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Author(s): Josh A. Hendrix, Ph.D., Erin K. Kennedy, James V. Trudeau, Ph.D., Alana Henninger, Ph.D.

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Bullying and Violence on the School Bus: A Mixed-Methods Assessment of Behavioral Management Strategies

Final Report

Prepared for

Laurie Bright
Senior Grant Manager
National Institute of Justice
810 7th Street, NW
Washington, DC 20531
Laurie.Bright@usdoj.gov

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Prepared by

RTI International
3040 E. Cornwallis Rd
Post Office Box 12194
Research Triangle Park, NC 27709-2194

Josh A. Hendrix, PhD
Youth, Violence Prevention & Community Justice
Program
Erin K. Kennedy
Courts Systems Research Program

James V. Trudeau, PhD
Division of Applied Justice Research
Alana Henninger, PhD
Victimization and Resilience Research Program



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Study Overview

Numerous high-profile events involving student victimization on school buses in the past few years have raised critical questions regarding the safety of school-based transportation for children, the efforts taken by school districts to protect students on buses, and the most effective transportation-based behavioral management strategies for reducing misconduct. To address these questions, RTI International, in partnership with the National Association for Pupil Transportation (NAPT) conducted a mixed-methods study with three core project phases. In Phase I, a national web-based survey was administered to district-level transportation officials throughout the United States to assess the perceived prevalence of seven forms of misconduct on school buses; identify the variety and prevalence of behavioral management strategies used to address misconduct; and describe strategies that are believed to be effective for reducing student misbehavior. In Phase II, semi-structured telephone interviews were conducted with thirty-nine transportation officials to understand the challenges of transportation-based behavioral management and to elaborate on strategies used to help create safe and positive school bus environments. Interviews were also used to identify data-driven approaches for tracking student disciplinary referrals, assess the perceived effectiveness of specific approaches, and to conduct evaluability assessments of participating districts to determine whether a future evaluation of behavioral management strategies is feasible. In Phase III, results were analyzed to draw conclusions about the nature of student misconduct on school buses and the approaches being used to address it, in addition to developing key milestones for future research projects pertaining to school bus safety.

Research Questions

The study has six key research questions:

- **RQ1:** What is the perceived nature and extent of behavioral problems on school buses and what types of districts have higher levels of perceived misconduct?
- **RQ2:** What are commonly used behavioral management strategies for school buses and does strategy use vary across different types of districts?
- **RQ3:** What strategies do transportation officials perceive to be the most effective for reducing misconduct, and are these perceptions contingent on the makeup of the district (e.g. district size)?
- **RQ4:** How do districts assess the effectiveness of behavioral management strategies they implement?
- **RQ5:** To what extent are necessary protocols being met in transportation departments to allow for a scientific evaluation of one or more behavioral management strategies for school buses?
- **RQ6:** What are key challenges faced by transportation officials in establishing safe and positive school bus environments?

Study Design and Methods

RTI and NAPT conducted a 2.5-year mixed-methods study in three phases:

- In *Phase I*, a national web-based survey was administered to district-level transportation officials to gather information about the perceived nature and extent of student misconduct on buses, uncover the variety and prevalence of transportation-based behavioral management strategies, and identify the approaches that officials perceive to be the most effective for reducing misconduct. Prior to the development of the survey, a rigorous scan of scholarly publications, school/district websites, bullying-

prevention websites, reports from transportation organizations, and media reports was conducted to identify strategies that districts use to regulate students on buses. The review identified 18 behavioral management strategies for buses, each of which were incorporated into the survey.

- In *Phase II*, thirty-nine telephone interviews were conducted with district-level transportation officials to understand the challenges of behavioral management, processes by which strategies are implemented, and the conditions under which different approaches are perceived to be most successful for promoting safe school bus environments. The interviews were also used to understand how transportation departments track student disciplinary referrals, to what extent they use data-driven approaches to assess the effectiveness of their efforts, and whether their current data-keeping practices would be amenable to a future evaluation study. Additionally, interviewees were asked to provide feedback on a taxonomy of behavioral management strategies developed by the project team that grouped similar strategies together under larger thematic categories.
- In *Phase III*, survey and interview results were systematically analyzed to identify themes related to student misconduct and concerted efforts to regulate student behavior, and to design recommendations for moving forward in this area of research.

Web-based Survey

The web-based survey administered in Phase I addressed five core topics: a) the nature of behavioral problems on school buses; b) uses of transportation-based behavioral management strategies; c) perceived effectiveness of behavioral management strategies for reducing misconduct; d) methods for assessing whether strategies are effective for reducing misconduct; and e) lessons learned from implementing behavioral management strategies on buses. The survey instrument can be referenced in Appendix A.

Sampling Procedure

The sampling procedure began with a list of names and contact information for transportation officials and superintendents for public school districts in the U.S. The list was purchased from a private vendor and contained contact information for officials representing 10,384 districts. Because one area of interest was understanding whether misconduct and behavioral management varies across different types of districts, the sampling frame was merged to the National Center for Education Statistics' (NCES) Common Core Data (CCD) dataset. The CCD provides information on district-level characteristics such as size, urbanicity, and racial composition. The CCD included 2,110 districts not represented by the sampling frame. Manual tracing efforts were conducted to locate contact information for these districts, increasing the size of the frame to 12,494 districts. Email invitations were sent to each district's transportation director, or to the superintendent if the project team was unable to obtain contact information for the transportation director. After the initial survey invitation was sent via email, respondents received up to 4 reminders via various methods of contact: 1) A reminder email, sent 8 business days after the survey invitation; 2) A non-response letter, sent 10 business days after the reminder email (with the assumption that it would be received approximately 14 business days post reminder email); 3) A non-response email, sent 14 business days after the reminder email (to coincide with the receipt of the non-response letter); and 4) a final survey reminder/ end of study email, sent 10 days after the non-response email. Respondents from 3,215 districts opened the survey. Of those, 120 did not agree to the terms of informed consent, 70 stated that their districts did not use buses, and 430 left most questions unanswered. After removing these 620 respondents, the total sample size of completed responses was 2,595 (response rate 21%).

Weighting and Accounting for Missing Data

A comparison of descriptive statistics between the sample and the population of districts from the sampling frame revealed marginal bias on a few key characteristics. For instance, the study sample slightly

underrepresented districts from the Northeastern and Southern regions of the U.S., and overrepresented urban districts. To adjust these proportions so that they resembled the population of districts from the sampling frame, raking ratio estimation was used to assign a weight value to each observation so that marginal totals of the adjusted weights on specified characteristics mirror the corresponding totals of the population. Raking was conducted using five characteristics gleaned from the CCD: geographic region, urbanicity, number of schools in the district, number of students in the district, and percentage of White students in the student population. Applying weights to the analysis produced nationally representative estimates pertaining to perceptions of behavioral problems, the use of transportation-based behavioral management strategies, and other core areas of interest. Multiple imputation, with a series of five imputations, was used to predict the missing values of key variables in the analysis.

Measurement

Table 1 (see Appendix B) describes variables used in the analysis of the survey data. The table is organized into seven sections: 1) respondent characteristics; 2) district characteristics; 3) measurements of perceptions of misconduct, corresponding with RQ 1; 4) measurements of the use of behavioral management strategies, corresponding to RQ2; 5) variables for measuring the effectiveness of behavioral management strategies for reducing specific forms of misconduct, corresponding to RQ 3; 6) variables for measuring the methods used to assess whether behavioral management strategies are effective, corresponding to RQ4; and 7) items used to measure lessons learned from implementing behavioral management strategies on school buses, corresponding to RQ6. For each item, the table describes where the information came from (i.e., the source), how the item was originally operationalized, and how the items were recoded for analysis (if applicable).

As described in Table 1, respondents had the opportunity in four open-ended questions to describe lessons learned from implementing behavioral management strategies on school buses and to describe anything about student management that was not already covered in the survey. Answers were coded into larger thematic categories, three of which related directly to one of the study's core research questions. For instance, responses coded as "facilitators" helped to elaborate on effective strategies for reducing misconduct (RQ3); responses coded as "challenges of student transportation" were a core resource for addressing RQ6; and responses coded as "observations about student misbehavior" provided additional insights into the nature of student misconduct and therefore related directly to RQ1. A total of 1,543 respondents, or 59% of the sample, replied to at least one of these questions (a total of 3,361 responses). A total of 1,277 respondents described at least one facilitator, 319 respondents described at least one challenge, and 169 respondents made at least one observation about misbehavior. Fifty-one respondents provided at least one miscellaneous observation, 42 described at least one ineffective strategy, and 37 respondents provided inapplicable or unusable information.

Survey Sample

Table 2 displays descriptive statistics for survey respondents. Two-thirds of respondents in the sample identified as the transportation director, whereas the other one-third identified as the superintendent, school principal, or some other title. On average, respondents had nearly ten years of experience in their current position, and the majority identified as non-Hispanic, White, and male. Table 3 displays descriptive statistics for district characteristics and shows that on average, respondents represented districts with student populations that were 71% White, 4.6% English learner, and 13.5% special education. Slightly more than half were rural districts.

Semi-structured Interviews

In Phase II, semi-structured telephone interviews were conducted with thirty-nine transportation officials to understand the challenges of student behavior on school buses, implementation of behavioral strategies, conditions under which strategies are perceived to be most successful, approaches used to track disciplinary referrals, and the efficacy of behavioral management strategies. Email invitations were sent to all transportation officials who completed the survey in Phase I (N=2,595). The invitations informed potential respondents that

the interviews would last approximately 45 minutes, were an effort to learn practical information about approaches to transportation-based student management, and that their answers would remain strictly anonymous. Thirty-three transportation officials were recruited from the web survey sample. An additional six officials were recruited from the NAPT annual conference in Columbus, Ohio in November of 2017.

Interviews were conducted by the Project Director and the Qualitative Data Collection Task Leader with the assistance of a trained notetaker. Interview guides (see Appendices C and D) were used to provide structure to the interviews. For interviewees recruited from the survey sample, interviewers customized each interview to answers provided by the respondent in the survey. For example, interviewers began several questions with a brief overview of information provided by the respondent during the survey before asking more targeted questions based on those answers. For interviewees recruited from the NAPT conference, questions were more general (e.g., “What are some of the strategies your district uses to manage student behavior on school buses?”). The guides were meant to serve as semi-structured templates and interviewers allowed respondents to speak freely about issues they believed were important for bus safety, regardless of whether the guides explicitly included these areas of interest. All transcripts were coded under a qualitative content analysis approach using NVivo 11 qualitative data analysis software to uncover salient themes. Six core categories of themes emerged from the analysis of the interview data: 1) Types of Misbehavior; 2) Types of Behavioral Management Strategies; 3) Challenges; 4) Facilitators; 5) Characteristics; and 6) Evaluability Assessments. The coding trees for each of these themes can be referenced in Appendix E. Relevant themes emerging from this analysis are incorporated into the Results section of this report when they provide additional insights for answering the study’s core research questions.

Results

RQ 1: What is the perceived nature and extent of behavioral problems on school buses and what types of districts have higher levels of perceived misconduct?

Perceptions of Misconduct

Table 4 displays descriptive statistics for items measuring school bus misconduct and suggests that the most commonly perceived form of misbehavior relates to violations of basic rules (e.g., littering, vandalizing seats, yelling, or changing seats). However, with a mean of 3.11, even this form of misconduct is on average perceived to be “common” rather than “very common” or “extremely common.” The next two forms of misconduct with the highest average scores were the use of profanity ($\bar{x} = 2.9$, i.e., “somewhat common”), and bullying ($\bar{x} = 2.1$, i.e., “somewhat common”). For additional context, 68% of respondents indicated that violations of basic rules were common, very common, or extremely common. About 59% marked the use of profanity as common, very common, or extremely common, whereas 25% marked bullying as common or more than common. Less than 15% reported fighting, substance use, sexual harassment, or sexual activity as common or more than common. Table 4 also shows that 70% of districts filed fewer than 76 disciplinary referrals in the 2015 calendar year, and only 20% filed more than 100 referrals. Likewise, only 11% of districts reported that formal reports are filed for school bus misconduct daily, although the majority (78%) reported referrals being filed on at least a monthly basis. The clear majority (89%) of districts had not experienced a serious incident on a school bus in the 2015-2016 school year that resulted in criminal charges against a student.

Qualitative analysis of open-ended survey responses and interview transcripts further supported the notion that school bus misconduct typically involves minor rule violations. For instance, whereas more than 60 indicated that student misbehavior on school buses is inevitable, 40 respondents described misconduct as being relatively non-serious and most often involving excessive noisemaking, moving seats while the bus is in motion, and general defiance toward the driver. Importantly, while most interview respondents believed that most school bus infractions were minor, many emphasized that lower-level violations can have dangerous implications for bus safety because they threaten drivers’ abilities to focus on the road.

Conversely, several respondents suggested that student behavior has become significantly worse during their years working in student transportation. These respondents believed that students are not being adequately held accountable for their behavior at home or at school. For instance, one respondent suggested that holding children accountable is difficult, time-consuming, and a major inconvenience to parents with busy lives and demanding work schedules. Instead, parents are increasingly opting to challenge (with the hopes of dismissing) school complaints about their children, which is often more time-efficient than attempting to correct their child's behavior. In turn, children learn that there are few, if any, consequences for their misconduct, a process that reinforces socially undesirable behaviors at school and on the bus.

Types of Districts with Higher Levels of Perceived Misconduct

To identify types of school districts with higher levels of perceived misconduct, a series of multivariate ordinary-least squares (OLS) regression models were analyzed. In the first set (see Table 5), perceptions of each form of misconduct were regressed onto a set of district characteristics that included percent White of the student population; percent English learners; district urbanicity; percent special education; total number of students in the district; the occurrence of a serious incident on a school bus resulting in criminal charges against a student in the 2015 school year; and the number of disciplinary reports filed for school bus misconduct in the 2015 school year. Variance inflation factors were assessed for each of these models (in addition to forthcoming models discussed in the report) and never exceeded a value of 1.8. In the second set (see Table 6), the number of disciplinary reports filed and the frequency of reports filed were also regressed onto these district characteristics. Several noteworthy findings emerged:

- Higher percentages of White students in the district were associated with lower perceptions of fighting, uses of profanity, and sexual behaviors, as well as with lower numbers of disciplinary referrals filed and a lesser frequency with which referrals were filed.
- Relative to respondents from rural districts, respondents from city and suburban districts reported a higher number of disciplinary referrals and a greater frequency with which reports were filed. Whereas respondents from city districts perceived fighting to be more common than respondents from rural districts, respondents from suburban districts perceived sexual harassment, sexual behaviors, and violations of basic rules to be less common than respondents from rural districts.
- The percentage of special education students in the district was positively associated with perceptions of fighting, bullying, and the use of profanity, in addition to higher numbers of disciplinary referrals and the frequency with which referrals were filed.
- The size of the district also emerged as an important factor for understanding misconduct, as small districts reported fewer disciplinary referrals overall and reported a lesser frequency with which referrals were filed relative to medium- and large-sized districts.
- Having experienced a serious incident in which misconduct on a school bus resulted in criminal charges against a student was a robust predictor of each form of perceived misconduct, in addition to the number of disciplinary referrals filed and the frequency with which they were filed.

Although only a handful of survey respondents who answered open-ended questions with observations about student misconduct described district-level conditions that they believed contributed to misconduct on their district's buses (e.g., some respondents believed that the reason they did not have many problems related to school bus misconduct was due to the small size of their schools or their district overall), several did describe conditions of school bus commutes that promote misbehavior. For instance, 51 respondents believed that long commutes, afternoon commutes, crowded buses, or buses with greater numbers of special education students tended to have the most disciplinary problems.

RQ2: What are commonly used behavioral management strategies for school buses and does strategy use vary across different types of districts?

Table 7 shows the percentages of respondents who reported using each of 18 behavioral management strategies on their district's buses. The most commonly reported strategies were disciplinary referrals (used by 99% of districts), encouraging drivers to know their students (98%), promoting relationships between drivers and school officials (97%), drivers having the option to pull over when misconduct occurs (97%), and assigned seating (89%). Another 80% reported the use of surveillance cameras. The least commonly used strategies were safety belts (56%), reporting systems (55%), bus monitors (50%), student training programs (25%), and cautionary films (5%).

District-Level Predictors of Strategy Use

On average, districts reported the use of nearly 13 behavioral management strategies on their district's buses. When asked why it was important to use numerous strategies, respondents almost universally indicated that different strategies must be tailored to types of students. Rather than relying on a "one-size fits all" approach, they believed it was necessary to have a "tool belt" of options that could accommodate a range of student personalities. Some respondents also noted that drivers too have different personalities and vary in their levels of comfort with different approaches. As such, they need a range of options to employ on their buses. Table 8 presents results from an OLS regression model predicting the number of strategies used for school bus student management. Results indicate that the size of the district and the number of disciplinary referrals filed for school bus misconduct in the 2015 school year are each statistically associated with the number of strategies used to reduce school bus misconduct. Specifically, small districts use an average of .61 fewer strategies than medium-to large-sized districts, and every one-unit increase in the number of disciplinary referrals filed for school bus misconduct in 2015 predicts a .42 unit increase in the number of strategies that districts use.

