The Ohio Department of Education and Workforce should require and provide a curriculum for six hours of annual bus driver training.

The Ohio School Bus Safety Working Group recommends that the Ohio Department of Education and Workforce combine current annual and recertification training (a total of 33 hours every six years) into a schedule of six hours of training annually (a total of 36 hours every six years). Members of the working group believe that this revised annual training schedule will allow bus drivers to receive more timely and relevant updates on new technology and safety improvements from year to year. Requiring the Ohio Department of Education and Workforce to provide this training curriculum will also standardize instruction and improve the availability of quality training across all districts. Training curriculum should require that bus drivers also undergo periodic skills recertification.



5 The Ohio Department of Public Safety and Ohio Department of Education and Workforce should partner to expand advanced driver training for school bus drivers in Ohio.

As with many skills, defensive driving skills are perishable and require regular practice. While Ohio does offer some advanced driver training for school bus drivers, it is geographically limited and only offered twice annually. The Ohio School Bus Safety Working Group recommends that Ohio develop and fund a regional advanced bus driver training program that allows for maximum participation

by local school districts at no cost. Advanced training for bus drivers will not only ensure that defensive driving skills stay sharp, but also improve a driver’s ability to maintain control of their bus while simultaneously responding to stressful events taking place among passengers and on the roadways. Advanced training offerings to meet other training prioritized by bus drivers, such as crisis intervention and first aid, also should be considered.¹⁷ Because many school districts cannot afford to offer advanced training to their drivers, it is essential that this training be offered to schools for free.

6 The Ohio Department of Education and Workforce should adopt rules requiring school districts to offer school bus safety orientation to students, parents, and guardians at the beginning of each school year.

Most school districts hold open house orientations to allow teachers to meet students, parents, and guardians and provide information on classroom expectations. Similarly, families also should have an opportunity to meet school bus drivers and receive information on school transportation expectations. The Ohio School Bus Safety Working Group recommends that the state require all school districts to offer opportunities for students, along with their parents or guardians, to meet their bus drivers, tour a bus, and learn about school bus safety at the start of each school year. When possible, school bus safety orientations should be incorporated into existing mandatory orientations, meetings, or assemblies. School districts should provide families with take-home materials that parents can use to encourage positive school bus behaviors.

7 The Ohio State Highway Patrol should initiate collaboration between state and local law enforcement partners to develop law enforcement training on school bus inspections and the most common safety risks for student passengers.

While the Ohio State Highway Patrol conducts regular inspections of school bus fleets, school buses should be monitored to ensure daily wear and tear does not become dangerous. School districts and transportation staff are responsible for identifying any day-to-day maintenance needs, but student safety would benefit from training others who are regularly around school buses to recognize significant problems. Because local law enforcement officers often are positioned within school zones during pick-up and drop-off times, the Ohio School Bus Safety Working Group recommends that training be developed to help officers recognize externally visible signs of serious maintenance issues. The working group believes this partnership with local law enforcement could help mitigate the risk of unanticipated and potentially dangerous equipment failures occurring in the time between Ohio State Highway Patrol inspections.

8 The Ohio Department of Public Safety should develop educational materials and wide-ranging public service announcements on school bus traffic safety laws and best driving practices.

It is important that members of the public, including young drivers, understand school bus traffic safety laws. This information can best be communicated when schools, local law enforcement, the Ohio Traffic Safety Office, and the Ohio State Highway Patrol partner to promote public awareness.¹⁸ **The Ohio School Bus Safety Working Group recommends that the Ohio Department of Public Safety work collaboratively with a broad range of stakeholders to deliver impactful school bus safety public service announcements and other public awareness materials and opportunities.** Suggestions include training videos for the public published by high school media programs, law enforcement, and the Ohio School Safety Center.

9 The Ohio Department of Education and Workforce should assess whether it is appropriate to increase the minimum number of required training hours for school bus mechanics.

