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Driver Knowledge of School Bus Passing Laws: A National Survey

Background

The National Highway Traffic Safety Administration has been closely following the safety issue of vehicles illegally passing a stopped school bus with its red lights flashing and stop-arm deployed. This dangerous driving behavior occurs frequently across the entire country with over 43.5 million illegal passes estimated to have occurred during the 2022 to 2023 school year (National Association of State Directors of Pupil Transportation Services, 2023). When a child is struck going to or from a school bus, severe injury or death often occurs with devastating consequences for all involved. The greatest risk to a child isn't riding a school bus but approaching or leaving one as a pedestrian. Prior to the current study, no recent national survey had assessed driver knowledge and understanding of laws governing the passing of stopped school buses. This research aimed to determine driver knowledge gaps to better inform NHTSA's countermeasure development efforts to reduce crashes involving children going to or from stopped school buses.

Methods

Survey participants were recruited from the AmeriSpeak panel developed using a rigorous stratified random sampling approach to create a nationally representative pool of potential participants. From this pool, the study team randomly sampled drivers who were 18 or older and spoke English. AmeriSpeak contacted the selected panelists via email or text message with an invitation to participate. Panel members could also view the invitation in the online member portal or on the AmeriSpeak mobile app. Participants could complete the survey through the mobile app or using an internet browser. A total of 3,557 participants completed the survey.

The survey focused primarily on driver knowledge of the proper behavior, as prescribed by laws in their residential State, in specific situations when encountering a school bus that is stopped or about to stop. Seven scenarios were depicted using three-dimensional animations. Each presentation began with an overhead view of the scenario and a description of the direction of travel of the vehicle the participant was "driving." The scenario then transitioned to a first-person view that was animated to look as if the driver was approaching (from the front) or overtaking (from the rear) a school bus. After the animated presentation was complete, the driver was asked the same question following all seven scenarios:

What does the law say a driver must do in this situation?

- Nothing special
- Proceed with caution
- Slow down
- Yield to children
- Stop, look, and go
- Stop and stay stopped

Scenarios

Scenario 1: Vehicle overtaking a school bus stopped on a **two-lane undivided** roadway as its red lights and stop-arm deploy.



Scenario 2: Vehicle approaching a school bus stopped on a **two-lane undivided** roadway as its red lights and stop-arm deploy.



Scenario 3: Vehicle overtaking a school bus stopped on a **four-lane undivided** roadway as its red lights and stop-arm deploy.



Scenario 4: Vehicle approaching a school bus stopped on a **four-lane undivided** roadway as its red lights and stop-arm deploy.



Scenario 5: Vehicle approaching a school bus stopped on a **four-lane divided** (by a clearly visible physical median) roadway as its red lights and stop-arm deploy.



Scenario 6: Vehicle overtaking a school bus stopped as the last bus in a line of buses in a **school driveway** with its red lights flashing and stop-arm extended.



Scenario 7: Vehicle following a school bus on a **four-lane undivided** roadway as its **yellow** lights start to flash.



Results

The correct answer for each scenario was determined by what the law in each participant's State required. For Scenarios 1 to 6, the unweighted and weighted percentages of participants who answered each scenario correctly are provided in Table 1. In many States, determining the correct answer for Scenario 7 was not possible because it was vaguely addressed or not addressed at all. Therefore, Table 2 reflects the percentages of each response chosen and not the percentage of correct responses as shown in Table 1. Results weighted to the population of the United States are based on the known information for the entire AmeriSpeak panel and the combined probabilities that the panel member would be selected for the panel, would be selected for the survey, and actually responded. Table 1 shows the percentage of correct responses, the weighted percentage and weighted confidence interval (CI).

Knowledge rates were high (over 90% correct responses) for Scenarios 1 and 2 involving two-lane undivided roadways and a bus with its stop-arm deployed and red lights flashing. Scenario 3 also had over 90 percent correct responses for the situation of overtaking a bus with its red lights flashing and stop-arm deployed on a four-lane undivided road. Just over half (55%) of participants correctly answered Scenario 4, which involved approaching a stopped bus from the front on an undivided four-lane roadway with the bus stop-arm deployed and red lights flashing. Performance was even worse (about 18% correct) on Scenario 5 when a physical median was present on a four-lane divided roadway, and the vehicle was approaching a bus with its stop-arm deployed and red lights flashing from the front. About 26 percent of participants correctly answered Scenario 6 that involved overtaking a school bus with stop-arm deployed and red lights flashing in line on school property. For Scenario 7 that involved overtaking a bus from the rear with its yellow lights flashing, the responses were primarily split between proceed with caution, slow down, and stop and stay stopped.

Table 1. Scenarios 1 to 6, Percentage Correct

Scenario	Unweighted (%)	Weighted (%)	95% CI* (%)
1	92.3	93.0	91.7, 94.1
2	90.3	91.0	89.6, 92.2
3	91.4	91.8	90.5, 93.0
4	52.9	55.5	53.2, 57.7
5	17.5	17.8	16.1, 19.5
6	26.7	27.2	25.2, 29.2

*Interval based on weighted %

Table 2. Scenario 7 Responses

Answer Choice	Unweighted (%)	Weighted (%)	Weighted 95% CI (%)
Nothing special	2.3	1.6	1.1, 2.3
Proceed with caution	28.5	29.2	27.2, 31.3
Slow down	24.1	23.8	21.9, 25.8
Yield to children	5.5	4.6	3.7, 5.6
Stop, look, and go	2.2	2.1	1.5, 2.9
Stop and stay stopped	37.4	38.7	36.5, 40.9

Discussion and Conclusions

Overall, these findings suggest the majority of drivers know the requirements of the law when approaching and overtaking school buses with their stop-arm deployed and red lights flashing on two-lane undivided roads, and when overtaking a school bus on four-lane undivided roads. Also, many of the respondents who answered Scenarios 4 to 6 incorrectly chose "stop and stay stopped" as their response. Even though incorrect, for their State, this does likely suggest that the behavior of stopping for a stopped school bus is well known. Only stopping and staying stopped until the stop-arm is retracted and flashing red lights are off will ensure the highest level of safety for pupils going to or from the bus. Correct knowledge, however, decreases substantially when approaching a bus from the front on a four-lane road with and without a physical median. Knowledge was also low for what to do

when a bus was in line at school. The lower knowledge rates for these scenarios were not surprising, however, given vague and varying State laws prescribing what is in fact legal. The frequency and pattern of incorrect responses observed in this national survey suggests that a lack of knowledge does appear to be playing a role as drivers continue to pass stopped school buses with such great frequency. Additionally, it appears that making drivers aware of the penalties could be useful given how few participants said they knew the level of penalties that could be levied against violators. The results of this study do suggest drivers will likely be receptive to camera enforcement and stricter penalties as these were the two most frequently selected approaches for reducing illegal passing. Contrary to the usual assumption, nearly 70 percent of participants agreed with the approach of ticketing the registered owner of a vehicle rather than the driver which would eliminate the need to figure out who was actually driving the vehicle at the time of an illegal pass.

References

National Association of State Directors of Pupil Transportation Services. (2023, July). *Annual NASDPTS survey highlights danger of passing school buses* [Press release].

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