Table 9 presents results from a series of logistic regression models that predict the odds of districts having used each behavioral management strategy on some or all buses (0=strategy not used in any capacity; 1=strategy used on some or all buses). For parsimony, strategies with more than 90% usage rates were excluded from this analysis (e.g., disciplinary referrals). Collectively, the models show considerable variation depending on the strategy of interest. However, a few noteworthy patterns can be identified:

- For 11 out of 13 strategies, the odds of strategy use were significantly higher for districts that filed greater numbers of referrals in 2015. For instance, the odds of districts having used assigned seating are 93% higher for every one-unit increase on the number of disciplinary referrals measure.
- Higher percentages of special education students were associated with greater odds of districts having used several strategies, including assigned seating, surveillance cameras, safety belts, bus monitors, and visits from school authority figures.
- The odds of strategy use were often contingent on the size or urbanicity of the district. For instance, smaller districts were less likely than larger districts to use assigned seating, surveillance cameras, safety belts, bus monitors, and reporting systems, but 1.86 times more likely to use mentoring programs. Likewise, city and suburban districts were considerably more likely to use several strategies than rural districts, including safety belts, bus monitors, and visits from school authority figures, but less likely to have used mentoring programs, rewards, or behavior contracts.
- The percent White of the student population was positively correlated with some strategies (assigned seating, rewards, mentoring, entertainment, cameras), but negatively correlated with others (behavior contracts, bus monitors, visits from school authority figures). Similar patterns were identified for the percentage of English learner students.

Taxonomy of Behavioral Management Strategies

To date, few efforts have been made to bridge connections between the various approaches to student management on school buses or to identify underlying themes that can speak to the logic of these efforts. Thus, with consultation from the NAPT, the project team developed a behavioral management strategy taxonomy that draws connections across strategies, locating them within thematic categories and helping to show the likeness between approaches, reducing redundancy. Interview respondents were then asked to provide feedback on the taxonomy, and revisions were made iteratively until a final version was agreed upon by the project team. The final taxonomy includes nine non-exclusive categories, as shown below.

- **Deterrence:** discourage misconduct by communicating undesirable consequences for misbehavior using cautionary films, visits from an authority figure, or behavioral contracts (i.e., codes of conduct)
- **Surveillance:** utilize resources for the intention of surveilling students, including interior-mounted security cameras and bus monitors
- **Training and Education:** involve special curricula developed for students or drivers to promote safe environments on the bus
- **Restraint:** the use of safety belts, harnesses, or other restraints to keep students in their seats and reduce their abilities to violate basic rules
- **Organizational Design:** the use of seating arrangements based on past behavior, gender, age, or student relationships to minimize the potential for negative interactions between students
- **Reactive:** approaches for addressing misconduct after it has occurred, including reporting systems that students or parents can use to report misconduct (e.g., websites or hotlines), drivers pulling to the side of the road to disrupt misconduct, and disciplinary referrals
- **Distractive:** attempt to direct students' attention away from one another, including the use of Wi-Fi technology or entertainment systems that play music or movies
- **Bonding/Mentoring:** strategies to promote relationships between students, between students and drivers, or between drivers and school officials to improve communication and create systems of accountability
- **Rewards Systems:** efforts to recognize positive behaviors and link them to positive outcomes

RQ3: What strategies do transportation officials perceive to be the most effective for reducing misconduct, and are these perceptions contingent on the makeup of the district (e.g., district size)?

If survey respondents indicated that they used a strategy on some or all buses, they were asked to report on a scale of 1 to 5 how effective that strategy is for addressing each form of misconduct. Descriptive means were assessed to determine the average effectiveness score for each strategy, by each form of misconduct. Results (see Table 10) showed that the top five most effective strategies for each form of misconduct always included some combination of the following strategies: bus monitors, surveillance cameras, disciplinary referrals, pulling over, assigned seating, and driver/student relationships. Bus monitors and surveillance cameras had the highest ($\bar{x} \geq 3.43$) and second-highest ($\bar{x} \geq 3.27$) average scores for each type of misconduct, respectively. Pulling over had one of the top five highest scores for each type of misconduct, whereas disciplinary referrals were among the top five approaches for six types of misconduct (i.e., all types except the use of profanity). On average, assigned seating was viewed as one the top five most effective strategies for reducing fighting, sexual harassment, sexual behavior, and basic violations. Encouraging drivers to know students was the fifth most

effective strategy for bullying and substance use, and the third most effective strategy for the use of profanity. Conversely, safety belts and entertainment were among the two lowest scores for every type of misconduct.

District-Level Predictors of Perceptions of Strategy Effectiveness

Table 11 presents results from a series of OLS regression models that regress perceptions of strategy effectiveness for reducing bullying on district-level characteristics for six strategies perceived to be the most effective for reducing various forms of misconduct based on their average effectiveness scores (bus monitors, surveillance cameras, disciplinary referrals, pulling over, assigned seating, and encouraging drivers to know students). Similarly, Table 12 regresses perceptions of strategy effectiveness for reducing violations of basic rules on district-level characteristics. Several findings emerged from these analyses:

- Higher numbers of disciplinary reports filed for school bus misconduct and higher percentages of special education students were each negatively associated with perceptions of effectiveness for most strategies.
- Respondents from smaller districts perceived several strategies to be more effective than respondents from larger districts, including pulling over and encouraging drivers to know their students.
- Respondents from rural districts perceived several strategies to be less effective than their more urban counterparts, including surveillance cameras, encouraging drivers to know their students, disciplinary referrals, and assigned seating.

Additional Insights on Effective Strategies for Student Management

A total of 1,277 respondents described at least one facilitator in open-ended responses to questions related to lessons learned from implementing behavioral management strategies on school buses. Each facilitator was organized into one of 25 subcategories. Some of the most common subcategory themes are described below:

- *Smart practices:* More than 700 respondents described general “smart” practices for student management. Common themes related to the importance of consistency in the way disciplinary issues are handled for all students and by all officials; setting clear expectations about behavior; following through according to district policies; addressing misconduct immediately after it happens; documenting all misbehavior; using frequent reminders of rules; and getting all the facts of an incident before addressing it.
- *Interacting with students:* More than 200 respondents expressed the importance of drivers building relationships with students; using positive praise and rewards for good behavior; talking and listening to students; being friendly, firm, and respectful in interactions with students; and leading by example.
- *Cameras:* More than 200 respondents described surveillance cameras as critical tools for investigating and documenting misbehavior. Respondents viewed cameras as invaluable for communicating with parents about their child’s behavior and some believed that cameras were an effective deterrent to misbehavior.
- *Interacting with parents:* Two hundred and thirty-six respondents described the importance of interacting with parents. Common responses included communicating with parents about the rules of the bus and their child’s behavior; the importance of getting parents’ help in teaching children the rules of the bus; and the importance of building relationships with parents.
- *Interacting with schools:* Two hundred and six respondents described the importance of a “teamwork” approach to bus safety through cooperative partnerships between school administrators, bus drivers, and the transportation director. Respondents promoted ongoing collaboration to ensure buses are safe and positive environments. Regular collaborative meetings involving principals, drivers, the transportation director, and other school staff were viewed as essential to creating strong communication systems.
- *Bus monitors:* One hundred and six respondents described the value of bus monitors, suggesting that they provide supervision while allowing drivers to focus on driving. Many described conditions under which monitors are effective; for instance, when they are employed on the most troubled or crowded buses.

Others noted that monitors must engage and interact with students, get to know them on a personal level, and create an informal system of accountability whereby students want to behave.

Respondent interviews also revealed salient themes regarding effective practices for student management (see Appendix E). One of the most prominent themes across interviews related to the notion that drivers must build positive relationships with their students. Respondents overwhelmingly believed that personal relationships between drivers and students were critical for student management, as these bonds promote mutual trust and an informal system of accountability. Poignantly put by one interviewee, “When you build a relationship, you build trust, and [students] will do what you want or need them to do. It is that simple.” Numerous respondents pointed out that drivers play an essential, but often under-appreciated role in the school system, as they are often the first and last school officials to interact with students each day. For this reason, they emphasized that drivers can have a critical impact on children’s overall attitudes towards the educational system and therefore have a tremendous responsibility to serve as positive role models. For instance, one respondent said that “Knowing their names also helps personalize a child who feels they’re invisible. The bus driver might be the only smile they get that day from an adult.” Others pointed to the destructive message it sends to a child when an incident occurs, and the driver does not know the names of students involved. In general, respondents believed that drivers can build relationships with their riders by requiring seating charts, taking rollcall at the beginning of each commute, greeting each rider by name upon entering and exiting the bus, being friendly with students, and taking time to talk to students when problems emerge.

RQ4: How do districts assess the effectiveness of behavioral management strategies they implement?

Table 13 presents descriptive statistics for the survey item measuring ways that transportation departments determine whether a specific strategy is effective for preventing or managing student misbehavior on school buses. Most respondents (93%) reported that their district gets formal or informal feedback from drivers, whereas 65% and 70% reported that they get feedback from students or parents, respectively. Another 70% reported that they track disciplinary referrals before and after strategies are implemented, while less than half reported having a strategy evaluated or observing the bus after a strategy is implemented. To understand what types of districts use multiple methods to track the success of their efforts to reduce misconduct, a count variable was created that summed the total number of methods used and was regressed on core district-level characteristics. The model was statistically nonsignificant and contained no statistically significant effects. Additional efforts were made to understand whether the use of specific methods to assess the effectiveness of specific strategies for reducing misconduct vary across different types of districts. Table 14 presents four logistic regression models that predict the odds of districts having used four methods for assessing strategy effectiveness: tracking disciplinary referrals, having strategies evaluated, obtaining feedback from students, and having staff observe the bus (models showing no statistically significant effects are excluded). Results indicate a few noteworthy themes:

- Districts with higher numbers of disciplinary referrals for bus misconduct are more likely to track their disciplinary referrals before and after a strategy is implemented and to have staff observe the bus after strategy implementation, but they are less likely to get feedback from students.
- Methods used to determine the effectiveness of behavioral management strategies do not vary across district size, nor are they contingent on whether the district has experienced a serious incident on a school bus resulting in criminal charges against a student. Interestingly, although the percentage of special education students was an important factor for understanding perceptions of misconduct, the use of behavioral management strategies, and the perceived effectiveness of behavioral management strategies, it does not appear to factor into the ways in which strategies are assessed.
- Methods used to determine the effectiveness of behavioral management strategies are partially contingent on the urbanicity of the district. For instance, the odds of having strategies officially

evaluated are 54% higher in city districts relative to rural districts. Likewise, rural districts are significantly less likely to have school staff observe the school bus relative to more urban districts.

RQ5: To what extent are necessary protocols being met in transportation departments to allow for a scientific evaluation of one or more behavioral management strategies for school buses?

Given a general lack of empirical research on effective initiatives for reducing student misconduct on school buses, an important question in this area of research is whether a scientific evaluation of one or more behavioral management strategies for school buses is feasible. Specifically, for such an evaluation to be possible, it would be necessary to identify one or more school districts that have a system in place for capturing and storing data related to student misconduct on buses (e.g., disciplinary referrals) and that would be interested in participating in an evaluation of some or all buses in their district. Although survey results suggested that 70% of districts reported tracking disciplinary referrals before and after strategies are implemented, these findings do not elaborate on how data related to student disciplinary referrals are being captured, nor whether they would be willing to participate in an evaluation. In-depth interviews in Phase II presented a unique opportunity to explore these domains. Findings suggest that multiple districts who participated in the study meet basic protocols that would make a scientific evaluation possible. Core findings of this portion of the interviews are bulleted below:

- 20 respondents reported that their department had experience in capturing, organizing, and analyzing student disciplinary referral data.
- Eighteen respondents explicitly mentioned using an electronic referral system, such as Infinite Campus, Bus Conduct, PROSOFT, Google Drive, or their district-level student portal.
- Thirteen respondents also noted that they actively analyze referral data to better understand what works for student management; of these,
 - all 13 analyzed their referral data at incident and student levels
 - 10 analyzed referral data at the school level, and 9 analyzed data at the bus level
- Several respondents described using their referral data in productive ways:
 - 13 respondents used referral data to inform their responses to student misconduct
 - 8 used referral data to isolate issues in specific schools or buses
 - 9 used referral data to assess trends in referrals and specific forms of misconduct over time
 - 7 used referral data to assess the effectiveness of specific behavioral strategies, and
 - 6 used referral data to inform driver training programs
- Sixteen respondents expressed interest in participating in a scientific evaluation of the use of behavioral management strategies for school buses. Of those, 11 respondents had reported that they use an electronic referral system and currently analyze their referral data to understand or improve student behavior on their district's buses and thus would be potential candidates to participate in such an evaluation.

RQ6: What are key challenges faced by transportation officials in establishing safe and positive school bus environments?

Three hundred and nineteen respondents described at least one challenge of student transportation in open-ended questions on the survey. Challenges were coded into one of three subcategories: *interpersonal challenges*; *insufficient resources*; and *other challenges*. Interpersonal challenges related to parents not believing transportation officials when told that their child had misbehaved on the bus; a lack of support from school administrators for dealing with student issues; a lack of support from parents; a lack of respect for drivers; a lack of consistency in the way problems on the bus are handled; and a lack of follow-through by school administrators in handling behavioral problems according to policy. Insufficient resources included the need for monitors and cameras, a lack of options for discipline to use with students who misbehave, insufficient training for drivers, and problems recruiting and retaining drivers. Other challenges included a sense of powerlessness to correct misbehavior because behavioral problems “start at home,” while others explained that drivers themselves can act as barriers

to well-functioning school bus environments. Respondents also believed that school transportation was taken for granted by students and parents who viewed it as a right whereas they viewed it as a privilege that could be revoked.

Interview respondents also described numerous challenges of school-based transportation. In addition to the challenges of communicating with parents, a common frustration was that transportation is not viewed as an important component of the educational system by school administrators and staff. For instance, school administrators often do not communicate with drivers or the transportation director regarding what actions were taken to address a student's misconduct. Respondents believed that failures to "close the loop" on student disciplinary issues weakened driver morale and encouraged their disinvestment from student management programs and philosophies. Conversely, respondents advocated strong communication systems between schools and the transportation department as a way of signifying that drivers have support from the district, that their cooperation in student management efforts is important, and that transportation is a valued component of the larger school system.

Conclusions and Implications

The goals of this study were to answer important questions related to the nature of student misconduct on buses, the variety and value of different transportation-based behavioral management strategies, successful methods of implementing strategies and assessing their effectiveness, the evaluability of school district transportation departments, and key challenges that transportation officials face in promoting safe school bus environments. Below, we highlight key findings of the study and their implications for researchers and the school transportation community.

Overall, findings suggest that transportation officials do not perceive most forms of misconduct to be very common on their district's buses, and only a small minority of district transportation departments are regularly processing a large volume of disciplinary referrals for school bus misconduct. Although these findings reflect only the perceptions of transportation officials and should be subjected to additional scrutiny in future research, they may have important implications for the school transportation community. For instance, the fact that no form of misconduct is perceived to be very common on average by transportation officials could be used as leverage in recruiting new drivers. In the past few years, a nationwide driver shortage has become an increasingly critical issue for school districts. It is logical to expect that student misconduct is one factor that could discourage some otherwise qualified individuals from becoming drivers. Recruiting materials developed by districts may emphasize that although student management is a critical part of the job, they do not perceive serious misbehavior to be common.

However, it is also notable that 68% and 25% of the sample viewed violations of basic rules (e.g., moving seats, noisemaking) and bullying, respectively, to be common forms of misconduct. While violations of basic rules are typically considered minor or nonserious in nature, they can be a distraction to drivers and therefore pose an immediate threat to the physical safety of students and other motorists. The present study has uncovered multiple strategies perceived to be effective for controlling basic violations, yet scientific evaluations of these promising strategies are needed to provide additional confidence that transportation departments are implementing the appropriate approaches to enhance the safety of the school bus commute. Additionally, the finding that bullying was viewed as the third most common form of misconduct is significant. Research has long suggested that even limited exposure to bullying can have a harmful and enduring effect on children, thus, the fact that respondents believe bullying occurs on buses with any regularity is alarming and suggests the need for research-informed interventions to reduce it. Again, while the present study identified several approaches perceived to be effective for reducing bullying, scientific evaluations of these strategies are warranted to determine whether they have a measurable effect on bullying perpetration and victimization. More research is also needed to understand why specific characteristics of districts tend to correspond to higher levels of misconduct (e.g., higher percentages of special needs students). Understanding the mechanisms through which

these characteristics are linked will ultimately help to inform the ways in which behavioral management strategies are implemented with the intention of securing positive school bus environments.