Appropriately trained mechanics are essential to safe school bus transportation. By performing regular maintenance, adhering to manufacturer guidelines, and maintaining a strong focus on safety, mechanics maximize the lifespan and performance of school buses. After working group meetings concluded, some members raised questions regarding current mechanic training requirements. Although this topic was not discussed during its public meetings, members believe it warrants further consideration. **The Ohio School Bus Safety Working Group recommends the Ohio Department of Education and Workforce review the number of hours required for school bus mechanic training and determine whether additional training, continuing education, or other professional development is necessary.**



School Bus Safety Features

Ohio is one of 42 states that does not require seat belts on large school buses, but seat belts are permitted should a school district choose to install them.¹⁹ In 2014, the Ohio Department of Public Safety, which adopts and enforces rules relating to the construction, design, and equipment of all publicly and privately owned and operated school buses, approved the optional use of seat belts on large school buses weighing more than 10,000 pounds. Currently, there are at least 382 school districts in Ohio out of 611 with at least one large bus with seat belts.²⁰

The Federal Motor Vehicle Safety Standards require all smaller school buses under 10,000 pounds to have seat belts for school bus passenger protection.

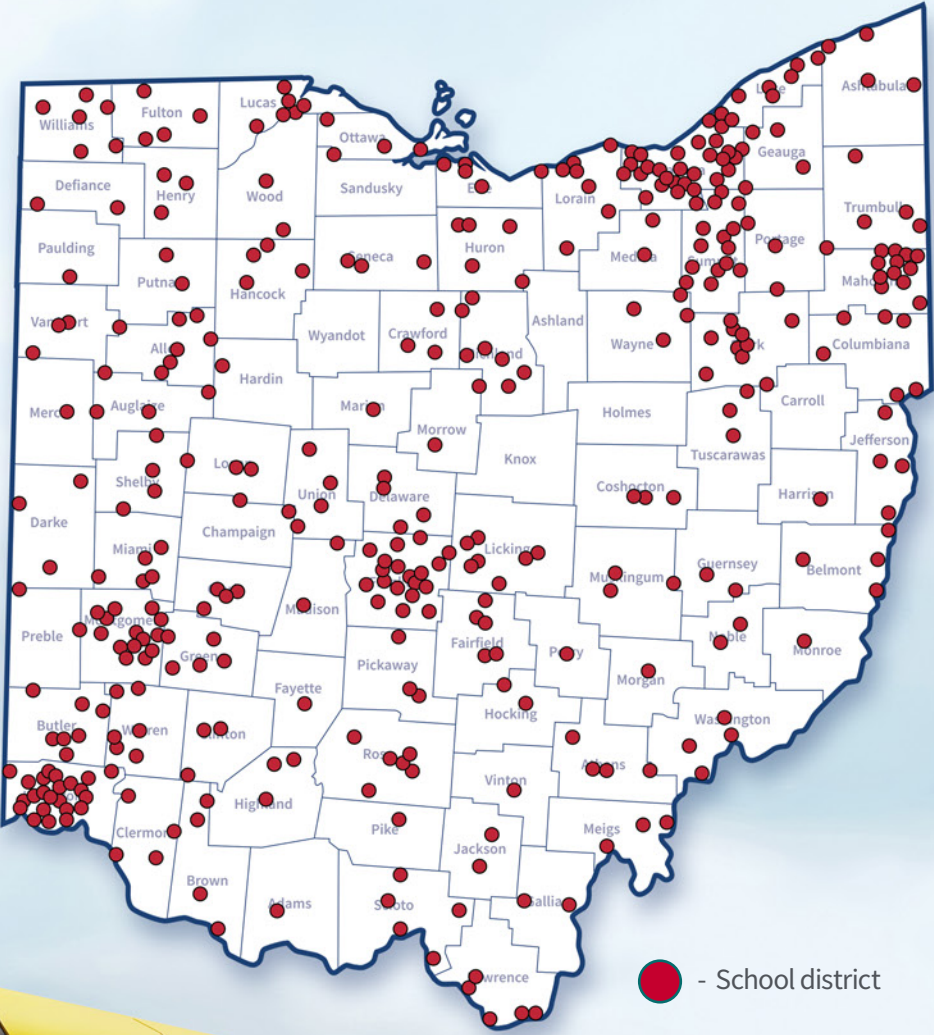
Members of the working group heard from several sources on the topic of school bus seat belts. A survey of Ohio's bus drivers revealed that almost 81% of drivers do not think buses should have seat belts, citing concerns about the process of releasing seat belts in an emergency.²¹