The results of our study have also suggested that school districts, especially larger districts and those with higher levels of disciplinary issues on school buses, are using a plethora of behavioral management strategies to reduce or control misconduct. Furthermore, several strategies including assigned seating, pulling over, disciplinary referrals, and the promoting of relationships between drivers and students and between transportation personnel and school staff appear to be ubiquitous across districts. Alternatively, some strategies such as student training programs are being used by only a small minority of districts. As noted by respondents, implementing a diverse range of approaches may be necessary to accommodate a wide range of personalities in the school bus ecology; however, in the absence of a solid base of empirical research that evaluates the efficacy of these approaches, it is not clear whether these efforts are sound investments. Although it is helpful that the present study has identified multiple approaches that experienced transportation officials perceive to be effective (e.g., bus monitors, surveillance cameras, pulling over, assigned seating, driver/student relationships, working collaboratively with school officials and parents), robust evaluations are needed to identify which strategies produce the greatest measurable impacts on student behavior and to identify the conditions under which they are most efficacious. In turn, districts may be in a better position to invest more thoughtfully in a fewer number of approaches that can be fine-tuned to fit specific needs and circumstances. While one approach might be for researchers to evaluate some of the most promising approaches identified by respondents in our study (for instance, surveillance cameras and bus monitors), another approach might be to develop a program holistically that builds in components of multiple strategies that are perceived to be effective, implement the program in one or more districts, and conduct a process and outcome evaluation of that program. The latter approach would be consistent with many transportation officials' beliefs that no one strategy works in isolation, but rather must be combined with numerous other practices. Such an evaluation would be well-served by considering the many challenges described by our respondents in promoting safe school bus environments and building from these insights to develop programs that deliberately attempt to mitigate these barriers.

Critically, the present study not only highlights the need for scientific evaluations of behavioral management strategies or programs, it also suggests that many district-level transportation departments have a data infrastructure currently in place that would make such evaluations possible. Findings suggest that although the most common methods for determining whether behavioral management strategies work for reducing misconduct involve getting feedback from drivers, students, or parents, more than two-thirds of districts reported that they track disciplinary referrals before and after strategy implementation. This finding indicates that the majority of district transportation departments are currently collecting data that could be used to inform the design and implementation of a program evaluation. Moreover, among a sample of transportation officials representing 39 school districts who participated in interviews in Phase II, 16 (41%) of them expressed interest in participating in a scientific evaluation of the use of behavioral management strategies for school buses. Even more promising, 11 of those 16 respondents reported that they use an electronic referral system and currently analyze their referral data to understand or improve student behavior on their district's buses.

Taken together, the results of the Bullying and Violence on the School Bus Study have significantly advanced our understanding of the nature and extent of student misconduct on school buses and the approaches school districts throughout the country are currently using for student management. The study has identified core and peripheral strategies for behavioral management while also delineating variations in strategy use across different types of districts. In addition, it has underscored several promising behavioral interventions that are based on the perceptions of transportation directors and other officials who have first-hand experience managing student conduct, as well as the conditions under which these approaches are believed to be most effective. Although future evaluations of behavioral interventions are essential, our findings have helped to establish a foundation for forthcoming research by identifying a short-list of promising approaches and key barriers to the development of safe school bus environments. Additionally, our study has detailed the current data-keeping infrastructures of the nation's transportation departments and determined that an evaluation is feasible.

2016 Bullying and Violence on the School Bus Study (BVSBS) Web Questionnaire

Welcome

RTI International and the National Association for Pupil Transportation (NAPT) are jointly conducting a research study, funded by the National Institute of Justice, to learn more about the types of strategies that school districts in the United States use to manage students' behaviors while riding the bus to and from school. More specifically, we are interested in the ways that school districts prevent and address bullying, violence, and other forms of misbehavior during the school bus commute. These strategies might include the use of surveillance technology, bus monitors, training programs designed for bus drivers or students, or other types of efforts.

To help further our understanding of this topic we are conducting a survey with Transportation Directors (or other school officials who are familiar with transportation issues) representing school districts throughout the U.S. Our goal is to survey Transportation Directors (or other school officials) for whom we have contact information from approximately 12,500 school districts. We are interested in your perspective on whether specific strategies are used on your district's buses to manage students' behaviors and how effective you believe these strategies are for preventing or controlling bullying, violence, and other types of misbehavior. The survey will take about 15-30 minutes to complete.

There are no direct benefits to you for participating in this study. Your participation is voluntary, and you will not be compensated for your participation.

There are minimal risks to participating in this study. Because the survey questions relate to your job, it is possible that some questions may make you feel uncomfortable. You may decline to answer any question, and you may stop the survey at any time.

We will treat all of your answers as private and confidential. Neither your name nor the name of your school district will be used in any reports we produce that describe the results of the survey. We will not share any information you provide with anyone in your school district or anyone at NAPT. Only the staff at RTI who work on the study will be able to see your answers. To further protect your privacy, we encourage you to take this survey in a private setting where no one can see your answers. We will combine your information with information from all of the other participants to create group statistics, which will then be summarized in our final report. De-identified data from the study will be archived at the National Archive of Criminal Justice Data (NACJD).

Please also note that there is a possibility of future contact. A select group of Transportation Directors will be recruited to participate in a telephone interview following their completion of the web survey.

If you ever have any questions about the project, you may contact Dr. Joshua Hendrix from RTI International at (919) 541-8009 or toll-free at 1-800-334-8571, x28009. If you have any

questions about your rights as a study participant, you can call RTI's Office of Research Protection toll-free at (866) 214-2043.

Thank you for taking the time to complete this questionnaire.

Please choose one option below:

[1] I agree to these terms and would like to continue to the survey

[2] I do not agree to these terms

PART I: Respondent Information

First, we would like to learn a bit about you.

NAME

What is your first and last name?

TITLE

What is your current title or position?

YEARS_POSITION

How many years have you been in your current position? This can include your experience outside of the district/company you currently work for. *If less than 1 year, enter 0.*

PHONE

What is the best phone number to reach you?

NAME_OF_DISTRICT

According to our records, you are employed or contracted by [SCHOOL DISTRICT NAME]. Is that correct?

[1] Yes

[2] No

NAME_OF_DISTRICT_NO

What school district are you employed or contracted by? *If you are employed by more than one school district, please provide the one that is related to the email account where you received the survey invitation. If more than one district is related to this email account, list the one where you work the most. While answering the rest of the survey, please only think about the school district you provide below.*

USE_OF_BUSES

Does your school district use school buses for student transportation during normal school hours? *This does not include public transportation or private vehicles used to transport pupils. If your district only has buses that are used solely to transport special education students, please select 'No'.*

[1] Yes

[2] No

Part II. Behavior Management Strategies.

Now we would like to know more about how your school district prevents, manages, and addresses bullying, violence, and other types of misbehavior by students while riding the bus (for a description of what we mean by these behaviors, please refer to the table below). ***Please only think about ^FILLSCHOOL.***

Fighting	The use of physical force between two or more students with the intention of causing physical harm to one another
Bullying	Unwanted physical, verbal, or emotional/psychological harassment, including making threats, spreading rumors, attacking someone physically or verbally, name calling, making fun of someone, excluding someone purposefully from a group or activity, or in other ways attempting to make someone feel bad about themselves
Use of profanity or other types of inappropriate language	The use of blasphemous, obscene, racist, or other types of offensive language
Substance use	Alcohol, tobacco, illegal drug (e.g., marijuana, cocaine, heroin, methamphetamine, etc.), or illicit nonmedical prescription drug use (i.e., the use of Oxycodone, Adderall, Xanax, or other prescription drugs that have not been prescribed to that person)
Sexual harassment	Harassment of a person involving unwanted sexual advances (physical or verbal in nature) or obscene sexual remarks
Sexual behaviors	Sexual activities involving one or more students, including masturbation, kissing, fondling, oral sex, or intercourse
Violations of other basic rules	Behavior that violates other basic rules for the school bus other than those previously listed above, such as littering, vandalizing seats or other parts of the bus, yelling/screaming, changing seats while the bus is in motion, etc.

DISTRICT_POLICY2

Please indicate whether or not your school district has a district-wide policy, program, or initiative to address bullying or violence for each of the following locations.

	[1] Yes	[2] No	[-1] Don't know
On the school bus			
On school property			
At school sponsored events			

STRATEGIES

Now we would like to know what strategies your district uses to manage/address students' behavior or prevent misbehavior while riding the bus. Please look at the list below. For each behavior management strategy, please indicate whether it is used on **all buses, some buses, or no buses in your district**. Please note:

- We are only interested in buses used on **regular daily routes**. We are not interested in buses used for extracurricular student transport or field trips, buses used **solely** to transport special education students, or private vehicles used for student transportation.
- We are interested in whether your school district uses each strategy as a way to **manage students' behavior on the bus**. If your district uses a specific strategy (e.g., safety belts) for a reason other than managing students' behavior (e.g., to protect students in the event of a traffic accident), please select "No buses."

	[2] All buses	[1] Some buses	[0] No buses	[-1] Don't know
Students are assigned to seats				
Students who misbehave are issued a disciplinary action (either verbal or written)				
All students or students who misbehave on the bus are required to watch films that communicate the importance of positive behavior on the bus or reasons misbehavior on the bus is inappropriate (e.g., <i>Tears on the Highway</i>)				
Parents and/or students sign a code of conduct or written agreement that communicates rules of the bus and consequences for violating the bus rules				
Students participate in a training program (including the use of instructional videos) to teach ways to prevent, manage, or address bullying or other types of misbehavior on the bus (e.g., <i>The Peaceful School Bus</i>). This also				

includes training programs that have a section or component that is specific to the bus.				
Bus drivers participate in a training program (including the use of instructional videos) to teach ways to prevent, manage, or address bullying or other types of misbehavior on the bus (e.g., <i>The Peaceful School Bus</i>). This also includes training programs that have a section or component that is specific to the bus.				
Students are encouraged to get to know their drivers so that they will feel comfortable reporting issues they are having on the bus				
Students are rewarded for good behavior on the bus				
Older students are encouraged through a formal or informal system to mentor and look out for younger students				
Bus drivers play music, show films, or provide other forms of entertainment to engage or distract children while they ride the bus				
Buses are equipped with surveillance cameras				
Buses are equipped with safety belts				
Bus drivers are encouraged to get to know the students who ride their bus to help create a respectful environment where there are clear expectations for student behavior				
Bus drivers and school officials are encouraged to build relationships with one another so that drivers feel comfortable reporting misconduct and voicing their opinions about how to make the bus a safer place				
If bus drivers observe misbehavior, they have the option to pull over, if necessary, until the behavior stops				
Adult bus attendants/monitors ride the bus with students to and from school				
The principal, teachers, or school resource officers board the bus regularly to remind students of bus rules and the importance of positive behavior				
A bus-specific website or dedicated telephone number is available where students or parents can report misbehavior that happens on the bus				

The school district uses some other strategy not listed here				
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ASSIGNED_SEATS1

You said that **students are assigned to seats** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

ASSIGNED_SEATS2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **assigning students to seats**.

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

ASSIGNED_SEATS3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **assigning students to seats** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

DISCIPLINARY_NOTICE1

You said that students who misbehave are **issued a disciplinary action** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

DISCIPLINARY_NOTICE2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **issuing a disciplinary action**?

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

DISCIPLINARY_NOTICE3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **issuing a disciplinary action** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

FILMS1

You said that students who misbehave are **required to watch films that communicate the importance of positive behavior on the bus** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

FILMS2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **requiring students to watch films that communicate the importance of positive behavior on the bus**?

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

FILMS3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **requiring students to watch films that communicate the importance of positive behavior on the bus** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

CONTRACTS1

You said that parents or students **sign a code of conduct or written agreement that communicates rules of the bus and consequences for violating the bus rules** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

CONTRACTS2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **requiring parents or students to sign a code of conduct or written agreement that communicates rules of the bus and consequences for violating the bus rules?**

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

CONTRACTS3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **requiring parents or students to sign a code of conduct or written agreement that communicates rules of the bus and consequences for violating the bus rules** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

TRAINING_STUDENTS_PROGRAM

You said that **students participate in a training program** to teach ways to prevent, manage, or address bullying or other types of misbehavior on the bus. What is the name of this program? *If your district uses more than one program, please choose the program you feel is the most important or impactful for controlling students' behavior on the bus.*

- [01] U.S. Department of Education/National Association for Pupil Transportation Training Program
- [02] The Peaceful School Bus Program
- [03] Take Pride in Your Ride (Wyoming Department of Education)
- [04] See Something, Say Something, Do Something
- [05] ZoeBus
- [06] Be Nice on My Bus (All-Star Transportation)
- [07] Bullying Prevention on the School Bus (School Bus Safety Co.)
- [08] Growing Respect on Your Bus
- [09] Breaking up Fights on the Bus (Coastal Training Technologies Corp.)
- [10] Other
- [-1] Don't know

TRAINING_STUDENTS_PROGRAM_OTHER

You said your district uses some other training program for students not previously listed. What is the name of this program?

TRAINING_STUDENTS1

Please indicate whether or not **having students participate in a training program** is used to manage/address students' behavior or to prevent misbehavior on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

TRAINING_STUDENTS2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **having students participate in this training program**?

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		

Violations of other basic rules		
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TRAINING_STUDENTS3

On a scale of 1 to 5, with 1 being “Not at all effective” and 5 being “Extremely effective”, how effective is **having students participate in this training program** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

TRAINING_DRIVERS_PROGRAM

You said that **bus drivers participate in a training program** to teach ways to prevent, manage, or address bullying or other types of misbehavior on the bus. What is the name of this program? *If your district uses more than one program, please choose the program you feel is the most important or impactful for controlling students’ behavior on the bus.*

- [01] U.S. Department of Education / National Association for Pupil Transportation Training Program
- [02] The Peaceful School Bus Program
- [03] Take Pride in Your Ride (Wyoming Department of Education)
- [04] See Something, Say Something, Do Something
- [05] ZoeBus
- [06] Be Nice on My Bus (All-Star Transportation)
- [07] Bullying Prevention on the School Bus (School Bus Safety Co.)
- [08] Growing Respect on Your Bus
- [09] Breaking up Fights on the Bus (Coastal Training Technologies Corp.)
- [10] Other
- [-1] Don’t know

TRAINING_DRIVERS_PROGRAM_OTHER

You said your district uses some other training program for drivers not previously listed. What is the name of this program?

TRAINING_DRIVERS1

Please indicate whether or not **having bus drivers participate in a training program** is used to manage/address students' behavior or to prevent misbehavior on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

TRAINING_DRIVERS2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **having bus drivers participate in this training program**?

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

TRAINING_DRIVERS3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **having bus drivers participate in this training program** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

STUDENTS_DRIVERS1

You said that **students are encouraged to get to know their drivers so that they will feel comfortable reporting issues they are having on the bus** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

STUDENTS_DRIVERS2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **encouraging students to get to know their drivers so that they will feel comfortable reporting issues they are having on the bus?**

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

STUDENTS_DRIVERS3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **encouraging students to get to know their drivers so that they will feel comfortable reporting issues they are having on the bus** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

REWARDS1

You said that **students are rewarded for good behavior on the bus** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

REWARDS2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **rewarding students for good behavior on the bus**?

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

REWARDS3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **rewarding students for good behavior on the bus** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

MENTORING1

You said that **older students are encouraged through a formal or informal system to mentor and look out for younger students** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

MENTORING2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **encouraging older students through a formal or informal system to mentor and look out for younger students on the bus?**

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

MENTORING3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **encouraging older students through a formal or informal system to mentor and look out for younger students on the bus** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

ENTERTAINMENT1

You said that **bus drivers play music, show films, or provide other forms of entertainment to engage or distract children while they ride the bus** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

ENTERTAINMENT2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by having **bus drivers play music, show films, or provide other forms of entertainment?**

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

ENTERTAINMENT3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **the use of music, films, or other types of entertainment** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

CAMERAS1

You said that **buses are equipped with surveillance cameras** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

CAMERAS2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **having surveillance cameras on buses**?

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

CAMERAS3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective are **surveillance cameras on buses** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

SAFETY_BELTS1

You said that **buses are equipped with safety belts** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

SAFETY_BELTS2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **equipping buses with safety belts**?

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

SAFETY_BELTS3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective are **safety belts on buses** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

DRIVERS_STUDENTS1

You said that **bus drivers are encouraged to get to know the students who ride their bus to help create a respectful environment where there are clear expectations for student behavior** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

DRIVERS_STUDENTS2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **encouraging bus drivers to get to know the students who ride their bus?**

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

DRIVERS_STUDENTS3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **encouraging bus drivers to get to know the students who ride their bus** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

DRIVERS_OFFICIALS1

You said that **bus drivers and school officials are encouraged to build relationships with one another** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

DRIVERS_OFFICIALS2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **encouraging bus drivers and school officials to build relationships with one another?**

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

DRIVERS_OFFICIALS3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **encouraging bus drivers and school officials to build relationships with one another** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

PULLOVER1

You said that if **bus drivers observe misbehavior, they have the option to pull over until the behavior stops** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

PULLOVER2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **bus drivers having the option to pull over when misbehavior occurs?**

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

PULLOVER3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **bus drivers having the option to pull over when they observe misbehavior** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

MONITORS1

You said that **adult bus attendants/monitors ride the bus with students to and from school** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

MONITORS2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **having adult bus attendants/monitors ride the bus with students**?