The National Transportation Safety Board provided a history of lessons learned from school bus crashes across the nation. Based on studies of the biomechanics of school bus crashes, National Transportation Safety Board investigations found that, if fitted and worn properly, seat belts in school buses can reduce the level of injuries by keeping passengers within the seating compartment and preventing high-impact contact during a crash.²² In 2018, the National Transportation Safety Board recommended that all new, large school buses be equipped with seat belts. Despite this recommendation, there is no corresponding federal requirement for all large school buses to be equipped with seat belts.

The Ohio State University Biomechanics Research Center presented information on crash risks and occupant protection. Academic research from simulated crashes concluded that seat belts do offer better protection to students by stopping contact with the interior of the bus and preventing ejection from the vehicle.²³

The superintendent of the Avon Lake City School District provided a summary of its school bus seat belt pilot program that began in 2019. The district found that younger students struggled to buckle their own seat belts and some high school students could not fit in the shoulder straps. Drivers were oftentimes forced to stop the bus to assist a student, which presented a safety concern. In some instances, students shoved the buckles in the seat bottom or tied the shoulder straps together. The district has not purchased any more large buses with seat belts because there were longer route times for buses with seat belts and drivers preferred the buses without them.²⁴

School Districts with One or More Large Seat-Belted Bus



A survey by the Ohio School Boards Association found that most districts have not added seat belts to buses due to the significant cost and concerns over unintentional consequences such as students being trapped by a seat belt after a crash or students using seat belts as weapons.²⁵

The working group also raised the issue of school bus safety as it relates to the geography of bus routes throughout the state, citing that varying routes (e.g. highways vs. low-speed roads) could necessitate different safety priorities.

Members also heard from three of the country’s top school bus manufacturers, Blue Bird Corporation, IC Bus, and Thomas Built Buses Inc., who discussed the latest school bus safety features to prevent school bus crashes and make buses more visible to other drivers on the road. Working group members were impressed by the available school bus technology and equipment, but acknowledged adding these safety features to a fleet of buses or new bus purchases likely would be cost-prohibitive for most school districts.

As a result of these discussions, members of the working group spent significant time weighing the pros and cons of requiring seat belts on buses. Intrinsic evidence from peer-reviewed research and simulated school bus crashes supports the position that seat belts make school buses safer for passengers in the event of a serious crash; however, seat belts are just one of the possible safety measures that districts could choose to employ. Working group members observed there was significant value in the many other types of crash-avoidance technology available for school buses today that can effectively prevent serious crashes from happening at all. Because school bus hazards vary across school districts, schools must have the flexibility to expend funds on safety equipment that best meets their unique needs. Therefore, the working group does not recommend that seat belts be mandated for all school buses in Ohio. Group members are in favor of continuing to give local school districts the ability to identify the technology and equipment that could best protect their students. Members of the working group believe that the state should offer funding to school districts to offset the costs associated with upgrading school bus fleets with safety equipment that meets districts’ specific needs.



Additional School Bus Safety Features

- External School Bus Cameras
- Crossing Arms
- Lane Departure Warning Systems
- Electronic Stability Control
- Lighted Crossover Mirrors
- Colorado Rack
- Test-Approved Bus Frames
- Fully Illuminated Stop Arms at the Front and Rear
- Fully Illuminated “School Bus” Signs
- Collision Avoidance Systems
- All LED Lights
- Ground Wash Lights
- Reflective Chevron

More information on these safety features can be found in the appendix.

School Bus Safety Features

Recommendation -----

10 The Ohio Department of Education and Workforce should work with the Ohio General Assembly to develop and fund a grant program to help school districts invest in school bus safety features such as, but not limited to, seat belts. The grant program should be needs-based.

Since the beginning of the COVID-19 pandemic, the number of students riding school buses has decreased, while school bus costs have increased by 30%.²⁶ At the same time, bus safety technology continues to rapidly evolve at price points that are well beyond what most school districts in Ohio can realistically afford. The Ohio School Bus Safety Working Group recommends the Ohio Department of Education and Workforce engage in conversations with the Ohio General Assembly to create a grant program to help school districts pay for new school bus safety equipment and technology. The grant program should be flexible enough to allow school districts to address their own specific school bus safety needs, and funds should be allocated in a manner that addresses the financial needs of the districts that apply.

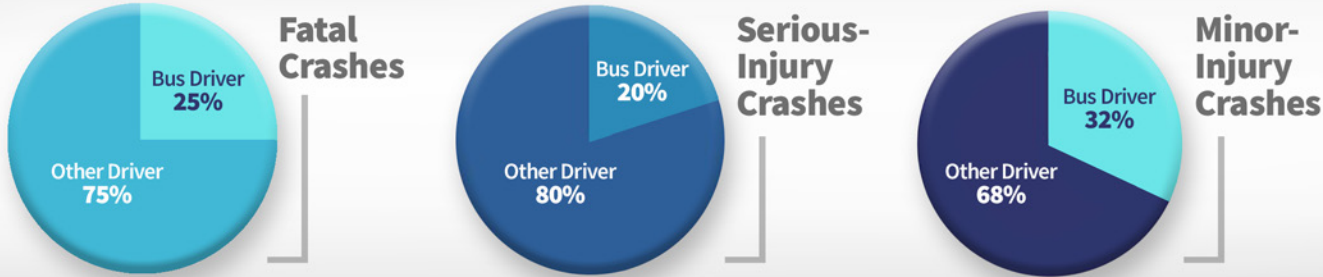
Road and Traffic Safety

Keeping students safe as they travel to and from school is a shared responsibility that should not fall solely on bus drivers; school districts, government, and members of the public also have an important role to play, particularly regarding road infrastructure and traffic safety.

According to the Ohio State Highway Patrol, other drivers are usually responsible for school bus crashes that result in injuries and fatalities among the vehicles involved.

Discussions also found that bus drivers, administrators, and law enforcement all questioned the effectiveness of current penalties for vehicle drivers who fail to follow traffic laws related to school buses.²⁷ To illustrate this point, the Ohio School Boards Association collected a sample of fines issued to drivers who failed to stop for school buses in northwest Ohio. Although the maximum fine allowed by law is \$500, fines issued by the courts ranged from just \$25 to \$250, thus downplaying the seriousness of these offenses.²⁸

School Bus Crashes: At Fault Drivers 2018 - 2023*



Source: Ohio State Highway Patrol

*Preliminary 2023 data

Working group members also stressed the importance of proper school zone infrastructure, clearly marked school zones, and safety measures for pedestrians. As a result of the Ohio School Bus Safety Working Group’s discussions, the Ohio Department of Transportation proactively launched a new initiative to examine road conditions in and around state-maintained school zones. Work is currently underway to review roads in these areas to ensure necessary infrastructure and safety features are intact.

Road and Traffic Safety
Recommendations -----

11 The Ohio Department of Public Safety should work with the Ohio General Assembly to strengthen penalties for drivers who violate traffic laws in school zones and around school buses.

Presentations, statistics, crash history, and other information provided to the working group made clear that other drivers traveling the roads with school buses are frequently to blame for school bus crashes, but fines for traffic violations related to school buses frequently fall far below the maximum allowable penalties. The Ohio School Bus Safety Working Group recommends the Ohio Department of Public Safety work with the Ohio General Assembly on legislation that strengthens penalties for drivers who violate traffic laws in school zones and around school buses. This could include enhanced minimum mandatory fines, increased penalties when school zone traffic violations cause injury, or strict liability in cases of vehicular assault or vehicular manslaughter involving school buses or school zones.

12 The Ohio Department of Transportation should support cities, townships, and villages to assess safety conditions on local roads located in and around school zones.