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

MONITORS3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **having adult bus attendants/monitors ride the bus with students** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

PRINCIPAL1

You said that **the principal, teachers, or school resource officers board the bus regularly to remind students of bus rules and the importance of positive behavior** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

PRINCIPAL2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **having the principal, teachers, or school resource officers board the bus regularly?**

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

PRINCIPAL3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **having the principal, teachers, or school resource officers board the bus regularly** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

HOTLINE1

You said that a **bus-specific website or dedicated telephone number is available where students or parents can report misbehavior that happens on the bus** to manage/address students' behavior or to prevent misbehavior while riding the bus. Please indicate whether or not this strategy is used on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

HOTLINE2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by **having a bus-specific website or dedicated telephone number?**

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

HOTLINE3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **having a bus-specific website or dedicated telephone number** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						
Violations of other basic rules						

OTHER_STRATEGIES_NAME

You said that **the school district uses some other strategy not listed here** to manage/address students' behavior or to prevent misbehavior while riding the bus. In your own words, please describe this strategy. *If more than one, please describe the strategy that is most impactful for managing/addressing or preventing misbehavior on the bus.*

[One open-ended text box (2000). No label.]

OTHER_STRATEGIES1

Please indicate whether or not **this other strategy** is used to manage/address students' behavior or to prevent misbehavior on buses in each of the following types of schools.

	[1] Yes	[2] No
Elementary schools		
Middle schools		
High schools		

OTHER_STRATEGIES2

Please indicate whether or not your district attempts to manage/address or prevent each of the following behaviors by using **this other strategy**?

	[1] Yes	[2] No
Fighting		
Bullying		
Use of profanity		
Substance use		
Sexual harassment		
Sexual behaviors		
Violations of other basic rules		

OTHER_STRATEGIES3

On a scale of 1 to 5, with 1 being "Not at all effective" and 5 being "Extremely effective", how effective is **this other strategy** for controlling each of the following behaviors on the bus? *A particular strategy may have an impact on certain behaviors even if it was not implemented specifically to control those behaviors. For that reason, please indicate how effective the above strategy is for each behavior. If the strategy does not apply to a given behavior, or if your district has never experienced problems with one of the listed behaviors, please select N/A.*

	[1] Not at all effective	[2] Somewhat effective	[3] Effective	[4] Very effective	[5] Extremely effective	[9] N/A
Fighting						
Bullying						
Use of profanity						
Substance use						
Sexual harassment						
Sexual behaviors						

Violations of other basic rules						
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NO_BEHAV_MANAGE

You reported that your district did not use any of the behavioral management strategies previously listed. Below are some reasons why a school district may not use any of the behavioral management strategies listed. Please indicate whether any of these reasons also apply to your school district.

	[1] Yes, this is a reason	[2] No, this is not a reason	[-1] Don't know
We do not have enough behavioral problems on our buses to require focused behavior management efforts			
We do not have the staff required to make focused behavior management efforts			
We do not have enough money in our budget to support focused behavior management efforts			
Some other reason			

REASONS_OTHER1

Please specify the other reasons(s) why your school district does not make explicit efforts to manage students' behaviors while riding the bus.

METHOD_EFFECTIVE

Which of the following are ways you determine whether a specific strategy is effective for preventing or managing student misbehavior on the bus?

	[1] Yes, we use this method	[2] No, we do not use this method	[-1] Don't know
We track disciplinary reports or incidents before and after the strategy is implemented			
We have the strategy(ies) evaluated or assessed by trained personnel			
We get formal or informal feedback from bus drivers			
We get formal or informal feedback from students			
We get formal or informal feedback from parents			
We have staff observe the bus during commutes to or from school after the strategy is implemented to determine whether behavior has improved			

We use some other method			
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METHOD_EFFECTIVE_OTHER1

You said your district uses some other method to determine whether a specific strategy is effective for preventing or managing student misbehavior on the bus. Please describe this method.

DISTRICT_TRAINING

Have you ever received formal or informal training from your school district to help you prevent, manage, or address student misbehavior on school buses?

[1] Yes

[2] No

STUDENTS_BUSED**PART III: SUPPLEMENTARY INFORMATION**

We would now like to learn some additional information about student behaviors on the bus in your school district. *Please note that we are not looking for exact answers to these questions- estimations are fine. Note that you may need to consult official records to answer some of these questions. (Please enter a numeric response)*

Approximately how many students use the school bus system in your district?

DISC_REPORTS

Approximately how many formal disciplinary reports or incidents were filed in the 2015 calendar year for behavioral issues on school buses in your school district?

[1] 0

[2] 1-25

[3] 26-50

[4] 51-75

[5] 76-100

[6] More than 100

PROBLEM_BEHAVIORS

On a scale of 1 to 5, with 1 being "Not at all common" and 5 being "Extremely common", how common do you think each of the following behaviors are while students ride the school bus?

	[1] Not at all common	[2] Somewhat common	[3] Common	[4] Very common	[5] Extremely common
Fighting					
Bullying					
Use of profanity					
Substance use					
Sexual harassment					
Sexual behaviors					

Violations of other basic rules					
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INCIDENT

In the 2015-2016 school year, was there a serious incident or incidents on a school bus resulting in criminal charges against a **student**?

- [1] Yes
- [2] No
- [3] Don't know

FORMAL_REPORTS

How often would you say there are incidents on school buses in your school district for which a bus driver makes a formal report?

- [1] Daily
- [2] 2-3 times per week
- [3] Once a week
- [4] 2-3 times a month
- [5] Once a month
- [6] Less than once a month
- [7] Never
- [-1] Don't know

PROBLEM_PEOPLE

In your opinion, do the following people think student behavioral issues on the school bus are not a problem, somewhat of a problem, or a big problem?

	[1] Not a problem	[2] Somewhat of a problem	[3] Big problem	[-1] Don't know
Parents				
Students				
School Personnel				

DO_MORE

Do you wish more could be done to manage students' behaviors while riding the school bus?

- [1] Yes
- [2] No

LESSONS

Most school districts have experienced challenges implementing and evaluating programs or strategies used to control students' behaviors while riding the bus. From your experience, what lessons have you learned that you would like to share with other school districts? *Provide up to three lessons learned.*

OPEN

If there is anything about student behavior on school buses not covered in this survey that you would like to add, please do so below.

HISPANIC

Now we would like to learn a little bit more about you.

Are you of Hispanic or Latino origin?

[1] Yes

[2] No

RACE

Which of the following best describes your race? *Select all that apply.*

[1] White

[2] Black

[3] Asian

[4] Native Hawaiian or other Pacific Islander

[5] American Indian or Alaska Native

[6] Some other race

SEX

What is your current sex?

[1] Male

[2] Female

EDUCATION

What is the highest level of education you have completed?

[1] Less than high school education

[2] High school education

[3] Some college

[4] Associate's degree

[5] Bachelor's degree

[6] Post-graduate degree

Those are all the questions we have for you. Thank you for your participation in this survey. The information you have provided is extremely valuable.

Table 1: Measurement of Key Variables

Respondent Characteristics	Source	Measurement	Recodes for Analysis
Years of Experience	Web Survey	<i>How many years have you been in your current position?</i> [open-ended response: respondent entered in a numeric value, entered “0” if their experience was less than one year]	No recodes
Education	Web Survey	<i>What is the highest level of education you have completed?</i> 1 = Less Than High School Education 2 = High School Education 3 = Some College 4 = Associate’s Degree 5 = Bachelor’s Degree 6 = Post-Graduate Degree	No recodes
Training	Web Survey	<i>Have you ever received formal or informal training from your school district to help you prevent, manage, or address misbehavior on school buses?</i> 1 = Yes 2 = No	0=respondent did not receive training 1=respondent received training
Hispanic/Latino Origin	Web Survey	<i>Are you of Hispanic or Latino origin?</i> 1 = Yes 2 = No	0=respondent is not of Hispanic/Latino origin 1=respondent is of Hispanic/Latino origin
Sex	Web Survey	<i>What is your current sex?</i> 1 = Male 2 = Female	0=female respondent 1=male respondent
Race	Web Survey	<i>Which of the following best describes your race?</i> 1 = White 2 = Black 3 = Asian 4 = Native Hawaiian or other Pacific Islander 5 = American Indian or Alaska Native 6 = Some Other Race	Recoded into three dummy variables for White, Black, All Other Races: 1=White; 2=Black; 3=All Other Races

Title/Position	Web Survey	What is your current title or position? [open-ended response: respondent entered in the name of their title]	0=position or title other than the transportation director 1=transportation director
District Characteristics	Source	Measurement	Recodes for Analysis
Percent White of the Student Population	NCES CCD 2015	Number of White, non-Hispanic students in the district	Number of White students divided by the total number of students in the district and multiplied by 100
Percent English Learners	NCES CCD 2015	Number of English language learner (ELL) students served in the district	Number of ELL students divided by the total number of students in the district and multiplied by 100
Percent Special Education	NCES CCD 2015	Number of all students having a written Individual Education Program (IEP) in the district	Number of students with an IEP divided by the total number of students in the district and multiplied by 100
Urbanicity	NCES CCD 2015	NCES urban-centric locale code 1 = large city, population 250k or more 2 = mid-sized city, population ≥100k and <250k 3 = small city, population <100k 4 = large suburb with population of 250k or more 5 = mid-sized suburb with population ≥100k and <250k 6 = small suburb with population <100k 7 = town, fringe territory 8 = town, distant territory 9 = town, remote territory 10 = rural, fringe 11 = rural, distant 12 = rural, remote	Categories recoded into three dummy variables: 1= city districts (combines categories 1 through 3); 2= suburban districts (combines categories 4-6); 3= town districts (combines categories 7-9); and 4= rural districts (combines categories 10-12).
Number of Students	NCES CCD 2015	Number of total students, all grades.	Recoded into three dummy variables: 1=small districts, < 649 students; 2=medium -sized

districts > 649 & < 2,221 students; 3 = large districts, > 2,221 students [*regression models combine medium and large districts into a single category]

Misconduct Variables (Research Question 1)	Source	Measurement	Recodes for Analysis
Perceptions of Fighting on School Buses	Web Survey	<p><i>On a scale of 1 to 5, with 1 being “Not at all common,” 2 being “somewhat common,” 3 being “common,” 4 being “very common,” and 5 being “extremely common,” how common do you think each of the following behaviors are while students ride the bus? [Fighting defined as: The use of physical force between two or more students with the intention of causing physical harm to one another]</i></p> <p>1 = Not at all common 2 = Somewhat common 3 = Common 4 = Very Common 5 = Extremely Common</p>	No recodes
Perceptions of Bullying on School Buses	Web Survey	<p><i>On a scale of 1 to 5, with 1 being “Not at all common,” 2 being “somewhat common,” 3 being “common,” 4 being “very common,” and 5 being “extremely common,” how common do you think each of the following behaviors are while students ride the bus? [Bullying defined as: Unwanted physical, verbal, or emotional/psychological harassment, including making threats, spreading rumors, attacking someone physically or verbally, name calling, making fun of someone, excluding someone purposefully from a group or activity, or in other ways attempting to make someone feel bad about themselves]</i></p> <p>1 = Not at all common 2 = Somewhat common 3 = Common 4 = Very Common 5 = Extremely Common</p>	No recodes

Perceptions of Profanity on School Buses	Web Survey	<p><i>On a scale of 1 to 5, with 1 being “Not at all common,” 2 being “somewhat common,” 3 being “common,” 4 being “very common,” and 5 being “extremely common,” how common do you think each of the following behaviors are while students ride the bus? [Profanity defined as: The use of blasphemous, obscene, racist, or other types of offensive language]</i></p> <p>1 = Not at all common 2 = Somewhat common 3 = Common 4 = Very Common 5 = Extremely Common</p>	No recodes
Perceptions of Substance Use on School Buses	Web Survey	<p><i>On a scale of 1 to 5, with 1 being “Not at all common,” 2 being “somewhat common,” 3 being “common,” 4 being “very common,” and 5 being “extremely common,” how common do you think each of the following behaviors are while students ride the bus? [Substance Use defined as: Alcohol, tobacco, illegal drug (e.g., marijuana, cocaine, heroin, methamphetamine), or illicit nonmedical prescription drug use (i.e., the use of Oxycodone, Adderall, Xanax, or other prescription drugs not prescribed to that person)]</i></p> <p>1 = Not at all common 2 = Somewhat common 3 = Common 4 = Very Common 5 = Extremely Common</p>	No recodes
Perceptions of Sexual Harassment on School Buses	Web Survey	<p><i>On a scale of 1 to 5, with 1 being “Not at all common,” 2 being “somewhat common,” 3 being “common,” 4 being “very common,” and 5 being “extremely common,” how common do you think each of the following behaviors are while students ride the bus? [Sexual Harassment: Harassment of a person involving unwanted sexual advances (physical or verbal in nature) or obscene sexual remarks]</i></p> <p>1 = Not at all common 2 = Somewhat common 3 = Common 4 = Very Common 5 = Extremely Common</p>	No recodes

Perceptions of Sexual Behaviors on School Buses	Web Survey	<p><i>On a scale of 1 to 5, with 1 being “Not at all common,” 2 being “somewhat common,” 3 being “common,” 4 being “very common,” and 5 being “extremely common,” how common do you think each of the following behaviors are while students ride the bus? [Sexual Behaviors defined as: Sexual activities involving one or more students, including masturbation, kissing, fondling, oral sex, or intercourse]</i></p> <p>1 = Not at all common 2 = Somewhat common 3 = Common 4 = Very Common 5 = Extremely Common</p>	No recodes
Perceptions of Violations of Basic Rules on School Buses	Web Survey	<p><i>On a scale of 1 to 5, with 1 being “Not at all common,” 2 being “somewhat common,” 3 being “common,” 4 being “very common,” and 5 being “extremely common,” how common do you think each of the following behaviors are while students ride the bus? [Violations of Basic Rules define as: Behavior that violates other basic rules for the school bus other than those previously listed above, such as littering, vandalizing seats or other parts of the bus, yelling/screaming, changing seats while the bus is in motion, etc.]</i></p> <p>1 = Not at all common 2 = Somewhat common 3 = Common 4 = Very Common 5 = Extremely Common</p>	No recodes
Number of Disciplinary Reports	Web Survey	<p><i>Approximately how many formal disciplinary reports or incidents were filed in the 2015 calendar year for behavioral issues on school buses in your district?</i></p> <p>1 = zero 2 = 1-25 3 = 26-50 4 = 51-75 5 = 76-100 6 = more than 100</p>	No recodes

Frequency of Disciplinary Reports	Web Survey	<i>How often would you say there are incidents in your school district for which a bus driver makes a formal report?</i> 1 = never 2 = less than once a month 3 = once a month 4 = 2-3 times a month 5 = once a week 6 = 2-3 times per week 7 = daily	No recodes
Serious Incidents	Web Survey	<i>In the 2015-2016 school year, was there a serious incident or incidents on a school bus resulting in criminal charges against a student?</i> 1 = no 2 = yes	0=there was not an incident 1=there was an incident
Strategy Variables (Research Question 2)	Source	Measurement	Recodes for Analysis
Use of Assigned Seats	Web Survey	<i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district</i> [Students are assigned to seats] 0 = no buses 1 = some buses 2 = all buses	0=strategy is not used on any bus 1=strategy is used on some or all buses
Use of Disciplinary Referrals	Web Survey	<i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district</i> [Students who misbehave are issued a disciplinary referral (either verbal or written)] 0 = no buses 1 = some buses 2 = all buses	0=strategy is not used on any bus 1=strategy is used on some or all buses
Use of Cautionary Films	Web Survey	<i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district</i> [All students or students who misbehave on the bus are required to watch films that communicate the importance of positive behavior on the bus]	0=strategy is not used on any bus 1=strategy is used on some or all buses

		<p>or reasons misbehavior on the bus is inappropriate (e.g., Tears on the Highway)]</p> <p>0 = no buses</p> <p>1 = some buses</p> <p>2 = all buses</p>	
Behavior Contracts	Web Survey	<p><i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district</i> [Parents, students, or both sign a code of conduct or written agreement that communicates rules of the bus and consequences for violating them]</p> <p>0 = no buses</p> <p>1 = some buses</p> <p>2 = all buses</p>	<p>0=strategy is not used on any bus</p> <p>1=strategy is used on some or all buses</p>
Student Training Program	Web Survey	<p><i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district</i> [Students participate in a training program (including the use of instructional videos) to teach ways to prevent, manage, or address bullying or other types of misbehavior on the bus (e.g., The Peaceful School Bus). This also includes training programs that have a section or component that is specific to the bus.]</p> <p>0 = no buses</p> <p>1 = some buses</p> <p>2 = all buses</p>	<p>0=strategy is not used on any bus</p> <p>1=strategy is used on some or all buses</p>
Driver Training Program	Web Survey	<p><i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district</i> [Drivers participate in a training program to teach ways to prevent, manage, or address misconduct on the bus.]</p> <p>0 = no buses</p> <p>1 = some buses</p> <p>2 = all buses</p>	<p>0=strategy is not used on any bus</p> <p>1=strategy is used on some or all buses</p>
Students Encouraged to Know Driver	Web Survey	<p><i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district</i> [Students are encouraged to</p>	<p>0=strategy is not used on any bus</p>

		get to know their drivers so that they will feel comfortable reporting issues they are having on the bus.] 0 = no buses 1 = some buses 2 = all buses	1=strategy is used on some or all buses
Rewards	Web Survey	<i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district</i> [Students are rewarded for good behavior on the bus.] 0 = no buses 1 = some buses 2 = all buses	0=strategy is not used on any bus 1=strategy is used on some or all buses
Mentoring	Web Survey	<i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district</i> [Older students are encouraged through a formal or informal system to mentor and look out for younger students.] 0 = no buses 1 = some buses 2 = all buses	0=strategy is not used on any bus 1=strategy is used on some or all buses
Entertainment	Web Survey	<i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district</i> [Bus drivers play music, show films, or provide other forms of entertainment to engage or distract children while they ride the bus.] 0 = no buses 1 = some buses 2 = all buses	0=strategy is not used on any bus 1=strategy is used on some or all buses
Surveillance Cameras	Web Survey	<i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district</i> [Buses are equipped with surveillance cameras.] 0 = no buses 1 = some buses 2 = all buses	0=strategy is not used on any bus 1=strategy is used on some or all buses