Properly maintained roadway infrastructure is significantly important for the safe travel of students, no matter if they bike, walk, or ride to school. The Ohio Department of Transportation’s ongoing survey to identify weaknesses in state-maintained school zones should similarly be conducted by local authorities in locally maintained school zones. The Ohio School Bus Safety Working Group recommends the Ohio Department of Transportation share its methodology with local engineers, school districts, and other stakeholders to help them evaluate current infrastructure on roads that serve local schools. Upon review, local communities should prioritize safety improvements for roadway features such as signs, pavement markings, pavement conditions, protective barriers, and traffic calming measures.

13 School districts should conduct safety audits of their bus routes, bus stops, and school pick-up/drop-off sites on school property to reduce safety risks and mitigate the severity of school bus crashes.

Safety should always be a priority when mapping bus routes and bus stop locations. The Ohio School Bus Safety Working Group recommends school districts conduct safety audits of bus routes, bus stops, and school pick-up/drop-off zones. Because evidence suggests left turns are more dangerous than right turns, safety audits should include an examination of left turns to determine whether route adjustments can be made to avoid crossing oncoming lanes of traffic.²⁹ Safety audits also should examine other structural components of bus routes that can impact bus safety such as high speed limits, traffic congestion, areas of low visibility, and areas with steep drop-offs adjacent to the roadway. As part of these reviews, districts are encouraged to consider the efficiency of individual bus routes.





Ohio Department of Transportation

School Zone Safety Audit

✓ Traffic signs

✓ Guardrails & Barriers

✓ Ditches & Drainage

✓ Turn Lanes & Turn Radius

✓ Traffic Control

✓ Pedestrian & Bicycle Infrastructure

✓ Street Crossings & Intersections

✓ Traffic Calming Measures



Emergency Response

Although school bus crashes resulting in serious injuries are rare, bus drivers, school leaders, and first responders must always be prepared. Ohio administrative code requires all school districts to have a policy for handling emergencies on school buses that include procedures on accidents, vehicle failures, hazardous weather, and evacuations.³⁰ These policies must also include instructions on emergency collaboration with first responders and procedures for parental notification. At least three emergency exit drills for students are required each year.

In addition to discussing the overall topic of critical incident response with the Ohio Emergency Management Agency, Ohio School Safety Center, and Ohio State Highway Patrol, working group members also spoke with German Township Fire & EMS Chief Tim Holman to better understand the emergency response to the fatal Northwestern Local School District school bus crash in August 2023.³¹ Chief Holman praised the quick response by first responders and the speed at which they assessed the scene and triaged the most serious injuries. The scene, he said, became more chaotic when parents began seeing the crash on social media, rushing to the site, and taking their children from the area. Although a reunification plan was in place and recently practiced, other students were taken by the school district to the wrong reunification location, causing significant confusion. Chief Holman suggested that engaging bus drivers in critical incident response planning could better ensure that these plans are correctly carried out in the event of a crash.

Emergency Response
Recommendations -----

14 School districts should engage school bus drivers in critical incident response planning and include them in realistic, scenario-based critical incident exercises.

When preparing for emergencies, there is no substitute for realistic scenario-based training; however, the involvement of school bus drivers in emergency response planning and preparation varies significantly among school districts.³² The Ohio School Bus Safety Working Group recommends school bus drivers be included in incident response planning and take part in scenario-based training exercises with local law enforcement, fire and EMS agencies, the Ohio State Highway Patrol, and county emergency management agencies. Including bus drivers in the emergency planning process and ensuring their participation in practice drills will better prepare school districts to effectively respond to a serious bus crash. Training should be challenging, interesting, and centered on exposing weaknesses and identifying remedies in current emergency response plans.

15 The Ohio State Highway Patrol should hold regular school bus stakeholder meetings to identify and mitigate gaps in critical incident responses to school bus crashes and other bus-related security issues.