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Safety Belts	Web Survey	<p><i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district [Buses are equipped with safety belts.]</i></p> <p>0 = no buses 1 = some buses 2 = all buses</p>	<p>0=strategy is not used on any bus 1=strategy is used on some or all buses</p>
Drivers encouraged to know students	Web Survey	<p><i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district [Bus drivers are encouraged to get to know the students who ride their bus to help create a respectful environment where there are clear expectations for student behavior]</i></p> <p>0 = no buses 1 = some buses 2 = all buses</p>	<p>0=strategy is not used on any bus 1=strategy is used on some or all buses</p>
Drivers – School Official Relationships	Web Survey	<p><i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district [Bus drivers and school officials are encouraged to build relationships with one another so that drivers feel comfortable reporting misconduct and voicing their opinions about how to make the bus a safer place.]</i></p> <p>0 = no buses 1 = some buses 2 = all buses</p>	<p>0=strategy is not used on any bus 1=strategy is used on some or all buses</p>
Pullover	Web Survey	<p><i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district [If bus drivers observe misbehavior, they have the option to pull over, if necessary, until the behavior stops.]</i></p> <p>0 = no buses 1 = some buses 2 = all buses</p>	<p>0=strategy is not used on any bus 1=strategy is used on some or all buses</p>
Bus Monitors	Web Survey	<p><i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some</i></p>	<p>0=strategy is not used on any bus</p>

		<i>buses, or no buses in your district</i> [Adult bus attendants/monitors ride the bus with students to and from school.] 0 = no buses 1 = some buses 2 = all buses	1=strategy is used on some or all buses
Visits from Authority Figures	Web Survey	<i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district</i> [The principal, teachers, or school resource officers board the bus regularly to remind students of bus rules and the importance of positive behavior.] 0 = no buses 1 = some buses 2 = all buses	0=strategy is not used on any bus 1=strategy is used on some or all buses
Reporting Systems	Web Survey	<i>Please look at the list below. For each behavior management strategy, please indicate whether it is used on all buses, some buses, or no buses in your district</i> [A bus-specific website or dedicated telephone number is available where students or parents can report misbehavior that happens on the bus.] 0 = no buses 1 = some buses 2 = all buses	0=strategy is not used on any bus 1=strategy is used on some or all buses
Count of All Strategies Used	Created from Existing Web Survey Items	A summation of all strategies coded as 1=strategy is used on some or all buses	N/A
Effectiveness of Strategies for Reducing Misconduct (Research Question 3)	Web Survey	[For each strategy reported as used on some or all buses, respondents were asked to indicate how effective each strategy is for controlling each of the seven forms of misconduct] <i>On a scale of 1 to 5, with 1 being “Not at all effective” and 5 being “Extremely effective”, how effective is [Strategy] to seats for controlling each of the following behaviors on the bus?</i> 1= not at all effective 2 = somewhat effective 3= effective	No recodes

		4 = very effective 5= extremely effective	
Methods for Determining Whether Strategies are Effective (Research Question 4)	Web Survey	<i>Which of the following are ways you determine whether a specific strategy is effective for preventing or managing student misbehavior on the bus?</i> 1 = We track disciplinary reports or incidents before and after the strategy is implemented 2 = We have the strategy(ies) evaluated or assessed by trained personnel 3 = We get formal or informal feedback from bus drivers 4 = We get formal or informal feedback from students 5 = We get formal or informal feedback from parents 6 = We have staff observe the bus during commutes to or from school after the strategy is implemented to determine whether behavior has improved 7 = We use some other method	Recoded into seven dummy variables that correspond to each response option: 0=method not used; 1=method is used
Count of All Methods Used	Created from Existing Web Survey Items	A summation of all methods coded as 1=method is used	N/A
Lessons Learned from Implementing Behavioral Management Strategies (Research Questions 1, 3, and 6)	Web Survey	<i>Most school districts have experienced challenges implementing and evaluating programs or strategies used to control students' behaviors while riding the bus. From your experience, what lessons have you learned that you would like to share with other school districts? Provide up to three lessons learned [open-ended]</i>	Answers coded into one of six larger thematic categories: 1) Facilitators (i.e., effective strategies); 2) Ineffective Strategies; 3) Challenges of Student Transportation; 4) Observations about Student Misbehavior; 5) Miscellaneous Information; and 6) Inapplicable Information
	Web Survey	<i>If there is anything about student behavior on school buses not covered in this survey that you would like to add, please do so below.</i>	Answers were coded into one of six larger thematic categories (see lessons learned categories)

Table 2: Descriptive Statistics for Respondent Characteristics

Survey Question and Response Options	Mean	SD	Range
<i>How many years have you been in your current position?</i> Years of Experience	9.70	8.9	0–44
<i>What is the highest level of education you have completed?</i> 1 = Less Than High School Education 2 = High School Education 3 = Some College 4 = Associate's Degree 5 = Bachelor's Degree 6 = Post-Graduate Degree Education	4.13	1.53	1–6
% of Sample			
<i>Have you ever received formal or informal training from your school district to help you prevent, manage, or address misbehavior on school buses?</i> Not Received Training Received Training	33 67		
<i>Are you of Hispanic or Latino origin?</i> Non-Hispanic Hispanic	96 4		
<i>What is your current sex?</i> Female Male	35 65		
<i>Which of the following best describes your race?</i> White Black Other Race	93 2 5		
<i>What is your current title or position?</i> Transportation Director Some Other Title	66 34		

Table 3: Descriptive Statistics for District Characteristics

District Characteristics	Mean	SD	Range
<i>Percent White of the Student Population</i>	71.28	26.84	0–100
<i>Percent English Learners</i>	4.60	8.93	0–74.4
<i>Percent Special Education</i>	13.47	5.09	0–81.4
% of sample			
<i>District Urbanicity</i>			
Rural	52		
City	5		
Suburban	24		
Town	19		
<i>District Size</i>			
Small (<649 students)	33		
Medium (649 to 2,221 students)	33		
Large (>2,221 students)	33		

Table 4: Descriptive Statistics for Variables Measuring Misconduct

Survey Question and Response Options	Mean	SD	Range
<i>On a scale of 1 to 5, with 1 being "Not at all common," 2 being "somewhat common," 3 being "common," 4 being "very common," and 5 being "extremely common," how common do you think each of the following behaviors are while students ride the bus?</i>			
Fighting	1.71	.86	1–5
Bullying	2.11	.88	1–5
Use of Profanity	2.85	1.09	1–5
Substance Use	1.18	.50	1–5
Sexual Harassment	1.30	.57	1–5
Sexual Behaviors	1.22	.52	1–5
Violations of Basic Rules	3.11	1.14	1–5
% of sample			
<i>Approximately how many formal disciplinary reports or incidents were filed in the 2015 calendar year for behavioral issues on school buses in your district?</i>			
Zero	04		
1–25	31		
26–50	19		
51–75	16		
76–100	10		
More than 100	20		
<i>How often would you say there are incidents in your school district for which a bus driver makes a formal report?</i>			
Never	03		
Less Than Once a Month	19		
Once a Month	11		
2–3 Times a Month	20		
Once a Week	16		
2–3 Times per Week	20		
Daily	11		
<i>In the 2015-2016 school year, was there a serious incident or incidents on a school bus resulting in criminal charges against a student?</i>			
Have not had an incident(s)	89		
Did have an incident(s)	11		

Table 5: OLS Regression Predicting Perceptions of Behavioral Problems on Buses

	Fighting	Bullying	Profanity	Substance Use	Sexual Harassment	Sexual Behaviors	Basic Violations
Percent White	-.004*** (.00)	.00 (.00)	-.002* (.00)	.00 (.00)	.00 (.00)	-.001* (.00)	.00 (.00)
Percent English Learners	-.004 (.003)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)
District Urbanicity							
Rural	-	-	-	-	-	-	-
City	.18* (.08)	.07 (.08)	.04 (.09)	-.03 (.05)	.00 (.05)	.02 (.05)	-.12 (.09)
Suburban	.05 (.05)	.04 (.05)	-.06 (.06)	-.03 (.03)	-.08* (.04)	-.08* (.03)	-.18** (.06)
Town	.05 (.05)	.09 (.05)	.04 (.06)	-.03 (.03)	.00 (.04)	-.03 (.03)	.11 (.06)
Percent Special Ed.	.01** (.00)	.01* (.00)	.01* (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)
Number of Students							
Medium/Large	-	-	-	-	-	-	-
Small	.03 (.05)	-.04 (.05)	-.26*** (.06)	-.02 (.03)	-.04 (.03)	-.04 (.03)	-.20** (.06)
Serious Incident							
No Incident	-	-	-	-	-	-	-
Serious Incident	.22*** (.06)	.19** (.06)	.29*** (.06)	.11** (.04)	.18*** (.04)	.12** (.04)	.15* (.02)
Number of Disciplinary Reports	.09*** (.01)	.12*** (.01)	.23*** (.02)	.27*** (.02)	.04*** (.01)	.06*** (.01)	.04*** (.01)
Constant	1.45*** (.11)	1.51*** (.11)	2.10*** (.02)	1.04*** (.01)	1.12*** (.07)	1.12*** (.07)	2.13*** (.13)
Model <i>F</i>	20.19***	21.28***	74.03***	8.91***	16.32***	11.70***	63.96***
<i>r</i> ²	.08	.08	.21	.03	.06	.04	.19

Note. *N* = 2,595. Coefficients are regression betas, standard errors in parentheses. *** < .001 ** < .01 * < .05

Table 6: OLS Regression Predicting Number of Disciplinary Reports and Frequency of Reports Filed

	Number of Disciplinary Reports	Frequency of Reports Filed
Percent White	-.01** (.00)	-.004* (.00)
Percent English Learners	-.01* (.00)	-.01 (.01)
District Type		
Rural	-	-
City	1.10*** (.13)	.85*** (.16)
Suburban	.34*** (.09)	.23* (.10)
Town	.23* (.09)	.18* (.09)
Percent Special Ed.	.01* (.00)	.02** (.01)
Number of Students		
Medium/Large	-	-
Small	-1.52*** (.07)	-1.63*** (.12)
Serious Incident		
No Incident	-	-
Serious Incident	.80*** (.10)	.60*** (.12)
Constant	4.17***	4.74***
Model <i>F</i>	177.70***	96.10***
<i>r</i> ²	.34	.27

Note. *N* = 2,595. Coefficients are regression betas, standard errors in parentheses. *** < .001 ** < .01 * < .05

Table 7: Descriptive Statistics for the Use of Behavioral Management Strategies for School Buses

	% of sample that used each strategy on some or all buses
Students are assigned to seats	89
Students who misbehave are issued a disciplinary referral (either verbal or written)	99
All students or students who misbehave on the bus are required to watch films that communicate the importance of positive behavior on the bus or reasons misbehavior on the bus is inappropriate (e.g., <i>Tears on the Highway</i>)	5
Parents, students, or both sign a code of conduct or written agreement (i.e., behavior contracts) that communicates rules of the bus and consequences for violating them	59
Students participate in a training program (including the use of instructional videos) to teach ways to prevent, manage, or address bullying or other types of misbehavior on the bus (e.g., The Peaceful School Bus). This also includes training programs that have a section or component that is specific to the bus.	25
Drivers participate in a training program to teach ways to prevent, manage, or address misconduct on the bus.	78
Students are encouraged to get to know their drivers so that they will feel comfortable reporting issues they are having on the bus	93
Students are rewarded for good behavior on the bus	72
Older students are encouraged through a formal or informal system to mentor and look out for younger students	76
Bus drivers play music, show films, or provide other forms of entertainment to engage or distract children while they ride the bus	61
Buses are equipped with surveillance cameras	80
Buses are equipped with safety belts	56
Bus drivers are encouraged to get to know the students who ride their bus to help create a respectful environment where there are clear expectations for student behavior	98
Bus drivers and school officials are encouraged to build relationships with one another so that drivers feel comfortable reporting misconduct and voicing their opinions about how to make the bus a safer place	97
If bus drivers observe misbehavior, they have the option to pull over	97
Adult bus attendants/monitors ride the bus with students to and from school	50
The principal, teachers, or school resource officers board the bus regularly to remind students of bus rules and the importance of positive behavior	72
A bus-specific website or dedicated telephone number is available where students or parents can report misbehavior that happens on the bus	55

Table 8: OLS Regression Predicting the Number of Behavioral Management Strategies Used

	Number of Strategies Used on Some or All Buses
Percent White	.00 (.00)
Percent English Learners	.01 (.01)
District Type	
Rural	-
City	.06 (.20)
Suburban	-.27 (.17)
Town	.13 (.13)
Percent Special Ed.	.01 (.01)
Number of Students	
Medium/Large	-
Small	-.61*** (.16)
Serious Incident	
No Incident	-
Serious Incident	.14 (.15)
Number of Disciplinary Reports	.42*** (.04)
Constant	10.74*** (.34)
Model <i>F</i>	30.33***
<i>r</i> ²	.13

Note. *N* = 2,595. Coefficients are regression betas, standard errors in parentheses. *** < .001 ** < .01 * < .05

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Table 9: Logistic Regression Predicting Use of Behavioral Management Strategies

	Assigned Seating	Cautionary Films	Behavior Contracts	Student Training	Driver Training	Rewards	Mentoring
Percent White	1.01* (.00)	.99 (.00)	.99*** (.00)	1.00 (.00)	1.00 (.00)	1.01** (.00)	1.01*** (.00)
Percent English Learners	.99 (.01)	.99 (.01)	.99 (.01)	1.00 (.01)	1.01 (.01)	1.01 (.01)	1.01 (.01)
District Urbanicity							
Rural	-	-	-	-	-	-	-
City	.57 (.22)	1.31 (.50)	.59** (.11)	.75 (.17)	1.52 (.48)	.59* (.13)	.57** (.11)
Suburban	.33*** (.07)	1.08 (.30)	.70** (.09)	.98 (.13)	.87 (.14)	.66** (.09)	.59*** (.08)
Town	.65 (.17)	1.23 (.32)	.98 (.12)	1.06 (.14)	1.18 (.20)	1.06 (.16)	.96 (.14)
Percent Special Ed.	1.04* (.02)	1.00 (.01)	.97** (.00)	1.01 (.01)	.98 (.01)	.98 (.01)	.99 (.01)
Number of Students							
Medium/Large	-	-	-	-	-	-	-
Small	.56** (.11)	1.59 (.46)	1.20 (.15)	.95 (.14)	.77 (.12)	.95 (.13)	1.86*** (.29)
Serious Incident							
No Incident	-	-	-	-	-	-	-
Serious Incident	1.05 (.34)	1.02 (.28)	1.21 (.17)	1.56** (.22)	.84 (.15)	1.22 (.20)	.77 (.11)
Number of Disciplinary Reports	1.93*** (.14)	1.22* (.10)	1.12** (.04)	1.10 (.06)	1.26*** (.06)	1.35*** (.06)	1.08* (.04)
Constant	.77 (.37)	.03*** (.02)	3.27*** (.96)	.14*** (.05)	2.08* (.72)	.81 (.26)	1.45 (.44)
Model <i>F</i>	16.86***	1.58	6.64***	3.52***	8.70***	10.58***	10.39***

	Entertainment	Cameras	Safety Belts	Bus Monitors	Visits from Authority Figures	Reporting Systems
Percent White	1.01*** (.00)	1.01* (.00)	1.00 (.00)	.99*** (.00)	.99* (.00)	1.00 (.00)
Percent English Learners	1.03*** (.01)	.99 (.01)	1.02** (.01)	.98** (.01)	.98* (.01)	1.01* (.01)
District Urbanicity						
Rural	-	-	-	-	-	-
City	.99 (.20)	1.31* (.49)	1.89** (.38)	2.78*** (.61)	1.80* (.42)	1.07 (.21)
Suburban	.66** (.08)	1.22 (.24)	1.51** (.18)	1.73*** (.22)	1.53** (.22)	1.16 (.14)
Town	.93 (.12)	1.45 (.28)	1.14 (.14)	1.30* (.16)	.93 (.12)	1.30* (.16)
Percent Special Ed.	1.00 (.00)	1.03* (.01)	1.02* (.01)	1.06*** (.01)	1.03** (.01)	.99 (.01)

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Number of Students						
Medium/Large	-	-	-	-	-	-
Small	.90 (.11)	.43*** (.07)	.74* (.09)	.42*** (.06)	.98 (.13)	.49*** (.06)
Serious Incident						
No Incident	-	-	-	-	-	-
Serious Incident	.88 (.12)	1.71 (.50)	1.04 (.14)	1.17 (.17)	1.10 (.18)	1.02 (.14)
Number of Disciplinary Reports	1.22*** (.04)	1.71*** (.12)	1.00 (.03)	1.21*** (.04)	1.09* (.04)	1.09* (.04)
Constant	.29*** (.08)	.49 (.20)	.98 (.27)	.56 (.17)	1.67 (.51)	.89 (.25)
Model <i>F</i>	10.06***	28.67***	8.86***	39.30***	7.48***	13.55***

Note. *N* = 2,595. Coefficients are odds ratios with standard errors in parentheses. *** < .001 ** < .01 * < .05

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Table 10: Average Strategy Effectiveness Scores by Forms of Misconduct

	assigned seats	disciplinary referrals	cautionary films	behavior contracts	training for students	training for drivers	students know drivers	rewards	mentoring
fighting	3.41	3.47	3.07	2.84	3.1	3.16	3.33	2.93	3.09
bullying	3.33	3.36	3.07	2.8	3.12	3.16	3.33	2.98	3.11
profanity	2.79	3.06	2.83	2.65	2.89	2.97	3.19	2.87	2.93
substance use	3.23	3.43	2.98	2.83	3.05	3.09	3.21	2.84	2.98
sexual harassment	3.41	3.47	3.06	2.85	3.09	3.17	3.28	2.9	3.02
sexual behavior violations of basic rules	3.47	3.5	3.05	2.87	3.1	3.17	3.27	2.9	2.99
	3.43	3.38	3.06	2.83	3.1	3.18	3.35	3.08	3.12
Average Score by Strategy	3.30	3.38	3.02	2.81	3.06	3.13	3.28	2.93	3.03
	entertainment	surveillance cameras	safety belts	drivers know students	drivers know officials	pulling over	bus monitors	visits from officials	reporting systems
fighting	2.58	3.63	2.65	3.35	3.28	3.47	3.67	3.26	3.07
bullying	2.58	3.53	2.51	3.35	3.28	3.39	3.64	3.23	3.11
profanity	2.46	3.27	2.11	3.21	3.15	3.17	3.43	3.07	2.94
substance use	2.43	3.54	2.14	3.24	3.23	3.3	3.64	3.2	3.05
sexual harassment	2.47	3.52	2.32	3.28	3.24	3.32	3.65	3.2	3.06
sexual behavior violations of basic rules	2.47	3.58	2.35	3.27	3.25	3.37	3.68	3.22	3.1
	2.72	3.56	2.81	3.38	3.29	3.4	3.65	3.24	3.1
Average Score by Strategy	2.53	3.52	2.41	3.30	3.25	3.35	3.62	3.20	3.06

Table 11: OLS Regression Predicting Effectiveness of Behavioral Management Strategies for Reducing Bullying

	Bus Monitors	Cameras	Disciplinary Referrals	Pullover	Assigned seating	Drivers Know Students
Percent White	.00 (.00)	.003* (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)
Percent English Learners	.00 (.01)	.01 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)
District Urbanicity						
Rural	-	-	-	-	-	-
City	-.05 (.12)	.12 (.10)	.20* (.09)	-.05 (.09)	.15 (.10)	.21* (.09)
Suburban	-.06 (.09)	.20** (.07)	.14* (.06)	-.03 (.07)	.13* (.06)	.24*** (.06)
Town	.08 (.09)	.22** (.07)	.19** (.06)	.11 (.06)	.19** (.06)	.19** (.06)
Percent Special Ed.	-.02** (.01)	-.02** (.01)	-.01** (.00)	-.01* (.00)	-.01* (.00)	-.02 (.00)
Number of Students						
Medium/Large	-	-	-	-	-	-
Small	.05 (.12)	.02 (.08)	.02 (.06)	.14* (.06)	.01 (.07)	.18** (.06)
Serious Incident						
No Incident	-	-	-	-	-	-
Serious Incident	.04 (.10)	-.05 (.08)	-.10 (.07)	-.05 (.08)	-.13* (.06)	-.07 (.07)
Number of Disciplinary Reports	-.03 (.02)	-.06** (.02)	-.06*** (.02)	-.05** (.02)	-.05** (.02)	-.05** (.02)
Constant	3.89*** (.21)	3.62*** (.18)	3.70*** (.14)	3.61*** (.14)	3.51*** (.14)	3.49*** (.14)
Model <i>F</i>	2.79*	4.33***	4.96***	6.57***	3.59***	6.68***
<i>r</i> ²	.02	.02	.02	.03	.01	.03

Note. *N* = 2,595. Coefficients are regression betas, standard errors in parentheses. *** < .001 ** < .01 * < .05

Table 12: OLS Regression Predicting Effectiveness of Behavioral Management Strategies for Reducing Violations of Basic Rules

	Bus Monitors	Cameras	Disciplinary Referrals	Pullover	Assigned seating	Drivers Know Students
Percent White	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)
Percent English Learners	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)
District Urbanicity						
Rural	-	-	-	-	-	-
City	-.05 (.12)	.12 (.10)	.05 (.09)	-.08 (.09)	.14 (.10)	.21* (.09)
Suburban	-.06 (.09)	.16* (.07)	.09 (.06)	-.03 (.06)	.10 (.06)	.22*** (.06)
Town	.08 (.09)	.26*** (.07)	.15* (.06)	.10 (.06)	.17** (.06)	.23*** (.06)
Percent Special Ed.	-.03** (.00)	-.02** (.00)	-.02** (.00)	-.01 (.00)	-.01* (.00)	-.02*** (.00)
Number of Students						
Medium/Large	-	-	-	-	-	-
Small	.05 (.12)	.08 (.08)	.03 (.06)	.12 (.07)	.01 (.06)	.17** (.06)
Serious Incident						
No Incident	-	-	-	-	-	-
Serious Incident	.04 (.09)	-.06 (.08)	-.04 (.07)	-.06 (.08)	-.03 (.06)	-.05 (.07)
Number of Disciplinary Reports	-.03 (.02)	-.04* (.02)	-.07*** (.02)	-.05** (.02)	-.06** (.02)	-.05** (.02)
Constant	3.89*** (.21)	3.55*** (.17)	3.67*** (.14)	3.52*** (.14)	3.50*** (.14)	3.55*** (.14)
Model <i>F</i>	2.79*	4.05***	6.40***	6.61***	4.28***	7.17***
<i>r</i> ²	.02	.02	.02	.03	.02	.03

Note. *N* = 2,595. Coefficients are regression betas, standard errors in parentheses. *** < .001 ** < .01 * < .05

Table 13: Descriptive Statistics for Methods of Assessing Strategy Effectiveness Variables

	% of sample
<i>Which of the following are ways you determine whether a specific strategy is effective for preventing or managing student misbehavior on the bus?</i>	
We track disciplinary reports or incidents before and after the strategy is implemented	70
We have the strategy(ies) evaluated or assessed by trained personnel	29
We get formal or informal feedback from bus drivers	93
We get formal or informal feedback from students	65
We get formal or informal feedback from parents	70
We have staff observe the bus during commutes to or from school after the strategy is implemented to determine whether behavior has improved	42
We use some other method	5

Table 14: Logistic Regression Predicting Methods Used for Determining the Effectiveness of Behavioral Management Strategies

	track disciplinary reports	strategies are evaluated	feedback from students	staff observe the bus
Percent White	1.01 (.00)	.99 (.00)	1.00 (.00)	1.00 (.00)
Percent English Learners	1.01 (.01)	.99 (.01)	1.00 (.01)	1.00 (.01)
District Urbanicity				
Rural	-	-	-	-
City	1.22 (.25)	1.54* (.29)	.72 (.13)	2.91*** (.56)
Suburban	1.08 (.01)	.97 (.13)	.86 (.10)	1.82*** (.22)
Town	1.24 (.17)	1.02 (.14)	.88 (.11)	1.48** (.18)
Percent Special Ed.	.99 (.01)	.99 (.01)	1.01 (.01)	1.01 (.01)
Number of Students				
Medium/Large	-	-	-	-
Small	.95 (.13)	.89 (.12)	1.20 (.16)	.85 (.11)
Serious Incident				
No Incident	-	-	-	-
Serious Incident	1.20 (.18)	1.04 (.14)	.95 (.13)	.98 (.13)
Number of Disciplinary Reports	1.09* (.04)	1.04 (.04)	.86*** (.03)	1.07* (.03)
Constant	1.23 (.36)	.41** (.12)	2.95*** (.84)	.38*** (.10)
Model <i>F</i>	2.65**	2.03*	7.20***	11.33***

Note. *N* = 2,595. Coefficients are odds ratios with standard errors in parentheses. *** < .001 ** < .01 * < .05

Phase II: Telephone Interview Guide

Intro script

I would first like to thank you for taking the time to talk with me today **[IF R AGREED TO BE RECORDED, SAY]** *and for consenting to us recording this interview. Again, we will only use the recording to finalize our notes; it will be destroyed once the notes are complete.*

I'd like to emphasize that the success of this project very much depends on people like you who are willing to share their insights and knowledge of strategies used on school buses to manage or prevent student misbehavior. We have done a thorough review of the answers you provided on the survey; based on those answers, we would like to focus on four behavioral management strategies that you said your district uses to control students' behaviors while riding the bus to and from school. Our overarching goal for this interview is to learn more about strategies that you believe are very effective for preventing or addressing bullying and fighting on the bus, as well as to learn more about strategies that you believe are not very effective for preventing or addressing these behaviors.

[IF PROFILE SENT IN ADVANCE, SAY] You can see on the profile the strategies we'd like to talk about today.

1. The first strategy we will discuss is **[INTERVIEWER INSERT NAME OF STRATEGY NUMBER 1, HIGHLY EFFECTIVE FOR BULLYING]**, which we selected because you indicated that it is very effective for preventing or addressing *bullying* on the bus.
2. Finally, the second strategy we will discuss is **[INTERVIEWER INSERT NAME OF STRATEGY NUMBER 2, INEFFECTIVE FOR BULLYING]**, which we selected because you indicated that it is not very effective for preventing or addressing *bullying* on the bus.
3. The third strategy we will discuss is **[INTERVIEWER INSERT NAME OF STRATEGY NUMBER 3, HIGHLY EFFECTIVE FOR FIGHTING]**, which we selected because you indicated that it is very effective for preventing or addressing *fighting* on the bus.
4. Finally, the fourth strategy we will discuss is **[INTERVIEWER INSERT NAME OF STRATEGY NUMBER 4, INEFFECTIVE FOR FIGHTING]**, which we selected because you indicated that it is not very effective for preventing or addressing *fighting* on the bus.

Before we get started, do you have any questions for me about the purpose of the study, the nature of this interview, or anything else?

[IF YES, ANSWER QUESTIONS. IF NO, BEGIN WITH BACKGROUND SECTION.]

Background

Can you tell me a bit about yourself, including your position in the **[INSERT NAME OF SCHOOL DISTRICT]** school district?

- *Probe:*
 - o *If respondent does not mention her or his involvement with school transportation, ask respondent to explain how his or her role relates to student transportation on school buses*

Behavioral Problems on Buses

Next we want to talk about behavioral problems on buses in your district.

On the survey, you indicated that there are incidents on school buses in your district for which a bus driver makes a formal report about [INSERT ANSWER FROM SURVEY].

You also mentioned that [INSERT MOST COMMON BEHAVIOR PROBLEMS FROM SURVEY] were the most common behavioral problems on buses. Can you talk a bit about these behavioral problems and what exactly you are seeing on buses?

- *Probes:*
 - o *Have you noticed any behavioral problems getting more or less common or more or less serious throughout your career?*
 - o *You mentioned on the survey that fighting and bullying are [INSERT LEVEL OF COMMONNESS FROM SURVEY]. When you do see these behaviors on buses, what is typically going on during these incidents?*

Strategies for Buses

Before we get to the 4 strategies I alluded to in the intro, I wanted to review a few of the answers you provided in the survey.

You noted that the following strategies are used on only some of your buses in the district: [INSERT STRATEGIES USED ON SOME BUSES ONLY].

- Can you talk a little bit about why these strategies are used on only some buses and not all? [SKIP IF NOT APPLICABLE]

You noted that the following strategies are used on all buses: [INSERT STRATEGIES USED ON ALL BUSES].

- Can you talk a bit about why these strategies are used on all buses? [SKIP IF NOT APPLICABLE]

[Look at table in profile called “School Level Strategy is Used For.” Pull out themes and ask respondent to explain why a strategy is only used for some levels. E.g., “I see in the survey that your district uses a mentoring-based strategy for elementary schools only. Why is this strategy used for elementary school students? Have you tried to use this with older students in the past?”]

- *Probes:*
 - o *[If district selected elementary, middle, and high school for all strategies:] I see that your district uses these strategies at all levels of education, can you tell me a bit about that?*
 - o *[If district selected only one level of education for all strategies:] I see that your district uses these strategies only at the [INSERT LEVEL] level. Can you tell me a bit about that?*
 - o *[If district selected a mix of education levels for all strategies:] I see that some strategies are used at the [INSERT LEVEL] while others are used at the [INSERT LEVEL]. Can you tell me a bit more about why some strategies are used at [INSERT LEVEL] level while others are used at the [INSERT LEVEL]?*
 - o *Are there any differences in the implementation of strategies for older versus younger students?*

Targeted Strategies for Buses

Now we want to transition to talk about the 4 strategies I mentioned earlier.

You indicated on the survey that the following strategy was among the most effective for handling bullying: [INSERT NAME OF STRATEGY NUMBER 1, HIGHLY EFFECTIVE FOR BULLYING]. Please walk me through what this strategy looks like in your district and talk to me about why it is so effective for handling bullying.

Probes:

- *How and why was this strategy selected?*
- *How long have you been using this strategy?*
- *What types of staff are involved with the implementation of this strategy?*
- *Have staff identified any training or technical assistance needs for the implementation of this strategy?*
- *Is it your impression that staff have the same experiences with/ opinions about this strategy? [INTERVIEWER: WE WANT TO KNOW IF EVERYONE IS ON THE SAME PAGE— DOES EVERYONE THINK THIS STRATEGY IS EFFECTIVE?]*
- *Are there any monetary costs associated with this strategy?*
- *What types of challenges are associated with this strategy?*
- *Are there advantages of this strategy you would like to share?*
- *Are there any lessons learned from the use of this strategy you would like to share?*
- *Do you have any plans for this strategy in the future? In other words, will you keep implementing them the same way or will they be modified?*

You indicated on the survey that the following strategy was among the least effective for handling bullying: [NAME OF STRATEGY NUMBER 2, INEFFECTIVE FOR BULLYING]. Please walk me through what this strategy looks like in your district and talk to me about why it is so ineffective for handling bullying.

- *Probes:*

- *How and why was this strategy selected?*
- *How long have you been using this strategy?*
- *What types of staff are involved with the implementation of this strategy?*
- *Have staff identified any training or technical assistance needs for the implementation of this strategy?*
- *Is it your impression that staff have the same experiences with/ opinions about this strategy? [INTERVIEWER: WE WANT TO KNOW IF EVERYONE IS ON THE SAME PAGE— DOES EVERYONE THINK THIS STRATEGY IS INEFFECTIVE?]*
- *Are there any monetary costs associated with this strategy?*
- *What types of challenges are associated with this strategy?*
- *Are there advantages of this strategy you would like to share?*
- *Are there any lessons learned from the use of this strategy you would like to share?*
- *Do you have any plans for this strategy in the future? In other words, will you keep implementing them the same way or will they be modified?*

You indicated on the survey that the following strategy was among the most effective for handling fighting: [INSERT NAME OF STRATEGY NUMBER 3, HIGHLY EFFECTIVE FOR FIGHTING]. Please walk me through what this strategy looks like in your district and talk to me about why this strategy is so effective for fighting.

- *Probes:*

- *How and why was this strategy selected?*
- *How long have you been using this strategy?*
- *What types of staff are involved with the implementation of this strategy?*
- *Have staff identified any training or technical assistance needs for the implementation of this strategy?*
- *Is it your impression that staff have the same experiences with/ opinions about this strategy?* [INTERVIEWER: WE WANT TO KNOW IF EVERYONE IS ON THE SAME PAGE— DOES EVERYONE THINK THIS STRATEGY IS EFFECTIVE?]
- *Are there any monetary costs associated with this strategy?*
- *What types of challenges are associated with this strategy?*
- *Are there advantages of this strategy you would like to share?*
- *Are there any lessons learned from the use of this strategy you would like to share?*
- *Do you have any plans for this strategy in the future? In other words, will you keep implementing them the same way or will they be modified?*

You indicated on the survey that the following strategy was among the least effective for handling fighting: [INSERT NAME OF STRATEGY NUMBER 4, INEFFECTIVE FOR FIGHTING]. Please walk me through what this strategy looks like in your district and talk to me about why it is so ineffective for fighting.