Best practices surrounding school bus safety frequently evolve, and ongoing school bus safety discussions at the local level are critical to better ensuring safe school transportation. The Ohio School Bus Safety Working Group recommends the Ohio State Highway Patrol conduct regular meetings related to school bus safety in collaboration with local law enforcement, first responders, school districts, and other stakeholders. Meetings should be held in each of the Ohio State Highway Patrol’s nine geographic districts across the state. Participants should share information and best practices related to school bus and school zone safety within their jurisdictions. During these meetings, the Ohio State Highway Patrol should provide details of any lessons learned from the emergency response to any recent school bus crashes throughout the state. Meetings also should address ideas related to training, education, and crash prevention, as well as the ongoing development and revision of policies as they relate to bus crash emergency response, the process to reunite students and parents, changes in relevant regulations and laws, and any other issues that affect school bus safety.

16 The Ohio Department of Education and Workforce should expand its post-crash report to collect additional information and publish the data annually to inform future policy decisions and aid in determining school bus driver professional development needs.

To ensure this report was as thorough as possible, much effort went into the collection of relevant and up-to-date information to aid the discussions of the working group. Through this research, working group members identified ways to improve the Ohio Department of Education and Workforce’s current post-crash report for bus drivers. The Ohio School Bus Safety Working Group recommends the Ohio Department of Education and Workforce expand its post-crash report to collect information on the bus drivers’ experience and the amount of time spent driving on the day preceding the crash. The agency should also track information on whether the drivers are full-time or substitutes. Post-crash reports should be analyzed, compiled, and shared to identify lessons learned. The information should be distributed to school districts, school bus professionals, and local first responders.

Commercial Bus Services

On Nov. 14, 2023, a commercial bus carrying students from the Tuscarawas Valley School District was involved in a horrific crash on I-70 when a semi-truck collided with the bus and a car transporting a district teacher and two parents. Six people were killed, including three students on the bus and all three individuals in the car, and many others were injured. Although the incident did not involve a traditional school bus, the incident prompted the working group to also consider the safety of contracted bus services.

Commercial Bus Services
Recommendation

17 School districts should adopt policies that require a thorough evaluation of contracted commercial bus services.

For non-routine bus trips to school events such as athletic competitions or field trips, a school district may choose to hire a private charter bus company or other commercial carrier. The Ohio School Bus Safety Working Group recommends school districts establish screening policies around contracted commercial bus services. Policies should ensure that buses have been properly maintained and that drivers are qualified.



Does the private transportation company have:

- A good safety record?
- Driver background checks?
- Driver drug and alcohol testing policies?
- Driver fatigue policies?
- Annual bus inspections?
- Roadside breakdown assistance?
- Subcontracted equipment or drivers?
- Public liability insurance?

Appendices



2023 School Bus Safety Manual - Safety Features

Safety Features	Description	2023 School Bus Inspection Manual Approved Option?
Seat belts	When a crash does occur, evidence suggests that seatbelts save lives during crashes. Seatbelts when worn correctly can prevent injuries and death by averting individual bodies from moving rapidly toward the point of impact. Indirect seatbelt benefits may include a calmer bus atmosphere, improved student behavior, increased driver satisfaction, and reduced driver distraction and stress. To achieve the effectiveness of seatbelts to and from school, it will be important that districts develop and execute implementation plans.	✓ Yes Page 89
External School Bus Cameras	The external camera allows license plates of drivers who run school bus stop signs to be captured so that school bus safety laws can be more consistently enforced.	✓ Yes Page 65
Fully Illuminated Stop Arms at the Front and Rear	The nation sees high rates of non-compliance by drivers who do not stop when a school bus's illuminated stop arm is deployed. Placing a fully illuminated stop arm at the rear of a bus notifies drivers approaching from behind at an earlier opportunity that a school bus is stopped picking up or dropping off children, and that the driver of the non-bus vehicle is required to stop.	✓ Yes Page 65
Crossing Arms	This feature is designed to prevent students from walking too close to the bus and being accidentally struck. It has been proven to improve student visibility and prevent accidents.	✓ Yes Page 29
Fully Illuminated "School Bus" Signs	Fully illuminated school bus signs enhance visibility as compared to more common signs with reflective surfaces. Surrounding motorists have improved awareness of the location and activities of school buses in their proximity and can respond accordingly.	✓ Yes Page 75
Lane Departure Warning Systems	Lane departure warning systems can prevent crashes by alerting drivers of unintentional lane drifting and lane changing without proper signaling.	✓ Yes Page 65

*Some of these safety features may only be available at the time of manufacturing.