- *Probes:*

- *How and why was this strategy selected?*
- *How long have you been using this strategy?*
- *What types of staff are involved with the implementation of this strategy?*
- *Have staff identified any training or technical assistance needs for the implementation of this strategy?*
- *Is it your impression that staff have the same experiences with/ opinions about this strategy?* [INTERVIEWER: WE WANT TO KNOW IF EVERYONE IS ON THE SAME PAGE— DOES EVERYONE THINK THIS STRATEGY IS INEFFECTIVE?]
- *Are there any monetary costs associated with this strategy?*
- *What types of challenges are associated with this strategy?*
- *Are there advantages of this strategy you would like to share?*
- *Are there any lessons learned from the use of this strategy you would like to share?*
- *Do you have any plans for this strategy in the future? In other words, will you keep implementing them the same way or will they be modified?*

Other Misbehavior

We have talked mostly about strategies used to manage or prevent bullying and fighting, and how effective they are or are not. But there are many other forms of misbehavior that might occur on school buses, such as general misconduct (e.g., yelling, littering, destruction bus property), substance use, sexual behavior, etc. Are there any strategies you would like to mention that stand out as being especially effective or ineffective for managing or preventing these behaviors?

Effectiveness and Evaluation

We want to understand a little bit more about how districts determine whether a strategy is working.

You mentioned in the survey that your district uses the following approaches to assess the effectiveness of a given strategy: [INSERT METHODS]. Can you walk me through each of these methods a bit so I can understand better how each of these works?

- *Probes:*
 - *How is this data collected?*
 - *Is any data collected retained over time?*
 - *What types of staff collect these data and who is responsible for managing it?*
 - *What challenges have you had with data collection or data quality?*
 - *What types of data variables/ data points do you collect?*
 - *Counts (10 incidents)*
 - *Incident characteristics? Such as..?*
 - *What do you do with the data you collect?*
 - *Analyze?*
 - *Provide periodic reports/ updates?*

[IF RESPONDENT PROFILE AND/OR INTERVIEW RESPONSES INDICATE NO DATA ARE COLLECTED, SAY] You indicated that you don't collect any data in order to assess how a strategy is working. I want to read a few examples to see whether you use any of these methods in your district.

- *Probes:*
 - *Anecdotal evidence from bus drivers*
 - *Anecdotal evidence from students*
 - *Anecdotal evidence from parents*
 - *At what point do you gather enough anecdotal evidence and decide to investigate further? (example: a certain number of phone calls from parents?)*

Other Strategies/ Open-Ended

We've been talking mostly about your survey responses thus far. I want to transition to talking about anything that may not have been on the survey.

On the survey, you indicated that your district uses the following strategies to manage students' behaviors while riding the bus [LIST BEHAVIORS FROM SURVEY].

- *Probes:*
 - *Are there any additional strategies your district uses that I have not listed?*
 - *Are there any strategies your district does not currently use but that you are thinking about using?*
 - **[IF YES]**
 - *Why are you considering this strategy?*
 - *How are you considering implementing it?*
 - *Do you foresee any challenges with this strategy?*
 - *What do you hope to achieve by implementing this strategy?*
 - **[IF NO]**
 - *Why not?*

Feedback on taxonomy

At the beginning of this study, we reviewed scholarly publications, school and district websites, bullying-prevention websites, and reports produced by the media or school-based transportation organizations to identify different types of strategies school districts are using to address or prevent bullying and other types of misbehavior on the school bus. We identified 18 different strategies, and one of our goals for the project is to organize these strategies into a smaller number of thematic categories. On your profile, you will see how we have organized these strategies into nine categories. We'd like to get your feedback on our efforts, since you're the ones in the field every day! We value your opinions and would love to hear your thoughts.

- *Probes, if respondent is struggling:*
 - o *For example, would you place safety belts in a different category? Why?*
 - o *If it would be easier, you can email us or call us with any thoughts once you've had a chance to review and think about it.*

Category	Logic of strategies in this category	Strategies that belong to this category
Deterrence	attempt to communicate to students that negative consequences are a certain outcome of misbehavior on the bus and avoidable only when students refrain from such misconduct.	<ul style="list-style-type: none"> ▪ Cautionary films ▪ Visits from school authority figures ▪ Behavior contracts/codes of conduct
Surveillance	employ resources to monitor students on the bus.	<ul style="list-style-type: none"> ▪ Security cameras ▪ Bus Monitors/Attendants
Training and Education	curriculums developed for students or drivers to help reduce bullying, violence, and other types of general misbehavior on the bus (e.g., Peaceful School Bus program.)	<ul style="list-style-type: none"> ▪ Training programs for students ▪ Training programs for drivers
Incapacitative	strategies based on the logic that children are less capable of misbehaving when they are restrained in their seats.	<ul style="list-style-type: none"> ▪ Safety belts
Organizational Design	seating arrangements on the bus used to minimize confrontations between students or to avoid seating problematic students near one another.	<ul style="list-style-type: none"> ▪ Seating Charts
Reactive	although reactive strategies may have a deterrent-like effect, their primary purpose is to help school officials handle misconduct after it has occurred.	<ul style="list-style-type: none"> ▪ Hotlines or websites where misbehavior can be reported ▪ Having the option for drivers to pull over if students are misbehaving ▪ Disciplinary actions for misbehavior (e.g., suspension from the bus; write-ups, etc.)
Distractive	the use of music or other forms of entertainment to create a peaceful environment on the bus and to keep students stimulated so as to discourage misbehavior.	<ul style="list-style-type: none"> ▪ The use of music, sound, videos, or other types of entertainment on the bus
Bonding	promoting relationships between students, drivers, and school officials to foster a respectful environment on the bus.	<ul style="list-style-type: none"> ▪ The district encourages drivers to get to know students ▪ The district encourages students to get to know drivers ▪ The district helps to build relationships between drivers and school officials ▪ Mentoring programs that foster relationships or "buddy systems" between students
Reward Systems	students are rewarded for positive behavior on the bus (e.g., students are given "bus bucks" for good behavior that can be used to purchase prizes at the school store)	<ul style="list-style-type: none"> ▪ Linking bus behavior to rewards

Lessons Learned and Open

[INTERVIEWER: Look at any lessons learned provided in the survey. Ask respondent to elaborate on each, if applicable.]

- *Probes:*

- *Any other lessons learned you'd like to mention?*

[IF NO LESSONS LEARNED PROVIDED ON SURVEY], would you like to add any 'lessons learned' at this point?

Is there anything about managing student behavior on the bus that I didn't bring up that you would like to share?

Evaluation

One of the next steps in this area of research is to subject one or more behavioral management strategies to a rigorous scientific evaluation. The goal of that evaluation would be to determine how effective that strategy is for deterring various types of misbehavior. Do you have any recommendations for the types of strategies that need to be evaluated the most?

If funding allows in future years, we are interested in conducting a scientific evaluation of one or more behavioral management strategies used for school buses. We are looking for a handful of school districts to host such an evaluation. Would your district have any interest in participating?

Closing

Is there anything else you would like to share with me today?

Thank you so much for your time! Your insight is really valuable in helping us learn more about what strategies are used on school buses and how districts manage student behavior on school buses. Thank you again!

BVSBS Telephone Interview Guide for Web Survey Non-Participants – Phase II

1. Introduction

I would first like to thank you for taking the time to talk with me today and to emphasize that the success of this project very much depends on people like you who are willing to share their insights and knowledge of strategies used on school buses to manage or prevent student misbehavior. Our overarching goal for this interview is to learn more about strategies that you believe are very effective for preventing or addressing bullying and fighting on the bus, as well as to learn more about strategies that you believe are not very effective for preventing or addressing these behaviors. Before we get started, I am going to provide a brief background regarding your participation in this study and then ask for your consent for participation:

[READ INFORMED CONSENT]

2. Background

Can you tell me a bit about yourself, including your position in the **[INSERT NAME OF SCHOOL DISTRICT]** district?

- *If respondent does not mention her or his involvement with school transportation, ask respondent to explain how his or her role relates to student transportation on school buses*

3. Behavioral Problems on Buses

Next we want to talk about behavioral problems on buses in your district.

About how often would you say bus drivers in your district make formal reports about student misbehavior on buses?

- *Everyday? A few times a week? A few times a month?*

I am going to read you a list of several types of student misbehavior that may occur on the buses in your district and I want you to tell me what are the top three most common types of misbehavior that you see on buses? Bullying, Fighting, Sexual Activity, Sexual Harassment, Substance Use, Profanity, and General Misconduct (e.g., moving seats while the bus is in motion, screaming, littering, destructing bus property, etc.).

Can you talk about these behavioral problems and tell me what exactly you are seeing on buses?

- *[IF BULLYING IS NOT MENTIONED] When you do see or hear about bullying on buses, what is typically going on during these incidents?*
- *Have you noticed any behavioral problems getting more or less common or more or less serious throughout your career?*

4. Strategies for Buses / Targeted Strategies for Buses

What are some of the strategies your district uses to manage student behavior on buses? These can include both strategies that you think are effective and those that you think are less effective.

In your opinion, which one of the strategies you just listed is most effective for preventing or addressing bullying and fighting that occurs on buses?

- *Please walk me through what this strategy looks like in your district and talk to me about why it is so effective for handling bullying and fighting.*
- *Is this strategy used on all buses or only some?*
- *How and why was this strategy selected?*
- *How long have you been using this strategy?*
- *What types of staff are involved with the implementation of this strategy?*
- *Have staff identified any training or technical assistance needs for the implementation of this strategy?*
- *Is it your impression that staff have the same experiences with/ opinions about this strategy?*
- *Are there any monetary costs associated with this strategy?*
- *What types of challenges are associated with this strategy?*
- *Are there advantages of this strategy you would like to share?*
- *Are there any lessons learned from the use of this strategy you would like to share?*
- *Do you have any plans for this strategy in the future? In other words, will you keep implementing them the same way or will they be modified?*

Is there another strategy you would like to mention that is also effective for handling bullying and fighting on buses?

- *Please walk me through what this strategy looks like in your district and talk to me about why it is so effective for handling bullying.*
- *Is this strategy used on all buses or only some?*
- *How and why was this strategy selected?*
- *How long have you been using this strategy?*
- *What types of staff are involved with the implementation of this strategy?*
- *Have staff identified any training or technical assistance needs for the implementation of this strategy?*
- *Is it your impression that staff have the same experiences with/ opinions about this strategy?*
- *Are there any monetary costs associated with this strategy?*
- *What types of challenges are associated with this strategy?*
- *Are there advantages of this strategy you would like to share?*
- *Are there any lessons learned from the use of this strategy you would like to share?*
- *Do you have any plans for this strategy in the future? In other words, will you keep implementing them the same way or will they be modified?*

In your opinion, are any of the strategies that your district has used especially ineffective for handling bullying or fighting?

- *Please walk me through what this strategy looks like in your district and talk to me about why it is so effective for handling bullying and fighting.*
- *Is this strategy used on all buses or only some?*
- *How and why was this strategy selected?*
- *How long have you been using this strategy?*
- *What types of staff are involved with the implementation of this strategy?*
- *Have staff identified any training or technical assistance needs for the implementation of this strategy?*
- *Is it your impression that staff have the same experiences with/ opinions about this strategy?*
- *Are there any monetary costs associated with this strategy?*
- *What types of challenges are associated with this strategy?*
- *Are there advantages of this strategy you would like to share?*
- *Are there any lessons learned from the use of this strategy you would like to share?*
- *Do you have any plans for this strategy in the future? In other words, will you keep implementing them the same way or will they be modified?*

We have talked mostly about strategies used to manage or prevent bullying and fighting, and how effective they are or are not. But there are many other forms of misbehavior that might occur on school buses, such as general misconduct (e.g., yelling, littering, destruction bus property), sexual behavior, etc. Are there any strategies you would like to mention that stand out as being especially effective or ineffective for managing or preventing these behaviors?

5. Effectiveness and Evaluation

We want to understand a little bit more about how districts determine whether a strategy is working. I'm going to read you a list of methods that districts might use to determine whether a strategy is effective for promoting positive behaviors on the bus or for deterring misbehavior and I want you to tell me if your district uses any of these methods: tracking disciplinary reports or incidents before and after the strategy is implemented; having the strategy evaluated or assessed by trained personnel; getting formal or informal feedback from bus drivers; getting formal or informal feedback from students; getting formal or informal feedback from parents; having staff observe the bus after the strategy is implemented to determine whether behavior has improved.

Which of these methods do you think has been the most effective for understanding whether a given strategy is working or not?

- *How is this data collected?*
- *Is any data collected retained over time?*
- *What types of staff collect these data and who is responsible for managing it?*
- *What challenges have you had with data collection or data quality?*
- *What types of data variables/ data points do you collect?*
 - *Counts (10 incidents)*
 - *Incident characteristics? Such as..?*
- *What do you do with the data you collect?*
 - *Analyze?*
 - *Provide periodic reports/ updates?*

6. Feedback on Taxonomy

At the beginning of this study, we reviewed scholarly publications, school and district websites, bullying-prevention websites, and reports produced by the media or school-based transportation organizations to identify different types of strategies school districts are using to address or prevent bullying and other types of misbehavior on the school bus. We identified 18 different strategies, and one of our goals for the project is to organize these strategies into a smaller number of thematic categories. On your profile, you will see how we have organized these strategies into nine categories. We'd like to get your feedback on our efforts, since you're the ones in the field every day! We value your opinions and would love to hear your thoughts.

- *Probes, if respondent is struggling:*
 - *For example, would you place safety belts in a different category? Why?*
 - *If it would be easier, you can email us or call us with any thoughts once you've had a chance to review and think about it.*

Category	Logic of strategies in this category	Strategies that belong to this category
Deterrence	attempt to communicate to students that negative consequences are a certain outcome of misbehavior on the bus and avoidable only when students refrain from such misconduct.	<ul style="list-style-type: none"> ▪ Cautionary films ▪ Visits from school authority figures ▪ Behavior contracts/codes of conduct
Surveillance	employ resources to monitor students on the bus.	<ul style="list-style-type: none"> ▪ Security cameras ▪ Bus Monitors/Attendants
Training and Education	curriculums developed for students or drivers to help reduce bullying, violence, and other types of general misbehavior on the bus (e.g., Peaceful School Bus program.)	<ul style="list-style-type: none"> ▪ Training programs for students ▪ Training programs for drivers
Incapacitative	Strategies based on the logic that children are less capable of misbehaving when they are restrained in their seats.	<ul style="list-style-type: none"> ▪ Safety belts
Organizational Design	seating arrangements on the bus used to minimize confrontations between students or to avoid seating problematic students near one another.	<ul style="list-style-type: none"> ▪ Seating Charts
Reactive	although reactive strategies may have a deterrent-like effect, their primary purpose is to help school officials handle misconduct after it has occurred.	<ul style="list-style-type: none"> ▪ Hotlines or websites where misbehavior can be reported ▪ Having the option for drivers to pullover if students are misbehaving ▪ Disciplinary actions for misbehavior (e.g., suspension from the bus; write-ups, etc.)
Distractive	The use of music or other forms of entertainment to create a peaceful environment on the bus and to keep students stimulated so as to discourage misbehavior.	<ul style="list-style-type: none"> ▪ The use of music, sound, videos, or other types of entertainment on the bus
Bonding	Promoting relationships between students, drivers, and school officials to foster a respectful environment on the bus.	<ul style="list-style-type: none"> ▪ The district encourages drivers to get to know students ▪ The district encourages students to get to know drivers

		<ul style="list-style-type: none"> ▪ The district helps to build relationships between drivers and school officials ▪ Mentoring programs that foster relationships or “buddy systems” between students
Reward Systems	Students are rewarded for positive behavior on the bus (e.g., students are given “bus bucks” for good behavior that can be used to purchase prizes at the school store)	<ul style="list-style-type: none"> ▪ Linking bus behavior to rewards

Is there anything about managing student behavior on the bus that I didn’t bring up that you would like to share?

7. Evaluation

One of the next steps in this area of research is to subject one or more behavioral management strategies to a rigorous scientific evaluation. The goal of that evaluation would be to determine how effective that strategy is for deterring various types of misbehavior. Do you have any recommendations for the types of strategies that need to be evaluated the most?

If funding allows in future years, we are interested in conducting a scientific evaluation of one or more behavioral management strategies used for school buses. We are looking for a handful of school districts to host such an evaluation. Would your district have any interest in participating?

[If the respondent asks what participation in an evaluation would entail]

We’re not sure yet. A future study will depend on funding, which hasn’t been obtained yet. At this point we’re just trying to see if any school districts might be interested in the future if we were to add on a second part to the study.

8. Closing

Is there anything else you would like to share with me today?

Thank you so much for your time! Your insight is really valuable in helping us learn more about what strategies are used on school buses and how districts manage student behavior on school buses. Thank you again!

Types of Misbehavior <i>Types of misbehavior on the school bus</i>	Bullying / <i>Description of bullying on the school bus</i>	Definition / <i>Definitions of bullying vary; thus, the term is overused</i>	
		Frequency / <i>Frequency of bullying on the school bus</i>	Frequent / <i>Bullying occurs frequently on the school bus</i>
			Infrequent / <i>Bullying occurs infrequently on the school bus</i>
		Improving / <i>Bullying is being addressed on the school bus and is occurring less often than previous years</i>	
		Investigation / <i>Accusations of bullying must be investigated</i>	
		Type / <i>Types of bullying that occur on the school bus</i>	
	Defiance / <i>Students on the school bus are defiant/do not obey bus drivers</i>		
	Disrespect / <i>Students are disrespectful to bus drivers</i>		
	False accusations / <i>Students make false accusations against bus drivers</i>		
	Fighting / <i>Description of fighting on the school bus</i>	Frequent-Fighting / <i>Fighting occurs frequently on the school bus</i>	
		General Description / <i>Descriptions of fighting on the school bus</i>	
		Infrequent-Fighting / <i>Fighting occurs infrequently on the school bus</i>	
		Response / <i>Disciplinary responses to fighting on the school bus</i>	
	Minor Rule Breaking / <i>Misbehavior that is considered minor rule-breaking on the school bus, like yelling, spitting, moving seats, etc.</i>		
	Sexual / <i>Sexual behavior on the school bus</i>		
	Substance / <i>Substance use on the school bus</i>		
	Vandalism / <i>Vandalism on the school bus</i>		
	Verbal / <i>Use of abuse language or profanity on the school bus</i>		
	Weapons / <i>Bringing weapons on the school bus</i>		

Types of Behavioral Management Strategies <i>Strategies to prevent and respond to bullying, fighting, and other forms of misbehavior on the school bus</i>	Bonding-Mentoring / Promoting relationships between students, drivers, and school officials to foster a respectful environment on the bus	Drivers get to know students / <i>Bus drivers are encouraged to get to know the students who ride their bus to help create a respectful environment where there are clear expectations for student behavior</i>	Challenges / <i>Discussed challenges with getting to know students on the bus</i>
			Consistency / <i>Keep the same drivers on the same routes every year, in order to get to know the students</i>
			Establish Relationship / <i>Discussed the importance of drivers establishing relationships with students on the bus</i>
			Events / <i>Discussed holding events for drivers and students to interact</i>
			Names / <i>Drivers knowing students by name</i>
			Training – Get to know students / <i>Discussed training for getting to know students</i>
			Welcome / <i>Drivers welcome students when they get on the bus, exchange pleasantries</i>
	Deterrence / Attempt to communicate to students that negative consequences are a certain outcome of misbehavior on the bus and avoidable only when students refrain from such misconduct	Student mentors / <i>Mentoring programs that foster relationships or “buddy systems” between students</i>	
		Bus Behavior Contracts / <i>Parents and-or students sign a code of conduct or written agreement that communicates rules of the bus and consequences for violating the bus rules</i>	Effective / <i>Bus Behavior Contracts are effective</i>
			Ineffective / <i>Bus Behavior Contracts are ineffective</i>
		Code of Conduct-Procedure / <i>Procedures for implementing Codes of Conduct</i>	
		Visits from School Authority Procedures / <i>School officials make guest appearances on the bus, reminding students of appropriate bus behaviors and punishments for misbehavior and reinforcing the driver’s authority</i>	
	Incapacitative / Strategies based on the logic that children are less capable of misbehaving when they are restrained in their seats	Distractive / <i>The use of music or other forms of entertainment to create a peaceful environment on the bus and to keep students stimulated so as to discourage misbehavior</i>	
		Effective / <i>Using safety belts is effective for behavioral management</i>	
		Ineffective / <i>Using safety belts is ineffective for behavioral management</i>	

Types of Behavioral Management Strategies Strategies to prevent and respond to bullying, fighting, and other forms of misbehavior on the school bus	Organizational Design / Seating arrangements on the bus used to minimize confrontations between students or to avoid seating problematic students near one another	Seating Charts / Students are assigned to seats	Challenges – Seating Charts / Challenges associated with using seating charts	Move around / Assigned seats only work if the child stays in their seat
			Facilitators – Seating Charts / Seating charts facilitate good behavior on the school bus	Open Seats / Buses are not full every day, which allows students to move to empty seats
				Student Conflict / Students who do not get along are sometimes assigned to sit together
				Time Consuming for Drivers / Drivers do not want to assign seats because it is a time-consuming process
				Assists with Using Safety Belts / Seating charts facilitate the use of safety belts
				Collaboration / Seating charts are developed collaboratively by bus drives and school staff
				Form of Discipline / Seating charts are used as a form of discipline for misbehavior
				Get Along Well / Students who get along well are seated together
				Identification / Assigned seats helps identify children
	Procedure / Procedure for using seating assignments	Organization / Seating charts facilitate organized bus boarding and travel		
		Assign by Age / Procedure for using seating assignments		
		Assign by Gender / Students are assigned to sit in specific areas of the bus by gender		
	Other / Respondent discussed behavioral management strategies other than those listed on the survey			
	Reactive / Although reactive strategies may have a deterrent-like effect, their primary purpose is to help school officials handle misconduct after it has occurred		Bus Suspension / Bus suspension is a form of student discipline	
			Cleaning the bus / Cleaning the bus is used as a form of discipline	
			Detention / Detention is a form of student discipline	
		Pulling Over / Pulling the bus over is a form of student discipline	Bus Driver Correction / Bus drivers pull over and wait until the misbehavior stop	
			Call Police / Transportation director will call the police for certain types of misbehavior (e g , fighting)	
			Call Transportation Director / Drivers will pull over and call the transportation director to correct misbehavior	
			Want to Go Home / Pulling over is effective because students want to go home	
		Referrals / Writing referrals is a form of student discipline	Appropriate Referrals / Drivers should write appropriate referrals, rather than write referrals for every small infraction	
			Consistent Referrals / Responses to referrals must be consistent and immediate (i e , otherwise there is no deterrence)	
			Drivers Dislike Writing Referrals / Drivers do not like to write referrals	
			Paper Trail / Writing referrals creates a paper trail to document persistent bad behavior and protect drivers	
			Training – Referrals / Drivers are trained on the referral system	
		Restrict Recess / Restricting recess is a form of student discipline		
		School Suspension / School suspension is a form of student discipline		
		Warning / Warnings are a form of student discipline		
		Website and/or Phone Number for Reporting / Bus-specific website or dedicated telephone number available for students or parents to report misbehavior that happens on the bus		
Reward Systems / Bus-specific website or dedicated telephone number available for students or parents to report misbehavior that happens on the bus	General Effectiveness / Effectiveness of reward systems			
	PBIS / Use of Positive Behavioral Intervention and Supports			
	Challenges – PBIS / Challenges to using PBIS	Extending to Bus / Extending the application of PBIS from the classroom to the bus is challenging		
		Frustrating for Drivers / Drivers are frustrated with using PBIS		
		Not Effective / PBIS is not effective on the school bus		
	Facilitators – PBIS / Facilitators to using PBIS	Effective for Older Students / PBIS is effective for older students		
		Effective for Younger Students / PBIS is only effective for younger students		
	General Discussion / General discussions of using PBIS			
	Training / Training for the use of PBIS			

Appendix E / BVSBS Qualitative Coding Trees

Types of Behavioral Management Strategies <i>Strategies to prevent and respond to bullying, fighting, and other forms of misbehavior on the school bus</i>	Surveillance / <i>Employ resources to monitor students on the bus</i>	Bus Attendants/ Monitors / <i>Bus attendants/ monitors ride the bus with students to and from school</i>	As Needed / <i>Bus monitors are used only as needed, and then removed from buses</i>
			Challenges / <i>Challenges associated with utilizing bus attendants/monitors</i>
			No Interaction / <i>Bus monitors do not interact with students and are thus ineffective</i> Short Term Involvement / <i>Bus attendants/monitors only cause short term change in behavior</i>
			Volume / <i>There are too many children on the school bus to supervise</i>
			Facilitators / <i>Facilitators associated with utilizing bus attendants/monitors</i>
			Additional supervision / <i>Having a monitor provides additional supervision</i>
			Procedure / <i>Describes the procedure used to assign a bus monitor</i>
			Adult Monitor / <i>The bus monitor is an adult</i> Student Monitor / <i>The bus monitor is a student</i>
			Training / <i>Training for bus monitors/attendants</i>
			Unnecessary / <i>Monitors are unnecessary</i>
		Security Cameras / Buses <i>are equipped with surveillance cameras</i>	Challenges – Security Cameras / <i>Challenges associated with using security cameras</i>
			Blind Spot / <i>There are blind spots on the bus where security cameras cannot monitor student behavior</i> Can't Show Parents / <i>Some school districts do not allow parents to be shown security video</i> Forget / <i>Students forget that the camera is there, which does not provide deterrence</i> Video Overuse / <i>Footage from security cameras is overused by school administrators</i> Video Time Consuming / <i>Checking the video is time consuming for transportation staff</i>
			Facilitators – Security Cameras / <i>Facilitators associated with utilizing bus attendants/monitors</i>
			Deterrent / <i>Cameras deter misbehavior</i> Driver Evaluation / <i>Security cameras assist with the evaluation of drivers</i> Good Audio / <i>Security cameras must have good audio</i> Investigation / <i>Security cameras aid in investigations/provide visual proof of misbehavior</i> Proof for Parents / <i>Security camera footage provides proof to parents of misbehavior</i> Proof for Students / <i>Security camera footage provides proof to students of misbehavior</i> Protects Drivers / <i>Security cameras provide evidence that protects drivers/provides corroboration of drivers' statements</i>
			Number of Cameras / <i>Described the number of cameras used on buses and their positions</i> Operations / <i>Described how security cameras operate</i> Other Security Measures / <i>Described miscellaneous types of security measures</i>

Types of Behavioral Management Strategies <i>Strategies to prevent and respond to bullying, fighting, and other forms of misbehavior on the school bus</i>	Training & Education / <i>Programs for students and drivers to help reduce bullying, violence, and general misbehavior on the bus</i>	Driver Training / <i>Bus drivers participate in a training program to teach ways to prevent, manage, or address bullying or other types of misbehavior on the bus</i>	Challenges / <i>Challenges associated with training bus drivers to manage student behavior</i>	
			Elements of Training / <i>Discussed elements that drivers are trained on</i>	Bullying / <i>Drivers are trained to recognize and respond to bullying</i>
				Bus Mechanics / <i>Drivers are trained on how to drive the bus, mechanics, and road rules</i>
				Bus Safety / <i>Drivers are trained on bus safety for students</i>
				Collaboration / <i>Drivers are trained to on collaboration with school staff and administrators, and parents</i>
				Driver Wellness / <i>Drivers are trained on wellness</i>
				Interpersonal Skills / <i>Drivers are trained on developing interpersonal skills and relationships with students</i>
				Reporting / <i>Drivers are trained to report misbehavior on the school bus</i>
				Rewards / <i>Drivers are trained to reward students for good behavior</i>
				Student Management / <i>Discussed training on student management, generally</i>
		Student Training / <i>Students participate in a training program to teach ways to prevent, manage, or address bullying or other types of misbehavior on the bus</i>	Facilitators / <i>Facilitators to bus driver training</i>	
			Programs / <i>Drivers are trained using specific programs</i>	
			Anti-Bullying / <i>Students participate in anti-bullying training</i>	
			Bus Safety / <i>Students participate in training programs on bus safety</i>	
			Reporting / <i>Students participate in training on how to report misbehavior</i>	

Challenges <i>Overarching challenges to managing student behavior on the school bus, which do not apply to specific behavioral management strategies (i.e., challenges that apply to all strategies)</i>	Drivers / <i>Overarching challenges to managing student behavior on the school bus which are associated with bus drivers</i>	Behavior Management While Driving / <i>It is very difficult for a bus driver to manage student behavior while driving</i>
		Discipline / <i>Bus drivers' and transportation directors' lack of authority to discipline students is a challenge</i>
		Outsider / <i>Transportation Department (including drivers) are not considered or treated as part of the school staff</i>
		Personality / <i>Drivers differ in terms of driving style, personality, views on child behavior, interaction with students, # of referrals written</i>
		Shortage / <i>There is a shortage of bus drivers/they are difficult to hire</i>
		Trust / <i>School administrators do not trust bus drivers when drivers report misbehavior</i>
	Follow Up / <i>It is difficult to manage student behavior if school administrators do not follow up with the drivers and transportation department on disciplinary action</i>	
	One Size Fits All / <i>Using a one size fits all strategy to student behavioral management is not effective because different strategies work or do not work with varying age groups and personalities</i>	
	Parents / <i>Challenges associated with parents of students who ride the school bus</i>	Accountability / <i>Students are not held accountable for misbehavior or obey authority figures</i>
		Disrespectful Parents / <i>Parents are disrespectful to drivers and staff</i>
		Lack of Parent Cooperation / <i>Parents do not cooperate with transportation staff and administrators when their child misbehaves</i>
		Lack of Parenting / <i>Discussed lack of parenting skills (i.e., teaching children what is acceptable and unacceptable behavior)</i>
	Privilege / <i>Students and parents believe that transportation to and from school is an entitlement rather than a privilege</i>	
	Resources / <i>Lack of resources to implement behavioral management strategies</i>	
	Understand Bus Ride / <i>Teachers and administrators do not understand the student behaviors that drivers have to manage on the bus or the context of behavior management</i>	

Appendix E / BVSBS Qualitative Coding Trees

Facilitators <i>Overarching facilitators to managing student behavior on the school bus, which do not apply to specific behavioral management strategies (i.e., facilitators that apply to all strategies)</i>	Bus as Extension of Classroom / <i>Considering the bus as an extension of the classroom</i>	
	Collaboration / <i>Collaboration among transportation staff, and between transportation and school staff</i>	
	Communication / <i>Good communication between parents and principals positively effects behavior on the school bus</i>	Communication – LEAs / <i>School should form relationships with local law enforcement agencies</i>
		Communication – Admin / <i>Communication between transportation department and school administrators</i>
		Communication – Parents / <i>Communication between transportation staff and parents</i>
	Support from Administrators / <i>Drivers and the transportation department need support from school administrators</i>	
	Transparency / <i>Students respond to drivers and discipline if they understand the rules and perceive them to be fair</i>	

Characteristics <i>Certain characteristics may affect what types of misbehavior occurs on the bus, and which behavioral management strategies will or will not be effective</i>	Age / <i>Some behavioral management strategies are more or less effective depending on the student age group</i>	
	Bus Drive Logistics / <i>Logistics of the bus ride that may have an effect on behavior management, including length of bus ride, terrain driven, location of school or bus routes</i>	
	Time of Day / <i>Student behavior on the school bus differs by time of day (i.e., morning vs. afternoon)</i>	

Appendix E / BVSBS Qualitative Coding Trees

Evaluability Assessment Discussion of whether school districts collect and analyze data on bus referrals, evaluate or assess use of current behavioral management strategies, and would be interested in participating in an evaluation	Evaluation of Strategies / Strategies to evaluate or assess behavioral management strategies	Check Referrals / Examine student referrals to assess effectiveness of behavioral management strategies		
		Data Driven / Transportation officials discussed the general need for data driven responses to student behavioral management on the school bus		
		Formal Observation / Trained staff members observe the use of behavioral management strategies to assess effectiveness		
		Informal Observation / School or transportation staff informally observe behavior on the school bus during the course of their regular duties, and report whether they believe a behavioral management strategy is working		
		No Strategies / Transportation officials stated that they do not evaluate the effectiveness of behavioral management strategies		
		Surveys / Administer surveys to assess effectiveness of behavioral management strategies		
		Talking / Talk to drivers, school administrators and staff, parents, and students to informally assess whether behavioral management strategies are effective on the school bus		
	Future Evaluation / Transportation officials specified whether they would participate in a future evaluation			
	Referral Data / Discussions of referral data collection, systems, and analysis	Referral Analysis and Utilization / Referral data analysis and utilization	Able to Track and Analyze Data / Transportation officials who have the capacity to track and analyze referral data	
			Analyze Incident / Transportation officials who analyze referral data at the incident level	
			Analyze by Bus / Transportation officials who analyze referral data at the bus level	
			Analyze by School / Transportation officials who analyze referral data at the school level	
			Analyze by Student / Transportation officials who analyze referral data at the student level	
			Do Not Track Referral Data / Transportation officials who do not track referral data	
			Informal Student Case by Case / Transportation officials who informally assess student behavior on a case by case basis	
			Use Data for Response to Students / Transportation officials who use analyzed referral data to provide data-driven responses to student misbehavior	
			Use Data to Identify Problem Buses & Schools / Transportation officials who use analyzed referral data to provide data-driven responses to student misbehavior in specific schools and buses	
			Uses Data to Assess Change Over Time / Transportation officials who use analyzed referral data to assess change in student behavior over time	
			Uses Data to Evaluate Behavioral Management Strategies / Transportation officials who use analyzed referral data to evaluate behavioral management strategies used on the school bus	
			Uses Data to Improve Driver Training / Transportation officials who use analyzed referral data to improve bus driver training	
		Referral System / Types of referral systems used by transportation officials	Type – Electronic / Transportation officials who use electronic referral systems	
			Type – Paper / Transportation officials who use paper referral systems	
			Type – Verbal / Transportation officials who use verbal referral systems	