2023 School Bus Safety Manual - Safety Features

Safety Features	Description	2023 School Bus Inspection Manual Approved Option?
Collision Avoidance Systems	Collision avoidance on school buses can alert the driver to the potential dangers on the road--located 360 degrees around the bus--allowing for additional time to react and avoid crashes.	✓ Yes Page 65
Electronic Stability Control	Electronic stability control assists school bus drivers by detecting and reducing the loss of traction. The ESC systems automatically apply braking action to individual wheels, helping the driver maintain proper control of the vehicle.	✓ Yes Page 62 (required in new busses)
All LED lights	LED lights include warning lights, headlights, brake lights, tail lights, and stop signs, enhancing visibility at all times, but particularly during evening hours and during adverse weather conditions. Enhanced visibility increases the safety of children loading and unloading--the most dangerous time of a child's school bus trip due to the driver's limited line of sight and the failure of surrounding motorists to follow traffic laws.	✓ Yes Page 62 & 74
Lighted Crossover Mirrors	These mirrors provide advanced illumination for the front "danger zone" where children pass when loading and unloading, but where bus drivers have limited line of sight.	✓ Yes Page 81 & 82
Ground Wash Lights	This feature produces a specified amount of light throughout a grid from the plane of the bus 15 feet outward. The lighting produces a halo of light allowing the bus driver and approaching motorists to better see the students.	✓ Yes Page 74
Colorado Rack Test-Approved Bus Frames	Required in 10 states (AR, CO, FL, GA, KY, NV, NC, SC, WV, and UT), this test ensures enhanced structural integrity of a bus by applying constant pressure along the full length of a bus body.	N/A
Reflective Chevron	Placing reflective chevron markings on the back of a school bus is a cost-efficient option to enhance visibility to approaching motorists during non-daylight or low-light hours.	✓ Yes Page 80

References

¹ <https://otso.ohio.gov/programs/school-bus-safety/school-bus-safety>

² Sergeant Trevor Jasper, Ohio State Highway Patrol. Ohio School Bus Crash Statistics, September 25, 2023

³ Sergeant Trevor Jasper, Ohio State Highway Patrol. Ohio School Bus Crash Statistics, September 25, 2023

⁴ Carolyn Everidge-Frey, Jessica Horowitz-Moore, Ohio Department of Education. Who Is Served by School Buses in Ohio?, September 11, 2023

⁵ Ohio Department of Transportation. (2016) Statewide Customer Preference Survey Findings Report. ETC Institute.

⁶ Carolyn Everidge-Frey, Jessica Horowitz-Moore, Ohio Department of Education. Who Is Served by School Buses in Ohio?, September 11, 2023

⁷ Davida Russell, South Euclid Lyndhurst School District. Survey of Ohio School Bus Drivers, Dec. 1, 2023.

⁸ Catherine Cooper, Rodell Davis, Jimmie Dawson, Matt Perkins, Eric Taylor, Jane Anne White, panelists. Panel Discussion. Ohio School Bus Safety Working Group, Nov. 16, 2023; Davida Russell, South Euclid Lyndhurst School District. Survey of Ohio School Bus Drivers, Dec. 1, 2023.

⁹ Davida Russell, South Euclid Lyndhurst School District. Survey of Ohio School Bus Drivers, Dec. 1, 2023; see also, Fox8 and Nexstar Media Group, Inc., Sartaj Singh, Alex Pearson, and Channing King, Parent breaks bones in Ohio bus driver’s face: Police, Dec. 21, 2023, available at <https://fox8.com/news/parent-breaks-bones-in-ohio-bus-drivers-face-police/> (last visited Dec. 27, 2023).

¹⁰ Davida Russell, South Euclid Lyndhurst School District. Survey of Ohio School Bus Drivers, Dec. 1, 2023; see also, Fox8 and Nexstar Media Group, Inc., Sartaj Singh, Alex Pearson, and Channing King, Parent breaks bones in Ohio bus driver’s face: Police, Dec. 21, 2023, available at <https://fox8.com/news/parent-breaks-bones-in-ohio-bus-drivers-face-police/> (last visited Dec. 27, 2023).

¹¹ oapt.org

¹² Catherine Cooper, Rodell Davis, Jimmie Dawson, Matt Perkins, Eric Taylor, Jane Anne White, panelists. Panel Discussion. Ohio School Bus Safety Working Group, November 16, 2023, Ohio Department of Public Safety, Columbus, OH. Colleen Hall, Solon City Schools. Safety Training, November 16, 2023. Doug Palmer, Ohio School Boards Association. School Transportation Safety and Driver Training and Cooperation to Expand Candidate Pool, November 16, 2023.

¹³ OAC 3301-83-10(B)

¹⁴ Davida Russell, South Euclid Lyndhurst City School District. Survey of Ohio School Bus Drivers, Dec. 1, 2023.

¹⁵ Doug Palmer, Ohio School Boards Association. School Transportation Safety, Sept. 25, 2023

¹⁶ See, e.g., Unioto Elementary, OSLN Design Challenge, Secure Bus, available at <https://www.youtube.com/watch?v=IKix-F6WT2Q> (last visited Jan. 14, 2023).

¹⁷ Davida Russell, South Euclid Lyndhurst School District. Survey of Ohio School Bus Drivers, Dec. 1, 2023.

¹⁸ Lieutenant Tyler Harris, City of Hilliard Police. Hilliard School Zone Safety Update, Oct. 30, 2023; Sheriff George Maier, Stark County Ohio Sheriff’s Office. School Bus Safety Working Group, Oct. 30, 2023.

¹⁹ For the purposes of this report, a seat belt is defined as a three-point retractable lap and shoulder belt.

²⁰ Ohio Department of Education and Workforce.

²¹ Davida Russell, South Euclid Lyndhurst School District. Survey of Ohio School Bus Drivers, December 1, 2023.

²² Kristin Poland, Ph.D., National Transportation Safety Board. National History of School Bus Crashes and Lessons Learned, September 25, 2023

²³ Amanda Agnew, Ph.D., Julie Mansfield, Ph.D., The Ohio State University. School Bus Crash Risks, September 25, 2023.

²⁴ Joelle Magyar, Avon Lake City Schools. Governor’s Task Force – Seat belts on Buses, October 12, 2023.

²⁵ Doug Palmer, Ohio School Boards Association. School Transportation Safety, Sept. 25, 2023

²⁶ Albert Burleigh, Blue Bird. Blue Bird Safety Features, Oct. 30, 2023; Chad Duncan, IC Bus. School Bus Safety Technology, Oct. 30, 2023; Ricky Stanley, Thomas. New Features from Thomas Built Buses, October 30, 2023.

²⁷ Joelle Magyar, Avon Lake City School District. Governor’s Task Force – Seat belts on Buses, Oct. 12, 2023.

²⁸ Doug Palmer, Ohio School Boards Association. School Transportation Safety, Sept. 25, 2023.

²⁹ Lieutenant Tyler Harris, City of Hilliard Police. Hilliard School Zone Safety Update, Oct. 30, 2023; Sheriff George Maier, Stark County Ohio Sheriff’s Office. School Bus Safety Working Group, Oct. 30, 2023.

³⁰ OAC 3301-83-15

³¹ Chief Tim Holman, German Township Fire & EMS. School Bus Crash in Northwestern Local School District, Clark County, Dec. 1, 2023.

³² Davida Russell, South Euclid Lyndhurst City School District. Survey of Ohio School Bus Drivers, Dec. 1, 2023.

³¹ Chief Tim Holman, German Township Fire & EMS. School Bus Crash in Northwestern Local School District, Clark County, Dec. 1, 2023.

³² Davida Russell, South Euclid Lyndhurst City School District. Survey of Ohio School Bus Drivers, Dec. 1, 2023.



OHIO

School Bus Safety Working Group

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77 S. High St., 30th floor
Columbus, OH 43215

www.Governor.Ohio.gov



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